

**BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION**  
**NEW DELHI**

**PETITION NO.....**

**IN THE MATTER OF** : Petition Under Section 62 and 79 (1) (a) of the Electricity Act, 2003 read with Chapter-III of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 and Chapter-3, Regulation-9 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for approval of tariff of Barh Super Thermal Power Station Stage-II (2x660 MW) for the period from 01.04.2024 to 31.03.2029.

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## Summary of Issues

### Determination of Tariff of Barh Stage-II (2x660 MW) for 2024-29 Period

#### I. CONSPECTUS:

- Barh Stage-II Station comprises of two units of 660 MW capacity having the station COD date 08.03.2016.
- Instant Petition is filed under Section 62 and 79 (1) (a) of the Electricity Act, 2003 read with Chapter-III of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 and Chapter-3, Regulation-9 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for approval of tariff of Barh Super Thermal Power Station Stage-II (2x660 MW) for the period from 01.04.2024 to 31.03.2029.
- Petitioner has filed a separate petition under Regulation-13 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for revision of tariff of instant station for the period from 01.04.2019 to 31.03.2024 after the truing up exercise.
- Barh-II is located at Patna District of Bihar and comprises of two units of 660 MW each with their respective COD's as 18.02.2016 (U#2) & 08.03.2016 (U#1) as determined by this Hon'ble Commission vide order dated 20.09.2017 in petition no 130/MP/2015, which has attained finality by Hon'ble Supreme Court Judgment dated 05.04.2019. Further, on the treatment of infirm power in tariff petition no.130/GT/2014 for tariff period 2014-19 (main petition), GRIDCO has filed appeal in Hon'ble APTEL against this Commission's interim order dated 18.03.2019, which was upheld by Hon'ble APTEL vide judgment dated 15.10.2020. GRIDCO has

filed appeal in Hon'ble Supreme Court against this APTEL judgment. Later on beneficiary Bihar has also filed appeal in Hon'ble Supreme Court against the same order. Vide judgement dated 01.03.2021, Hon'ble Supreme Court has stayed the APTEL 's Judgment and further proceedings are in process.

- The determination of tariff for Barh-II for the period from 01.04.2014 to 31.3.2019 in Petition No. 130/GT/2014, for the period from 01.04.2019 to 31.3.2024 in Petition No. 74/GT/2024 and its true up petition filed vide affidavit dated 29.11.2024 is under consideration of Hon'ble Commission and is yet to be determined.

## II. ISSUES FOR CONSIDERATION:

- (a) **Capital Cost:** The tariff for Barh-II for the period from 01.04.2014 to 31.3.2019 in Petition No. 130/GT/2014, for the period from 01.04.2019 to 31.3.2024 in Petition No. 74/GT/2024 and its true up petition is under consideration of Hon'ble Commission and is yet to be determined. In absence of orders for Barh-II till date, the actual closing capital cost as on 31.03.2024 has been worked out in the aforesaid true-up petition as Rs.1067688.35 Lakh based on the actual expenditure after truing up exercise for the period 2019-24. Accordingly, the opening capital cost as on 01.04.2024 has been considered as Rs 1067688.35 Lakh in the instant petition.
- (b) The tariff of instant station for 2024-29 period has been worked out based on opening capital cost as on 01.04.2024 arrived as above and projected additional capital expenditure (Add Cap) for 2024-29 period. The detail of

projected add cap year wise is provided in Form-9 of the Tariff forms attached as Appendix-I.

**(c) Claim of water charges, Capital Spares Consumption, security expenses & Ash Transportation charges:**

- i. **Water Charges:** Water charges are claimed based on projected expenditure towards water charges and provided in Form-3A of Appendix-I.
- ii. **Capital Spares Consumption:** The details of year-wise actual capital spares consumption is not provided at the instant petition. The same shall be provided at the time of true-up in terms of the proviso to the Regulation 36(1)(6) based on actual consumption of spares during the period 2024-29.
- iii. **Security expenses:** Security expenses are claimed based on estimated expenditure to be incurred towards deployment of CISF personnel/security personnel for safety and security according to security threat perception, survey and as per the guidelines of Ministry of Home Affairs. The estimated security expenses year wise is provided in Form-3A of the Appendix-I.
- iv. **Ash Transportation Charges:** Hon'ble Commission vide its order dated 28.10.2022 in petition no 205/MP/2021 allowed the Ash transportation expenses for FY 2019-20, 2020-21, and 2021-22 and further allowed the monthly billing of ash transportation charges for 2022-23 and 23-24 period. The petitioner is incurring ash transportation charges as per MOEF&CC notifications dated

25.1.2016 and 31.12.2021 in current tariff period as well. Accordingly, Petitioner has claimed ash transportation charges on the projected basis for 2024-29 period and same has been provided in Form-3A of Appendix-I.

- (d) **Filing and Publication Expenses:** Petitioner has claimed the Filing and Publication expenses as per Regulation, 94 of Tariff Regulations, 2024.
- (e) **Liberty to approach Commission for Pay Revision:** It is submitted that the pay/wage revision for the employees of the Petitioner will be due w.e.f 01.01.2027. Further, the wage/pay revision of CISF and Kendriya Vidyalaya employees will also be due for revision during the tariff period 2024-29. In view of the above, Petitioner seeks liberty to approach the Hon'ble Commission for allowing the impact of Pay/wage revision of employees of the Petitioner and personnel of CISF and Kendriya Vidyalaya as applicable.
- (f) Petitioner has also prayed for considering station heat rate based on design heat rate with applicable operating margin as detailed in the petition.

### **III. ANNUAL FIXED CHARGES CLAIMED:**

The detail of Annual Fixed Charges are provided at Appendix-I respectively.

### **IV. Prayer**

In the light of the above submissions, the Petitioner, therefore, prays that the Hon'ble Commission may be pleased to:

- i) Approve tariff of Barh Super Thermal Power Station Stage-II (2x660 MW) for the tariff period 01.04.2024 to 31.03.2029.
- ii) Allow the recovery of filing fees as & when paid to the Hon'ble Commission and publication expenses from the beneficiaries.
- iii) Consider station heat rate based on design heat rate with applicable operating margin.

- iv) Allow reimbursement of Ash Transportation Charges directly from the beneficiaries on monthly basis, subject to true up.
- v) Grant liberty to approach the Hon'ble Commission to allow for the recovery of pay/wage revision due in 2024-29 period as additional O&M over and above the normative O&M.
- vi) Pass any other order as it may deem fit in the circumstances mentioned above.

**BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION**  
**NEW DELHI**

**PETITION NO.....**

**IN THE MATTER OF** : Petition Under Section 62 and 79 (1) (a) of the Electricity Act, 2003 read with Chapter-III of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 and Chapter-3, Regulation-9 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for approval of tariff of Barh Super Thermal Power Station Stage-II (2x660 MW) for the period from 01.04.2024 to 31.03.2029.

**AND**  
**IN THE MATTER OF**

**Petitioner:** : NTPC Ltd.  
NTPC Bhawan  
Core-7, Scope Complex  
7, Institutional Area, Lodhi Road  
New Delhi-110 003.

**Respondents**

1	North Bihar Power Distribution Company Limited 1st Floor, Vidyut Bhawan, Bailey Road, Patna - 800 001
2	South Bihar Power Distribution Company Ltd (SBPDCL), Vidyut Bhawan, Bailey Road Patna - 800021
3	Jharkhand Bijlee Vitaran Nigam Ltd., Engineering Building, HEC Township, Dhurwa, Ranchi – 834 004
4	Power Department, Govt. of Sikkim, Kazi Road, Gangtok, Sikkim – 737 101

The Petitioner humbly states that:

- 1) The Petitioner herein NTPC Ltd. (hereinafter referred to as 'Petitioner' or 'NTPC'), is a company incorporated under provisions of the Company Act, 1956 and a Government Company as defined under Section 2(45) of the Companies Act, 2013. Further, NTPC is a 'Generating Company' as defined under Section 2(28) of the Electricity Act, 2003.
- 2) In terms of Section 79(1)(a) of Electricity Act, 2003, the Hon'ble Commission has been vested with the functions to regulate the tariff of NTPC, being a Generating Company owned and controlled by the Central Government. The regulation of the tariff of NTPC is as provided under Section 79(1)(a) read with Section 61, 62 and 64 of the Electricity Act, 2003 and the Regulations notified by the Hon'ble Commission in exercise of powers under Section 178 read with Section 61 of the Electricity Act, 2003.
- 3) The Petitioner is having power stations/ projects at different regions and places in the country. **Barh Super Thermal Power Station Stage-II (2X660 MW)** (hereinafter referred to as Barh-II) is one such station located in the State of Bihar. The power generated from Barh-II is being supplied to the respondents herein above.
- 4) The Hon'ble Commission has notified the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2024 (hereinafter 'Tariff Regulations 2024') which came into force from 01.04.2024, specifying the terms & conditions and methodology of tariff determination for the period 01.04.2024 to 31.03.2029.
- 5) Regulation 9(2) of Tariff Regulations 2024 provides as follows:  
*"(2) In case of an existing generating station or unit thereof, or transmission system or element thereof, the application shall be made by the generating company or the transmission licensee, as the case may be, by 30.11.2024, based on admitted capital cost including additional capital expenditure already admitted and incurred up to*



*31.3.2024 (either based on actual or projected additional capital expenditure) and estimated additional capital expenditure for the respective years of the tariff period 2024-29 along with the true up petition for the period 2019-24 in accordance with the CERC (Terms and Conditions of Tariff) Regulations, 2019."*

In terms of above, the Petitioner is filing the present petition for determination of tariff for Barh-II for the period from 01.04.2024 to 31.03.2029 as per the Tariff Regulations 2024.

- 6) Barh-II comprises of two units of 660 MW each with their respective COD's as 18.02.2016 (U#2) & 08.03.2016 (U#1) as determined by this Hon'ble Commission vide order dated 20.09.2017 in petition no. 130/MP/2015, which has attained finality by Hon'ble Supreme Court Judgment dated 05.04.2019. The amended petition for determination of tariff for Barh-II was filed before Hon'ble commission vide affidavit dtd. 28.06.2019 based on audited capital cost as on COD of Unit-V on 18.02.2016 and COD of unit-IV on 08.03.2016 (COD revised as per Hon'ble Commission order dtd. 20.09.2017 in petition no 130/MP/2015). The amended petition (130/GT/2014) was heard on 26.03.2021 by Hon'ble Commission, wherein the Petitioner was directed to file details of the actual expenditure incurred for the period from COD till 31.3.2019 along with tariff filing forms in terms of the Tariff Regulations. In line with the directions of Hon'ble Commission, the petitioner vide affidavit dated 06.09.2021 filed trueing up of additional capital expenditure for the control period from 01.04.2016 to 31.03.2019, based on actual capital expenditure incurred. Tariff order in this petition is yet to be issued by Hon'ble Commission.
- 7) Further, on the treatment of infirm power in tariff in petition no. 130/GT/2014 for tariff period 2014-19 (main petition), GRIDCO has filed appeal in Hon'ble APTEL against this Commission's interim order dated 18.03.2019, which was upheld by Hon'ble APTEL vide judgment dated 15.10.2020. GRIDCO has filed appeal in Hon'ble Supreme Court against this APTEL judgment. Later on beneficiary Bihar has also filed appeal in Hon'ble Supreme Court against the

same order. Vide judgement dated 01.03.2021, Hon'ble Supreme Court has stayed the APTEL 's Judgment and further proceedings are in process.

- 8) The tariff of the Barh-II for the tariff period 18.02.2016 to 31.03.2019 is under process of determination by Hon'ble Commission in Petition No. 130/GT/2014 in accordance with the CERC (Terms & Conditions of Tariff) Regulations 2014. Further, tariff for Barh-II for the period from 01.04.2019 to 31.3.2024 is yet to be determined by the Hon'ble Commission in Petition No. 74/GT/2024 in accordance with the CERC (Terms & Conditions of Tariff) Regulations 2019. The petitioner vide affidavit dated 29.11.2024 had filed a separate true up petition for the period 01.04.2019 to 31.03.2024 for revision of tariff in line with the applicable provisions of Tariff Regulations 2019.
- 9) It is submitted that the tariff for Barh-II for the period from 01.04.2014 to 31.3.2019 in Petition No. 130/GT/2014, for the period from 01.04.2019 to 31.3.2024 in Petition No. 74/GT/2024 and its true up petition is under consideration of Hon'ble Commission and is yet to be determined. In absence of orders for Barh-II till date, the actual closing capital cost as on 31.03.2024 has been worked out in the aforesaid true-up petition as Rs 1067688.35 Lakh based on the actual expenditure after truing up exercise for the period 2019-24. Accordingly, the opening capital cost as on 01.04.2024 has been considered as Rs 1067688.35 Lakh in the instant petition. The Hon'ble Commission may be pleased to accordingly adopt this in the admitted capital cost as on 31.3.2024 and determine the tariff in the present petition for the period 2024-29.
- 10) The capital cost claimed in the instant petition is based on the opening capital cost as on 01.04.2024 considered as above and projected estimated capital expenditures claimed for the period 2024-29 under Regulation 19 and Regulation 24, 25 and 26 of the Tariff Regulations, 2024.
- 11) The Petitioner further respectfully submits that as per Regulation 36(1)(6) of the Tariff Regulations 2024, the water charges, security expenses, ash transportation expenses and capital spares consumed for thermal generating stations are to be allowed separately. The details in respect of water charges such as type of cooling water system, water consumption, rate of water charges

as applicable for 2023-24 have been furnished below. In accordance with provision of the Regulations, the petitioner shall be furnishing the details of actual for the relevant year at the time of truing up and the same shall be subject to retrospective adjustment.

Description	Remarks
Type of Plant	Coal based station
Type of cooling water system	Closed Cycle
Consumption of Water	Considering Total water consumption of 36 Cusecs or actual whichever is higher. As per Payment term, minimum payment of 36 cusecs is to be done if actual withdrawal is less than 36 Cusecs.
Rate of Water charges	Rs. 18.0 per thousand Gallon
Total Water Charges	As per Form-3A of Appendix -I.

- 12) Similarly, the Petitioner is claiming the security & ash transportation expenses based on the estimated expenses for the period 2024-29, the same shall be subject to retrospective adjustment based on actuals at the time of truing up. In respect of capital spares consumption, it is submitted that the same shall be claimed at the time of true-up in terms of the proviso to the Regulation 36(1)(6) based on actual consumption of spares during the period 2024-29.
- 13) However, it is submitted that the expenditure towards the ash transportation charges is recurring in nature and the Petitioner has been incurring ash transportation expenditure in its stations in the current tariff period also. In case the same is permitted to be recovered after the issuance of the tariff order for the period 2024-29, there will be additional liability on the beneficiary on account of the interest payment for the period till the time the tariff petitions for the period 2024-29 is decided. To avoid the interest payment liability of the beneficiaries, it is prayed that the petitioner may be allowed to recover/ pass on the ash transportation charges on a monthly basis subject to true-up at the end of the 2024-29 period.

- 14) The petitioner humbly submits that petition no. 227/MP/2024 has been filed by the petitioner concerning Ash Transport Expenditure for its stations which is under active consideration of this Hon'ble Commission and the outcome of the said petition will be applicable to the instant petition also.
- 15) It is submitted that Hon'ble Commission has prescribed boiler efficiency and turbine heat rate separately for deriving the unit heat rate where the Unit Heat Rate is not guaranteed by the suppliers. It is submitted that the instant station was envisaged during the period 2004-09 and equipment's including SG and TG specifications for tendering / award was stipulated considering the boiler efficiency and the turbine heat rate prescribed by the Hon'ble Commission in the Tariff Regulations at that time. Based on the same the equipment's were ordered through international competitive bidding. It was not possible for the petitioner to specify the efficiency parameters at the time of finalizing the contracts on the instant station as per the efficiency parameters specified in Tariff Regulations 2024-29 which are more stringent.

In a similar case, Hon'ble Commission in its order dated 20.02.2014 in Petition No. 160/GT/2012 has considered the design parameters for computing Gross Heat Rate of the station with appropriate operating margin and has stated as under:

**Quote**

*"161. As per the guaranteed turbine cycle heat rate of 1945 kCal/kWh and boiler efficiency of 88.5% along with the deviation of 6.5 % as per the 2009 Tariff Regulations, the Gross Heat Rate works out to 2340.59 kcal/kWh. Without the margin of Auxiliary consumption of 6.5%, the Gross Heat Rate works out as 2197.74 kcal/kWh. In light of this, achieving a GSHR of 2220 kcal/kWh as per submission of the respondents 1 to 6 is not possible. Also, the EPC contract was finalized in 2006 and there was no possibility for the petitioner to specify the Station Heat Rate as per the 2009 Tariff Regulations. In view of above, we consider a GSHR of 2340.59 kCal/kWh based on guaranteed turbine cycle heat rate 1945 kCal/kWh and boiler efficiency of 88.5% with a deviation of 6.5 % from the guaranteed design value."*

**UNQUOTE**

Further, Hon'ble Commission vide its order dated 21.04.2022 in petition no 362/GT/2020 while determining tariff of Kahaigaon STPS-II of NTPC Limited has relaxed the boiler efficiency for computing Gross Heat Rate of the station with appropriate operating margin. The same is quoted below:

**Quote**

*"157. Accordingly, the Commission considered the SHR of 2425 kCal /kWh as approved for 2009-14 tariff period and in exercise of Power to Relax under Regulation 54 and Power to Remove Difficulty under Regulations 55 of Tariff Regulations, 2014 allowed boiler efficiency of the units of the generating station below 0.85 for the period 2014-19"*

**UNQUOTE**

- 16) Further, if the Petitioner had stipulated more stringent unit heat rate this would have increased the capital cost commensurate to the efficiency parameters sought. The benefit of the lower capital cost due to lower efficiency parameters has already been passed onto the beneficiaries in terms of lower capital cost. If now the boiler efficiency for working out the normative heat rate is considered as 86% instead of the actual design efficiency 83.7 % the unit heat rate would be worked out to be 2137.21 kcal/kwh and the operating margin available over the design heat rate would be 1.71 % only which is much less than the operating margin of 4.5% allowed in the Tariff Regulations 2024. Moreover, it is submitted that boiler efficiency is largely a function of coal quality. In view of above submissions, it is prayed that Gross Station Heat rate may be allowed based on guaranteed turbine cycle heat rate of 1838 Kcal/Kwh and design boiler efficiency of 83.7% with an operating margin of 4.5 % from the guaranteed design value. The tariff computation attached at Appendix-I is based on considering Station Heat Rate as per design heat rate with applicable operating margin of 4.5%.
- 17) It is submitted that in terms of Regulation 60 (5) of the Tariff Regulations 2024, the Petitioner is required to furnish details qua providing the details of Landed Price & Gross Calorific Value ("GCV") of coal in Form 15. It is further submitted that the Petitioner in terms of Regulation 40 of the Tariff Regulations 2019 was

required to furnish the details for Landed Price & GCV of coal also as per Form 15 of the Tariff Regulations, 2019.

18) However, in so far as the present Petition is concerned, the Petitioner has prepared & submitted the data of coal as per Form 15 of the Tariff Regulations, 2019. The same is because of the following reasons:-

- (a) This Hon'ble Commission had notified the Tariff Regulations, 2019 on 07.03.2019 and the same was in effect till 31.03.2024.
- (b) The Petitioner being a diligent utility has been seamlessly providing the said data of coal in terms of the prescribed format (i.e. Form 15 of Annexure-I (Part I)) of the Tariff Regulations, 2019 to this Hon'ble Commission for computation of Interest on Working Capital.
- (c) Thereafter, this Hon'ble Commission on 15.03.2024 notified the Tariff Regulations, 2024, wherein the format of Form 15 was changed/ amended by this Hon'ble Commission and a new format was placed in the Tariff Regulations 2024 in the month of June'2024.
- (d) By virtue of the said change, the Petitioner has been obligated to furnish the data of coal for its existing plants month wise for the preceding 12 months i.e. for FY 2023-24 for computation of Interest on Working Capital.

19) It is humbly submitted that by virtue of the Tariff Regulations, 2024, this Hon'ble Commission has added a new format/ revised the format of Form-15 which has not prescribed in the past Tariff Regulations i.e. of 2019. Hence, it is only now (in the Tariff Regulations 2024) that the Petitioner has been obligated to furnish the data of coal as per the new format of Form-15.

A True copy of the Form 15 of Tariff Regulations 2019 and Form 15 of Tariff Regulations 2024, is marked and annexed herewith as **Annexure C**.

20) It is respectfully submitted that since the format for Form 15 has been changed in Tariff Regulations, 2024 and was notified in the month of June'2024, the Petitioner could not have been aware about the said changes earlier, hence the

Petitioner did not maintain the data required in new format of Form 15 of Tariff Regulations, 2024.

- 21) Therefore, this Hon'ble Commission may kindly exempt the Petitioner from furnishing the data of coal in terms of new format of Form 15 of the Tariff Regulations, 2024 & may be allowed to furnish the details of coal for FY 2023-24 in terms of the prescribed format of Form-15 of the Tariff Regulations, 2019.
- 22) In light of the above submissions, it may kindly be noted that no prejudice shall be caused to any party if the Petitioner is allowed for providing the details of Landed Price & GCV of coal to this Hon'ble Commission in terms of Form 15 of the Tariff Regulations, 2019 as the value of Landed Price & GCV of coal will remain unaffected.
- 23) The present petition is filed on the basis of norms specified in the Tariff Regulations 2024. It is submitted that the petitioner is in the process of installing the Emission Control Systems (ECS) in compliance of the Revised Emission Standards as notified by MOEF vide notification dated 07.12.2015 as amended. Completion of these schemes in compliance of revised emission norms will affect the Station APC, Heat Rate, O&M expenses, water charges etc. In addition, the availability of the unit/ station would be also affected due to shutdown of the units for installation of ECS. The petitioner would be filing the details of the same in terms of the Regulation 29 of CERC (Terms & Conditions of Tariff) Regulations 2024.
- 24) The petitioner has accordingly calculated the tariff for 2024-29 period based on the above and the same is enclosed as **Appendix-I** to this petition.
- 25) The Petitioner humbly submits that the pay/wage revision for the employees of the Petitioner will be due wef 01.01.2027. Further, the wage/pay revision of CISF and Kendriya Vidyalaya employees will also be due for revision during the tariff period 2024-29. Regulation-36(1)(8) of CERC (Terms & Conditions of Tariff) Regulations-2024 provides as below:

*"In the case of a generating company owned by the Central or State Government, the impact on account of implementation of wage or pay revision shall be allowed at the time of truing up of tariff."*

In accordance with the above said regulation, the Petitioner shall approach the Hon'ble Commission for allowing the impact of Pay/wage revision of employees of the Petitioner i.e. NTPC Limited, CISF and Kendriya Vidyalaya (wherever applicable) as additional O&M at the time of truing-up of tariff for the control period 2024-29. Hon'ble Commission may be pleased to grant liberty to consider the impact of wage/pay revision as an additional impact on O&M from the date same is implemented and allow the same as additional O&M over and above the normative O&M.

- 26) It is submitted the Petitioner has served the copy of the Petition on to the Respondents mentioned herein above and has posted the Petition on the company website i.e. [www.ntpc.co.in](http://www.ntpc.co.in).
- 27) In accordance with the 'Conduct of Business Regulations 2023' of the Hon'ble Commission, the Petitioner shall, within 7 days after filing the tariff petition, publish a notice about such filing in at least two daily leading digital newspapers one in English language and another in any of the Indian languages, having wide circulation in each of the States and Union Territories where the beneficiaries are situated, as per Form 14 appended to these regulations. Subsequently, the Petitioner shall submit the proof of publications as soft copies of the publications under an affidavit through the e-filing portal of the Hon'ble Commission within one week from the date of publication. Further, the Petitioner shall also submit the detail of expenses incurred for publication of the notice alongwith the prayer for recovery of Publication Expenses as per Regulation-94 of CERC Tariff Regulations 2024.
- 28) It is submitted that the Petitioner has already paid the requisite filing fee vide UTR No. 37c568eba62158b7b321 on 24.04.2024 for the year 2024-25 and the details of the same have been duly furnished to the Hon'ble Commission. For the subsequent years, it shall be paid as per the provisions of the CERC



(Payment of Fees) Regulations, 2012 as amended. Further Regulation 94 (1) of Tariff Regulations 2024 provides that the application fee and publication expenses may be allowed to be recovered directly from the beneficiaries at the discretion of the Hon'ble Commission. Accordingly, it is prayed that Hon'ble Commission may be pleased to allow recovery of filing fee and publication fee directly from the beneficiaries.

- 29) It is submitted that the petitioner is filing this tariff petition subject to the outcome of its various appeals/ petitions pending before different courts. Besides, the petitions filed by NTPC for determination of capital base as on 31.3.2019 through true-up exercise are pending before the Hon'ble Commission and would take some time. The Petitioner, therefore, reserves its right to amend the tariff petition as per the outcome in such appeals/ petitions, if required.

#### **Prayers**

In the light of the above submissions, the Petitioner, therefore, prays that the Hon'ble Commission may be pleased to

- i) Approve tariff of Barh Super Thermal Power Station Stage-II (2x660 MW) for the tariff period 01.04.2024 to 31.03.2029.
- ii) Allow the recovery of filing fees as & when paid to the Hon'ble Commission and publication expenses from the beneficiaries.
- iii) Consider station heat rate based on design heat rate with applicable operating margin.
- iv) Allow reimbursement of Ash Transportation Charges directly from the beneficiaries on monthly basis, subject to true up.
- v) Grant liberty to approach the Hon'ble Commission to allow for the recovery of pay/wage revision due in 2024-29 period as additional O&M over and above the normative O&M.
- vi) Pass any other order as it may deem fit in the circumstances mentioned above.

**Petitioner**

Noida  
Date: 29.11.2024

**BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION**  
**NEW DELHI**

**PETITION NO.....**

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**Petitioner** : NTPC Ltd.  
NTPC Bhawan  
Core-7, Scope Complex  
7, Institutional Area, Lodhi Road  
New Delhi-110 003



**Respondents:** North Bihar Power Distribution Company Ltd. (NBPDC) & Others

**AFFIDAVIT**

I, Prashant Chaturvedi, S/o Dr. S.C Chaturvedi, aged about 48 years, resident of 103, Bhabha Tower, Griha Pravesh, Sector-77, Noida- 201301, do hereby solemnly affirm and state as follows:

1. That the deponent is the Additional General Manager (Commercial) of the Petitioner NTPC Ltd. and is well conversant with the facts and the circumstances of the case and therefore competent to swear this affidavit.

That the accompanying Petition under Section 62 and 79 (1) (a) of the Electricity Act, 2003, has been filed by my authorized representative under my instruction and the contents of the same are true and correct to the best of my knowledge and belief.

3. That the contents of Para No. 1 to 29 as mentioned in the Petition are true and correct based on the my personal knowledge, belief and records maintained in the office.



प्रशान्त चतुर्वेदी / PRASHANT CHATURVEDI  
अपर महाप्रबन्धक (व्यावसायिक)  
Addl. General Manager (Commercial)  
एन टी पी सी लिमिटेड / NTPC LIMITED

4. That the annexures annexed to the Petition are correct and true copies of the respective originals.
5. That the Deponent has not filed any other Petition or Appeal before any other forum or court of law with respect to the subject matter of the dispute.

*Prashant Chaturvedi*  
(Deponent)

प्रशान्त चतुर्वेदी / PRASHANT CHATURVEDI  
अवर महाप्रबन्धक (वणिज्यिक)  
Add. General Manager (Commercial)  
एन टी पी सी लिमिटेड / NTPC LIMITED

**Verification:**

Verified at Noida on this 29 day of November 2024, that the contents of my above noted affidavit are true and correct to my knowledge and no part of it is false and nothing material has been concealed therefrom.

*Prashant Chaturvedi*  
(Deponent)

प्रशान्त चतुर्वेदी / PRASHANT CHATURVEDI  
अवर महाप्रबन्धक (वणिज्यिक)  
Add. General Manager (Commercial)  
एन टी पी सी लिमिटेड / NTPC LIMITED



ATTESTED  
*Yogendra Singh*  
YOGENDRA SINGH  
NOTARY NOIDA  
G B NAGAR (U.P.) INDIA

29 NOV 2024

**TARIFF FILING FORMS (THERMAL)**

**FOR DETERMINATION OF TARIFF**

**FOR**

**Barh-II (2x660 MW)**

**(From 01.04.2024 to 31.03.2029)**

**PART-I**

**APPENDIX-I**

**Checklist of Main Tariff Forms and other information for tariff filing for Thermal Stations**

Form No.	Title of Tariff Filing Forms (Thermal)	Tick
FORM-1	Summary of Tariff	✓
FORM-1 (I)	Statement showing claimed capital cost	✓
FORM-1 (II)	Statement showing Return on Equity	✓
FORM-2	Plant Characteristics	✓
FORM-3	Normative parameters considered for tariff computations	✓
FORM-3A**	Statement showing O&M Expenses	✓
FORM-3B**	Statement of Special Allowance	NA
FORM-4	Details of Foreign loans	✓
FORM-4A	Details of Foreign Equity	NA
FORM-5	Abstract of Admitted Capital Cost for the existing Projects	NA
FORM-5A**	Abstract of Claimed Capital Cost for the existing Projects	✓
FORM-6	Financial Package upto COD	NA
FORM-7	Details of Project Specific Loans	✓
FORM-8	Details of Allocation of corporate loans to various projects	✓
FORM-9A**	Summary of Statement of Additional Capitalisation claimed during the period	✓
FORM-9 ##	Statement of Additional Capitalisation after COD	✓
FORM-10	Financing of Additional Capitalisation	✓
FORM-11	Calculation of Depreciation on original project cost	✓
FORM-12	Statement of Depreciation	✓
FORM-13	Calculation of Weighted Average Rate of Interest on Actual Loans	✓
FORM-14	Draw Down Schedule for Calculation of IDC & Financing Charges	NA
FORM-15	Details of Fuel for Computation of Energy Charges	✓
FORM-15A	Details of Secondary Fuel for Computation of Energy Charges	✓
FORM-15B	Computation of Energy Charges	✓
FORM-16	Details of Limestone for Computation of Energy Charge Rate	NA
FORM-17	Details of Capital Spares	***
FORM-18	Non-Tariff Income	***
FORM-19	Details of Water Charges	***
FORM-20	Details of Statutory Charges	***

## Provided yearwise for the period 2024-29

\*\* Additional Forms

PART-I

\*\*\* Shall be provided at the time of true up

**List of Supporting Forms / documents for tariff filing for Thermal Stations**

Form No.	Title of Tariff Filing Forms (Thermal)	Tick
FORM-A	Abstract of Capital Cost Estimates	NA
FORM-B	Break-up of Capital Cost for Coal/Lignite based projects	NA
FORM-C	Break-up of Capital Cost for Gas/Liquid fuel based Projects	NA
FORM-D	Break-up of Construction/Supply/Service packages	NA
FORM-E	Details of variables, parameters, optional package etc. for New Project	NA
FORM-F	Details of cost over run	NA
FORM-G	Details of time over run	NA
FORM-H	Statement of Additional Capitalisation during end of the useful life	✓
FORM-I	Details of Assets De-capitalised during the period	***
FORM-J	Reconciliation of Capitalisation claimed vis-à-vis books of accounts	***
FORM-K	Statement showing details of items/assets/works claimed under Exclusions	***
FORM-L	Statement of Capital cost	✓
FORM-M	Statement of Capital Works in Progress	✓
FORM-N	Calculation of Interest on Normative Loan	✓
FORM-O	Calculation of Interest on Working Capital	✓
FORM-P	Incidental Expenditure up to SCOD and up to Actual COD	NA
FORM-Q	Expenditure under different packages up to SCOD and up to Actual COD	NA
FORM-R	Actual cash expenditure	NA
FORM-S	Statement of Liability flow	***
FORM-T	Summary of issues involved in the petition	✓

\*\*\* Shall be provided at the time of true up

## Summary of Tariff

Name of the Petitioner:	NTPC Limited
Name of the Generating Station:	Barh-II (2x660 MW)
Place (Region/District/State):	Eastern Region /Bihar

Amount in Rs. Lakhs

S. No.	Particulars	Unit	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7	8	9
1.1	Depreciation	Rs Lakh	54,126.52	55,158.38	55,424.79	55,512.00	55,512.00	25,841.84
1.2	Interest on Loan	Rs Lakh	26,891.73	23,807.61	20,354.58	17,029.05	12,605.92	9,353.54
1.3	Return on Equity	Rs Lakh	59,226.85	60,355.12	60,641.95	60,733.63	60,733.63	60,816.54
1.4	Interest on Working Capital	Rs Lakh	15,153.92	14,347.04	14,181.05	14,275.71	14,304.22	13,937.25
1.5	O&M Expenses	Rs Lakh	50,122.71	47,576.20	45,075.29	47,956.86	50,034.23	52,362.93
1.6	Special Allowance (if applicable)	Rs Lakh	NA					
1.7	Compensation Allowance (if applicable – relevant for column 4 only)	Rs. Lakh						
	<b>Total</b>	Rs Lakh	<b>205521.73</b>	<b>201244.34</b>	<b>195677.66</b>	<b>195507.24</b>	<b>193190.00</b>	<b>162312.09</b>
2.1	Landed Fuel Cost (coal/gas/RLNG/ liquid)	Rs/Ton		4,816.92	4,816.92	4,816.92	4,816.92	4,816.92
	(%) of Fuel Quantity	(%)						
2.2	Landed Fuel Cost (coal from Integrated mine) as per FSA, if any, approved by beneficiaries or as per allocation of coal quantity	Rs/Ton						
	(%) of Fuel Quantity	(%)						
2.3	Landed Fuel Cost Imported Coal					NA		
	(%) of Fuel Quantity							
2.4	Landed Fuel Cost ( coal/gas /RLNG/liquid) other than FSA	Rs/Ton				NA		
	(%) of Fuel Quantity	(%)						
2.5	Landed Fuel Cost Imported Coal other than FSA					NA		
	(%) of Fuel Quantity							
3	Secondary Fuel							
	Secondary fuel oil cost	Rs/Unit				0.043		
	Energy Charge Rate ex-bus (Paise/kWh)	Rs/Unit				3.407		

(Petitioner)

PART-I FORM- 1(i)						
Name of the Petitioner:		NTPC Limited				
Name of the Generating Station:		Barh-II (2x660 MW)				
Amount in Rs. Lakhs						
Statement showing claimed capital cost – (A+B)						
S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
1	Opening Capital Cost	10,67,688.35	10,74,648.57	10,78,035.79	10,78,035.79	10,78,035.79
2	Add: Addition during the year/period	6,960.22	3,387.22	-	-	3,754.40
3	Less: De-capitalisation during the year/period	-	-	-	-	-
4	Less: Reversal during the year / period	-	-	-	-	-
5	Add: Discharges during the year/ period	-	-	-	-	-
6	Closing Capital Cost	10,74,648.57	10,78,035.79	10,78,035.79	10,78,035.79	10,81,790.19
7	<b>Average Capital Cost</b>	<b>10,71,168.46</b>	<b>10,76,342.18</b>	<b>10,78,035.79</b>	<b>10,78,035.79</b>	<b>10,79,912.99</b>
Statement showing claimed capital cost eligible for RoE at normal rate (A)						
S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
1	Opening Capital Cost	1067688.35	1074494.57	1077265.79	1077265.79	1077265.79
2	Add: Addition during the year / period	6806.22	2771.22	0.00	0.00	0.00
3	Less: De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
4	Less: Reversal during the year / period	0.00	0.00	0.00	0.00	0.00
5	Add: Discharges during the year / period	0.00	0.00	0.00	0.00	0.00
6	Closing Capital Cost	1074494.57	1077265.79	1077265.79	1077265.79	1077265.79
7	<b>Average Capital Cost</b>	<b>1071091.46</b>	<b>1075880.18</b>	<b>1077265.79</b>	<b>1077265.79</b>	<b>1077265.79</b>
Statement showing claimed capital cost eligible for RoE linked to SBI MCLR (B)						
S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
1	Opening Capital Cost	0.00	154.00	770.00	770.00	770.00
2	Add: Addition during the year / period	154.00	616.00	0.00	0.00	3754.40
3	Less: De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
4	Less: Reversal during the year / period	0.00	0.00	0.00	0.00	0.00
5	Add: Discharges during the year / period	0.00	0.00	0.00	0.00	0.00
6	Closing Capital Cost	154.00	770.00	770.00	770.00	4524.40
7	<b>Average Capital Cost</b>	<b>77.00</b>	<b>462.00</b>	<b>770.00</b>	<b>770.00</b>	<b>2647.20</b>
(Petitioner)						

Name of the Petitioner: NTPC Limited

Name of the Generating Station: Barh-II (2x660 MW)

## Statement showing Return on Equity at Normal Rate

Amount in Rs. Lakhs						
S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
	<b>Return on Equity</b>					
1	Gross Opening Equity (Normal)	3,20,306.49	3,22,348.36	3,23,179.72	3,23,179.72	3,23,179.72
2	Less: Adjustment in Opening Equity	-	-	-	-	-
3	Adjustment during the year	-	-	-	-	-
4	Net Opening Equity (Normal)	3,20,306.49	3,22,348.36	3,23,179.72	3,23,179.72	3,23,179.72
5	Add: Increase in equity due to addition during the year / period	2041.87	831.37	0.00	0.00	0.00
7	Less: Decrease due to De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
8	Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00
9	Add: Increase due to discharges during the year / period	0.00	0.00	0.00	0.00	0.00
10	Net closing Equity (Normal)	3,22,348.36	3,23,179.72	3,23,179.72	3,23,179.72	3,23,179.72
11	Average Equity (Normal)	3,21,327.42	3,22,764.04	3,23,179.72	3,23,179.72	3,23,179.72
12	Rate of ROE (%)	18.782	18.782	18.782	18.782	18.782
13	Total ROE	60,351.72	60,621.54	60,699.62	60,699.62	60,699.62

(Petitioner)



Name of the Petitioner: NTPC Limited

Name of the Generating Station: Barh-II (2x660 MW)

**Statement showing Return on Equity linked to SBI MCLR**

Amount in Rs. Lakhs

S. No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
<b>Return on Equity @ Rate Linked to SBI MCLR+350 basis points</b>						
1	Gross Opening Equity (Normal)	0.00	46.20	231.00	231.00	231.00
2	Less: Adjustment in Opening Equity	0.00	0.00	0.00	0.00	0.00
3	Adjustment during the year	0.00	0.00	0.00	0.00	0.00
4	Net Opening Equity (Normal)	-	46.20	231.00	231.00	231.00
5	Add: Increase in equity due to addition during the year / period	46.20	184.80	0.00	0.00	1126.32
7	Less: Decrease due to De-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
8	Less: Decrease due to reversal during the year / period	0.00	0.00	0.00	0.00	0.00
9	Add: Increase due to discharges during the year / period	0.00	0.00	0.00	0.00	0.00
10	Net closing Equity (Normal)	46.20	231.00	231.00	231.00	1357.32
11	Average Equity (Normal)	23.10	138.60	231.00	231.00	794.16
12	Rate of ROE (Pre-Tax) (%)	12.15	12.15	12.15	12.15	12.15
13	Rate of ROE (Post-Tax) (%)	14.723	14.723	14.723	14.723	14.723
14	Total ROE	3.40	20.41	34.01	34.01	116.92

(Petitioner)

## Plant Characteristics

Name of the Petitioner :	NTPC Ltd	
Name of the Generating Station :	Barh STPS Stage - II ( 2X660 MW)	
Unit(s)/ Block(s) Parameters	Unit-I	Unit-II
Installed Capacity ( MW)	660	660
Schedule COD as per Investment Approval	14.01.2013	14.11.2013
Actual COD /Date of Taken Over (as applicable)	08.03.2016 (Revised to 08.03.2016 from actual 15.11.2014)	18.02.2016 (Actual)
Pit Head or Non Pit Head or Integrated Mine	Non Pit Head	
Name of the Boiler Manufacture	BHEL*	
Name of Turbine Generator Manufacture	BHEL**	
Main Steam Pressure at Turbine inlet (kg/Cm <sup>2</sup> ) abs	247.00	
Main Steam Temperature at Turbine inlet (oC)	565.00	
Reheat Steam Pressure at Turbine inlet (kg/Cm <sup>2</sup> )	50.40	
Reheat Steam Temperature at Turbine inlet (oC)	593.00	
Main Steam flow at Turbine inlet under MCR condition (tons /hr)	1918.62	
Main Steam flow at Turbine inlet under VWO condition (tons /hr) <sup>2</sup>	2044.012 TPH (VWO, MSP,0% MU, 77 mmHg)	
Unit Gross electrical output under MCR /Rated condition (MW) <sup>2</sup>	660	
Unit Gross electrical output under VWO condition (MW) <sup>2</sup>	693	
Guaranteed Design Gross Turbine Cycle Heat Rate (kCal/kWh) <sup>3</sup>	1838	
Conditions on which design turbine cycle heat rate guaranteed		
% MCR	100 % TMCR	
% Makeup Water Consumption	0 % MU at guaranteed condition	
Design Capacity of Make up Water System	3600 CUBIC M/HR	
Design Capacity of Inlet Cooling System	72000 CUBIC M/HR	
Design Cooling Water Temperature (oC)	33 deg C	
Back Pressure	77 mm Hg	
Steam flow at super heater outlet under BMCR condition (tons/hr)	2120	
Steam Pressure at super heater outlet under BMCR condition) (kg/Cm <sup>2</sup> )	256	
Steam Temperature at super heater outlet under BMCR condition (oC)	568	
Steam Temperature at Reheater outlet at BMCR condition (oC)	596	
Design / Guaranteed Boiler Efficiency (%) <sup>4</sup>	83.7 at MCR	
Design Fuel with and without Blending of domestic/imported coal	Barh-II design does not specifically ensure provision for imported coal blending	
Type of Cooling Tower	IDCT	
Type of cooling system	Closed Circuit Cooling	
Type of Boiler Feed Pump	2nos TDBFP; 1no. MDBFP	
Type of Coal Mill	Bowl Mill	
Type of Boiler	Tangential fired boiler	

<b>Fuel Details</b>	
- Primary Fuel	Coal
-Secondary Fuel	LDO
-Alternate Fuels	
Types of SOX control system	FGD under implementation
Types of NOX control system	
Details of SPM control system	ESP
<b>Special Features/Site Specific Features</b>	
Special Technological Features	Supercritical
Environmental Regulation related features	1. FGD under implementation 2. High efficiency ESPs have been installed
Any other special features	
* BHEL in technical collaboration with M/s Alstom ** BHEL in technical collaboration with M/s Siemens	
1: At Turbine MCR condition.	
2: with 0% (Nil) make up and design Cooling water temperature	
3: at TMCR output based on gross generation, 0% (Nil) makeup and design Cooling water temperature.	
4: With Performance coal based on Higher Heating Value (HHV) of fuel and at BMCR) out put	
5: Closed circuit cooling, once through cooling, sea cooling, natural draft cooling, induced draft cooling etc.	
6: Motor driven, Steam turbine driven etc.	
7: Coal or natural gas or Naptha or lignite etc.	
8: Any site specific feature such as Merry-Go-Round, Vicinity to sea, Intake /makeup water systems etc. scrubbers etc.	
9: Any Special Technological feature like Advanced class FA technology in Gas Turbines, etc.	
10: Environmental Regulation related features like FGD, ESP etc.,	
<b>PETITIONER</b>	

## Normative parameters considered for tariff computations

Name of the Petitioner:		NTPC Limited					
Name of the Generating Station:		Barh-II (2x660 MW)					
		(Year Ending March)					
Particulars	Unit	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7	8
Base Rate of Return on Equity \$\$	%	15.50	15.50	15.50	15.50	15.50	15.50
Base Rate of Return on Equity on Add. Capitalization	%	-	12.15	12.15	12.15	12.15	12.15
Effective Tax Rate	%	17.4720	17.4720	17.4720	17.4720	17.4720	17.4720
Target Availability	%	85.00	85.00	85.00	85.00	85.00	85.00
Peak Hours	%	85.00	85.00	85.00	85.00	85.00	85.00
Off Peak Hours	%	85.00	85.00	85.00	85.00	85.00	85.00
β- Average Monthly Frequency Response Performance ##	0-1	To be provided at time of Trueing up					
Auxiliary Energy Consumption ***	%	6.25	5.75	5.75	5.75	5.75	5.75
Gross Station Heat Rate	kCal/kWh	2305.73	2294.76	2294.76	2294.76	2294.76	2294.76
Specific Fuel Oil Consumption	ml/kWh	0.50	0.50	0.50	0.50	0.50	0.50
Cost of Coal/Lignite for WC1	in Days	50	50	50	50	50	50
Cost of Main Secondary Fuel Oil for WC1	in Months	2	2	2	2	2	2
Fuel Cost for WC2	in Months						
Liquid Fuel Stock for WC2	in Months						
O&M Expenses	Rs lakh/MW	23.26	25.78	27.13	28.56	30.06	31.64
Maintenance Spares for WC	% of O&M	20.00	20.00	20.00	20.00	20.00	20.00
Receivables for WC	in Days	45	45	45	45	45	45
Storage capacity of Primary fuel *	Lakh MT				4.5		
SBI 1 Year MCLR plus 325 basis point	%	12.00	11.90	11.90	11.90	11.90	11.90
SBI 1 Year MCLR plus 350 basis point	%		12.15	12.15	12.15	12.15	12.15
Blending ratio of domestic coal/imported coal							
Norms for consumption of reagent							
Specific Limestone consumption for Wet Limestone FGD							
Specific Limestone consumption for Lime Spray Dryer or Semi-dry FGD							
Specific consumption of sodium bicarbonate							
Specific Limestone consumption for CFBC based generating station							
specific urea consumption of the SNCR							
Specific ammonia consumption of the SCR							
Transit and Handling Losses of coal or lignite, as applicable							

\$\$ Additional RoE due to better ramp rate would be claimed at the time of true-up or as per guidelines to be issued

## To be submitted at the time of trueing up based on RPC certification

Petitioner

Calculation of O&M Expenses

Name of the Company : NTPC Limited

Name of the Power Station : Barh-II (2x660 MW)

Amount in Rs. Lakhs

S.No	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7
1	O&M expenses under Reg.36(1)					
1a	Normative	34029.60	35811.60	37699.20	39679.20	41764.80
2	O&M expenses under Reg.36(1)(6)					
2a	Water Charges **	987.00	924.00	924.00	924.00	924.00
2b	Security expenses **	2209.60	2339.69	2573.66	2831.03	3114.13
2c	Capital Spares***					
2d	O&M expenses-Ash Transportation**	10350.00	6000.00	6760.00	6600.00	6560.00
	<b>Total O&amp;M Expenses (1+2)</b>	<b>47576.20</b>	<b>45075.29</b>	<b>47956.86</b>	<b>50034.23</b>	<b>52362.93</b>

\*\* subject to true up

\*\*\* Shall be provided at the truing up

Petitioner

**Abstract of Claimed Capital Cost for the existing Projects**

<b>Name of the Company :</b>	NTPC Limited	
<b>Name of the Power Station</b>	Barh-II (2x660 MW)	
Reference of Final True-up Tariff Petition	<b>Affidavit dated</b>	
Capital Cost allowed in the 2019-24 Main Tariff Petition no 74/GT/2024	<b>Rs. Lakhs</b>	130/GT/2014 (2014-19) & 74/GT/2024(2019-24), under consideration.
Following details as considered by the Petitioner as on the last date of the period for which final true-up tariff is claimed:		
Capital cost as on 01.04.2024 (cash basis)	<b>(Rs. in lakh)</b>	1067688.35
Amount of un-discharged liabilities included in above (& forming part of admitted capital cost) as on 31.03.2024		
Amount of un-discharged liabilities corresponding to above admitted capital cost (but not forming part of admitted capital cost being allowed on cash basis)		
Gross Normative Debt		747381.85
Cumulative Repayment		4,07,710.31
Net Normative Debt		339671.53
Normative Equity		320306.51
Cumulative Depreciation		409064.27
Freehold land		8,532.42
		<b>(Petitioner)</b>

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Ltd.
Name of the Generating Station	Barh-II (2x660 MW)
COD	08-03-2016
For Financial Year	2024-29 (Summary)

Sl. No.	Head of Work /Equipment	ACE Claimed					Total	Justification	Admitted Cost by the Commission, if any
		2024-25	2025-26	2026-27	2027-28	2028-29			
1	2	3	4	5	6	7	8	9	
<b>A. Works eligible for RoE at Normal Rate</b>									
1	Upgradation against Obsolescence of HMI of M/s ABB & M/s Siemens with cyber security suite for Station C&I	6,039	2,013				8,052	Pl. refer Form-9 of respective FYs.	
2	Comprehensive Cyber security suite for M/s BHEL Max-DNA	70	70				139		
3	Upgradation of CCTV system for Barh-2	388	388				775		
4	400 kV, 3150 A Circuit Breakers	270	270				540		
5	Water Cooled Screw Chillers at switchyard	40	31				71		
<b>Total additional capitalization claimed with RoE at Normal Rate (A)</b>		<b>6,806</b>	<b>2,771</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9,577</b>		
<b>B. Works eligible for Return on Equity linked to SBI MCLR:</b>									
1	ClO2 system at Barh-II	154	616				770	Pl. refer Form-9 of respective FYs.	
2	Infrastruture for supply of Treated Sewage water for NTPC Barh					3,754	3,754		
<b>Total additional capitalization claimed with RoE at SBI MCLR (B)</b>		<b>154</b>	<b>616</b>	<b>-</b>	<b>-</b>	<b>3,754</b>	<b>4,524</b>		
<b>Total Add. Cap. Claimed (A+B)</b>		<b>6,960</b>	<b>3,387</b>	<b>-</b>	<b>-</b>	<b>3,754</b>	<b>14,102</b>		

(Petitioner)

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Barh-II (2x660 MW)
COD	08-03-2016
For Financial Year	2024-25

Sl. No.	Head of Work /Equipment	ACE Claimed (Actual / Projected)				Regulations under which claimed	Justification	Amount in Rs Lakh Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
<b>A. Works eligible for RoE at Normal Rate</b>								
1	Upgradation against Obsolescence of HMI of M/s ABB & M/s Siemens with cyber security suite for Station C&I	6039		6039		25(2) (b) & (c)	<p>It is submitted that HMI system of OEM's are based on window server system 2003 / XP/2007 operating system, same has been declared obsolete by Microsoft. Due to declared obsolescence of same, no software patch update is available, exposing the system vulnerable to cyber threats. As Microsoft has officially ended support for Windows XP on April 8, 2014 and Window 7 on January 14,2020, no further maintenance patches, security updates, or antivirus support are available, exposing the existing system to significant security risks. Therefore, HMI upgradation to latest windows OS based platform with cyber security suite is required for ABB HMI systems of Main plant BOP, offsite etc., the obsolescence document from OEM M/s ABB for windows operating systems is <b>attached at Annexure-1</b>. Also, HMI upgradation to latest windows OS based platform with cyber security suite is required for Siemens HMI systems of Main plant Turbine, Generator etc., the obsolescence document from OEM M/s ABB for windows operating systems is <b>attached at Annexure-2</b>.</p> <p>Further, the guidelines on Cyber security features in Power Sector was issued by the Hon'ble CEA on Oct'21 (<b>Annexure-3</b>). The HMI systems previously deployed at Station relies on the Windows XP operating system. Since Microsoft no longer supports Windows XP, this created significant cybersecurity risks. To address these concerns and ensure continued functionality of the system, an upgradation is necessary. It is further submitted that the CEA Guidelines (2021) for Cyber Security in the Power Sector mandates</p> <p>(i) Phasing out legacy systems, (ii) Hardening existing systems with additional security controls in consultation with the OEM, and (iii) Maintaining system logs for a minimum of six months.</p> <p>In light of these mandates, it has become essential to upgrade the existing systems of M/s ABB and M/s Siemens installed in instant station. It is submitted that the proposed upgradation involves upgradation of existing System and implementing a cybersecurity suite for HMI to strengthen system hardening as mandated in the CEA guideline.</p> <p>Hon'ble Commission has allowed the similar additional capital expenditure incurred on HMI upgradation in Anta gas power station and Mejja thermal power station vide its order dated 05.09.2023 (in petition no. 432-GT-2020) and order dated 27.04.2023 (in petition no. 568-GT-2020) respectively.</p> <p>Therefore, for continued and efficient operation of the system, it is humbly requested that Hon'ble Commission may be pleased to allow the same under 25 (2) (b) &amp; (C) of Tariff Regulations 2024. Tariff Regulations 2024</p>	
2	Comprehensive Cyber security suite for M/s BHEL Max-DNA	70		70		25(2) (b)	<p>Guidelines on Cyber security features in Power Sector was issued by the Hon'ble CEA on Oct'21 (<b>Annexure-3</b>). The HMI system previously deployed at Station relied on the Windows XP operating system. Since Microsoft no longer supports Windows XP, this created significant cybersecurity risks. To address these concerns and ensure continued functionality of the system, comprehensive cyber security is necessary for the system. It is submitted that the CEA Guidelines (2021) for Cyber Security in the Power Sector mandates</p> <p>(i) Phasing out legacy systems, (ii) Hardening existing systems with additional security controls in consultation with the OEM, and (iii) Maintaining system logs for a minimum of six months.</p> <p>In light of these mandates, it has become essential to upgrade the existing systems. It is submitted that the proposed upgradation involves implementing a cybersecurity suite as per CEA guidelines of Max-DNA, M/s BHEL supplied HMI system for Main Plant SG ,TG etc. to strengthen system hardening as mandated in the CEA guideline.</p> <p>In view of the above, it is respectfully submitted that the Hon'ble Commission may allow the proposed expenditure under 25(2) (b) of Tariff Regulations 2024.</p>	
3	Upgradation of CCTV system for Barh-2	388		388		25(2) (C)	<p>The IT industry has been evolving fast and most legacy kernels such as Open Source Software (OSS) and drivers have not been updated by the suppliers. It has made difficult for M/s OEM Honeywell to provide further support for End of Life (EOL) products installed in instant station. With this announcement of End-of-Support on its products, Honeywell will no longer provide support for the requirements of technical support, new features, integration and cyber security updates, the obsolescence document from OEM M/s Honeywell is attached at <b>Annexure-4</b>.</p> <p>In view of the above, it is respectfully submitted that the Hon'ble Commission may allow the proposed expenditure under 25(2) (C) of Tariff Regulations 2024.</p>	



Sl. No.	Head of Work /Equipment	ACE Claimed (Actual / Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
4	400 kV, 3150 A Circuit Breakers	270		270		25(2) (C)	<p>It is submitted that circuit breakers are mainly used for the protection of very high voltage circuits up to 800 kV. These 400 kV circuit breakers enables power evacuation from generation side to transmission side alongwith grid connectivity between the substations. Any problem arising in circuit breakers due to failure, malfunction etc. will lead to a cascaded effect of bus/ unit tripping thereby weakening system reliability. Further, the OEM M/s BHEL has declared the discontinuation of SF6 circuit breakers installed at instant station, Obsolescence document of Circuit breaker from M/s BHEL attached at Annexure-5. Therefore, to ensure reliability of the system, existing breakers needs to be upgraded with modern, state of art, technologically.</p> <p>In view of the above, it is respectfully submitted that the Hon'ble Commission may allow the proposed expenditure under 25(2) (C) of Tariff Regulations 2024.</p>	
5	Water Cooled Screw Chillers at switchyard	40		40		25(2) (C)	<p>Presently installed Chiller system at Switchyard of instant station of reciprocating type has been declared obsolete by OEM M/s Bluestar on account of technology. These equipments regulate/control the ambient temperature required for installed equipment, panels, instruments etc. and are essential for reliable operation of the plant. The existing system needs to be replaced with efficient and reliable Water Cooled Screw Chillers at switchyard, Obsolescence document from M/s Bluestar attached at Annexure-6</p> <p>In view of the above, it is respectfully submitted that the Hon'ble Commission may allow the proposed expenditure under 25(2) (C) of Tariff Regulations 2024.</p>	
Total (A)		6806	0.00	6806				
<b>B: Works eligible for Return on Equity linked to SBI MCLR:</b>								
1	ClO2 system	154		154		26 (1) (b) (d) & (i)	<p>Chlorine gas is being dozed directly at various stages of water treatment to maintain water quality and to inhibit organic growth in the water retaining structures. Chlorine gas is very hazardous and may prove fatal in case of leakage; handling and storage of same involves risk to the life of public at large (Documents are placed as Annexure-B)</p> <p>Installation of ClO2 system by replacing chlorine gas injecting system is being undertaken at all NTPC stations to enhance safety of personnel engaged in power plant operation. Work taken-up in accordance to the various provisions and objectives of the "National Disaster Management Guidelines – Chemical Disasters" which provides that industrial systems shall be continuously improved and upgraded for the prevention and management of chemical accidents. It is also pertinent that the action for insilation of ClO2 system is also in compliance with the duties necessitated for an employer (NTPC) under the clause 6(1)(a) and 6(1)(d) of "The Occupational Safety, Health and Working Conditions Code, 2020" notified by Ministry of Law &amp; Justice, GoI vide Gazette Notification dated 29.09.2020 relevant extracts of which are reproduced below:</p> <p>"DUTIES OF EMPLOYER AND EMPLOYEES, ETC: 6 (1) Every employer shall: (a)ensure that workplace is free from hazards which cause or are likely to cause injury or occupational disease to the employees; ... (e)Provide and maintains, as far as is reasonably practicable, a working environment that is safe and without risk to the health of the employees"</p> <p>Some of the major benefits of installation of ClO2 system are as under (a) Avoid possible accidents due to leakage of chlorine while handling (b) Improves safety of personnel and plant &amp; equipment (c) Increases the shelf life of water retaining structures/ equipment such as clarifiers, storage tanks, cooling towers, condenser tubes &amp; piping etc thereby reduces the replacement cost. (d) Helps in complying with statutory direction of some states that have already made it mandatory.</p> <p>Additionally Chlorine dioxide (ClO2) dosing also helps control bacteria, algae, and biofilm in cooling towers and prevents Legionella contamination and improve heat transfer efficiency in Cooling Towers. In view of the above, it is humbly requested that Hon'ble Commission may be pleased to allow the same as a change in law event or compliance of any existing law under Regulation 26(1) (b) and under Regulation 26 (1)(d) which permits consideration for need for higher security and safety of the plant as advised or directed by statutory authorities responsible for national or internal security and also under 26(1)(i) as it results in higher operating efficiency in Cooling towers.</p>	
Total (B)		154.00		154.00				
Total Add. Cap. Claimed (A+B)		6,960		6,960				

(Petitioner)

## Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Barh-II (2x660 MW)
COD	08-03-2016
For Financial Year	2025-26

Sl. No.	Head of Work /Equipment	Accrual basis as per IGAAP	ACE Claimed (Actual / Projected)		Regulations under which claimed	Justification	Admitted Cost by the Commission, if any	
			Un-discharged Liability included in col. 3	Cash basis IDC included in col. 3				
1	2	3	4	5= (3-4)	6	7	8	9
<b>A. Works eligible for RoE at Normal Rate:</b>								
1	Upgradation against Obsolescence of HMI of M/s ABB & M/s Siemens with cyber security suite for Stn C&I	2013		2013		25(2) (b) & ( c )	Justification as per Form-9 (2024-25), Sl. No. 1	
2	Comprehensive cyber security suite for M/s BHEL Max-DNA	70		70		25(2) (b)	Justification as per Refer Form-9 (2024-25), Sl. No. 2	
3	Upgradation of CCTV system for Barh-2	388		388		25(2) (C)	Justification as per Refer Form-9 (2024-25), Sl. No. 3	
4	400 kV, 3150 A Circuit Breakers	270		270		25(2) (C)	Justification as per Refer Form-9 (2024-25), Sl. No. 4	
5	Water Cooled Screw Chillers at switchyard	31		31		25(2) (C)	Justification as per Refer Form-9 (2024-25), Sl. No. 5	
	<b>Total (A)</b>	<b>2771</b>	<b>0.00</b>	<b>2771</b>	-			
<b>B. Works eligible for Return on Equity linked to SBI MCLR:</b>								
1	CIO2 system	616	-	616		26 (1) (b) (d) & (i)	Justification as per Refer Form-9 (2024-25), Sl. No. 1	
	<b>Total (B)</b>	<b>616</b>	<b>-</b>	<b>616</b>	<b>-</b>			
	<b>Total Add. Cap. Claimed (A+B)</b>	<b>3387</b>	<b>-</b>	<b>3,387</b>	<b>-</b>			

(Petitioner)

## Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner		NTPC Limited						
Name of the Generating Station		Barh-II (2x660 MW)						
COD		08-03-2016						
For Financial Year		2026-27						
								Amount in Rs Lakh
Sl. No.	Head of Work /Equipment	ACE Claimed (Actual / Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
<b>A. Works eligible for RoE at Normal Rate</b>								
Total Add. Cap. Claimed (A)		-	-	-	-			
<b>B. Works eligible for Return on Equity linked to SBI MCLR:</b>								
Total Add. Cap. Claimed (B)		-	-	-	-			
								(Petitioner)

**Year wise Statement of Additional Capitalisation after COD**

Name of the Petitioner		NTPC Limited						
Name of the Generating Station		Barh-II (2x660 MW)						
COD		08-03-2016						
For Financial Year		2027-28						
								<b>Amount in Rs Lakh</b>
Sl No.	Head of Work /Equipment	ACE Claimed (Actual / Projected)				Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
<b>A. Works eligible for RoE at Normal Rate</b>								
<b>Total Add. Cap. Claimed (A)</b>		-	-	-	-			
<b>B. Works eligible for Return on Equity linked to SBI MCLR:</b>								
<b>Total Add. Cap. Claimed (B)</b>		-	-	-	-	-		
								<b>(Petitioner)</b>

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Barh-II (2x660 MW)
COD	08-03-2016
For Financial Year	2028-29

Sl. No.	Head of Work /Equipment	Accrual basis as per IGAAP	ACE Claimed (Actual / Projected)			Regulations under which claimed	Justification	Admitted Cost by the Commission, if any.
			Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2	3	4	5= (3-4)	6	7	8	9
<b>A. Works eligible for RoE at Normal Rate</b>								
1								
	Total (A)	-	-	-	-			
<b>B. Works eligible for Return on Equity linked to SBI MCLR:</b>								
1	Infrastrutre for supply of Treated Sewage water for NTPC Barh	3754	-	3,754	-	26 (1) (f)	It is submitted that an agreement has been signed between NTPC Barh and Bihar Urban Infrastructure Development Corporation (BUIDCO) for supply of treated sewage water from sewage treatment plant to NTPC Barh for Non potable application. This includes treatment of raw municipal sewage through STP of BUIDCO. The secondary treated sewage water at STP outlet shall meet NGT norms. The cost of developing infrastructure for pumping of water i.e. pumping system, Tertiary Treatment Plant, pipe conveying system upto NTPC Barh shall be executed by BUIDCO on deposit works basis and expenditure shall be borne by NTPC. The total expenditure is projected as Rs.93.86 Crore and Rs. 37.55 Cr has been projected in Barh Stage-II based on prorata capacity and balance amount is being claimed in Barh-I. enclosed as Annexure-7.  In view of the above, it is respectfully submitted that the Hon'ble Commission may allow the proposed expenditure under 26 (1) (f) of Tariff Regulations 2024.	
	Total (B)	3754	-	3,754	-			
	Total Add. Cap. Claimed (A+B)	3754	-	3,754	-			

(Petitioner)

<b>Name of the Petitioner</b>	<b>NTPC Limited</b>
<b>Name of the Generating Station</b>	<b>Barh-II (2x660 MW)</b>
<b>Date of Commercial Operation</b>	<b>08-03-2016</b>

Financial Year (Starting from COD)1	Amount in Rs Lakh									
	Actual					Admitted				
	2024-25	2025-26	2026-27	2027-28	2028-29	2024-25	2025-26	2026-27	2027-28	2028-29
1		3	4	5	6	7	8	9	10	11

Amount capitalised in Work/ Equipment

<b>Financing Details:</b>	<p><b>Add cap is proposed to be finance in Debt:Equity ratio of 70:30</b></p>
Loan-1	
Loan-2	
Loan-3 and so on	
Total Loan2	
Equity	
Internal Resources	
Others (Pl. specify)	
<b>Total</b>	

(Petitioner)

				<b>PART-I</b>
				<b>FORM- 11</b>
<b>Calculation of Depreciation</b>				
<b>Name of the Petitioner: NTPC Limited</b>				
<b>Name of the Generating Station : Barh STPS Stage - II ( 2X660 MW)</b>				
<b>(Amount in Rs Lakh)</b>				
Sl.No.	Name of the Assets	Gross Block as on 31.03.2024	Depreciation Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount on Gross Block as on 31.03.2024
1	2	3	4	5=Col.3 X Col.4
1	Freehold Land	11712.34	0.00%	0
2	Leasehold Land	657.44	3.34%	21.96
3	Roads, bridges, culverts & helipads	10013.26	3.34%	334.44
4	Main plant Building	52931.91	3.34%	1767.93
5	Other Buildings	15003.76	3.34%	501.13
6	Temporary erection	733.86	100.00%	733.86
7	Water supply, drainage & sewerage	1207.10	5.28%	63.74
8	MGR track and signalling system	10857.88	5.28%	573.3
9	Railway siding	29369.57	5.28%	1550.71
10	Plant and machinery	911995.35	5.28%	48153.35
11	Furniture and fixtures	1460.39	6.33%	92.44
12	Vehicles - Owned	235.00	9.50%	22.32
13	Construction equipment	1402.85	5.28%	74.07
14	Other Office Equipments	411.79	6.33%	26.07
15	EDP, WP machines & SATCOM equipment	325.27	15.00%	48.79
16	Electrical installations	3018.34	5.28%	159.37
17	Communication equipment	296.48	6.33%	18.77
18	Hospital equipment	15.56	5.28%	0.82
19	Software	81.52	15.00%	12.23
	<b>TOTAL</b>	<b>1051729.7</b>		<b>54155.3</b>
	<b>Weighted Average Rate of Depreciation (%)</b>			<b>5.149%</b>

## Statement of Depreciation

Name of the Company :	NTPC Limited
Name of the Power Station :	Barh-II (2x660 MW)

(Amount in Rs Lakh)

S. No.	Particulars	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7	8
1	Opening Capital Cost	1034567.39	10,67,688.35	10,74,648.57	10,78,035.79	10,78,035.79	10,78,035.79
2	Closing Capital Cost	1067688.35	10,74,648.57	10,78,035.79	10,78,035.79	10,78,035.79	10,81,790.19
3	Average Capital Cost	1051127.87	10,71,168.46	10,76,342.18	10,78,035.79	10,78,035.79	10,79,912.99
1a	Cost of IT Equipments & Software included in (1) above <sup>^^</sup>	485.42	470.47	470.47	470.47	470.47	470.47
2a	Cost of IT Equipments & Software included in (2) above <sup>^^</sup>	-14.96	470.47	470.47	470.47	470.47	470.47
3a	Average Cost of IT Equipments & Software	235.23	470.47	470.47	470.47	470.47	470.47
4	Freehold land	8,532.42	8,532.42	8,532.42	8,532.42	8,532.42	8,532.42
5	Rate of depreciation	5.15%	5.15%	5.15%	5.15%	5.15%	5.15%
6	Depreciable value	9,38,383.70	9,58,419.48	9,61,075.83	9,62,600.08	9,62,600.08	9,64,289.56
7	Balance useful life at the beginning of the period	17.91	16.91	15.91	14.91	13.91	12.91
8	Remaining depreciable value	5,83,180.90	5,47,355.21	4,96,853.18	4,42,952.64	3,87,440.64	3,33,618.13
9	Depreciation (for the period)	54,126.52	55,158.38	55,424.79	55,512.00	55,512.00	25,841.84
10	Depreciation (annualised)	54,126.52	55,158.38	55,424.79	55,512.00	55,512.00	25,841.84
11	Cumulative depreciation at the end of the period	409329.32	4,64,222.65	5,19,647.44	5,75,159.44	6,30,671.44	6,56,513.27
12	Less: Cumulative depreciation adjustment on account of un-discharged liabilities deducted as on 01.04.2009	0.00	-	-	-	-	-
13	Add: Cumulative depreciation adjustment on account of liability Discharge	0.00	-	-	-	-	-
14	Less: Cumulative depreciation adjustment on account of de-capitalisation	265.05	-	-	-	-	-
15	Net Cumulative depreciation at the end of the period after adjustments	4,09,064.27	4,64,222.65	5,19,647.44	5,75,159.44	6,30,671.44	6,56,513.27

<sup>^^</sup> Shall be provided at the time of true up

(Petitioner)



	<b>Name of the Company :</b>	NTPC Limited				FORM -13
	<b>Name of the Power Station :</b>	Barh-II (2x660 MW)				
<b>S.No.</b>	<b>Particulars</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>	<b>2027-28</b>	<b>2028-29</b>
<b>1</b>	<b>Kfw, Barh</b>					
	Gross Drawl opening	53,906.48	53,906.48	53,906.48	53,906.48	53,906.48
	Cummulative repayment of drawl till prev yr	41,747.95	46,426.72	51,105.50	53,906.48	53,906.48
	Net Loan opening	12,158.53	7,479.75	2,800.98	-	-
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	12,158.53	7,479.75	2,800.98	-	-
	Repayment of loan during the year	4,678.77	4,678.77	2,800.98	-	-
	Net loan closing	7,479.75	2,800.98	-	-	-
	Average net loan	9,819.14	5,140.37	1,400.49	-	-
	Rate of interest on loan	3.5000%	3.5000%	3.5000%	3.5000%	3.5000%
	Interest on loan	343.67	179.91	49.02	-	-
<b>2</b>	<b>4.3/5% Euro Bonus 20<sup>24</sup></b>					
	Gross Drawl opening	4,921.75	4,921.75	4,921.75	4,921.75	4,921.75
	Cummulative repayment of drawl till prev yr	-	4,921.75	4,921.75	4,921.75	4,921.75
	Net Loan opening	4,921.75	-	-	-	-
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	4,921.75	-	-	-	-
	Repayment of loan during the year	4,921.75	-	-	-	-
	Net loan closing	-	-	-	-	-
	Average net loan	2,460.87	-	-	-	-
	Rate of interest on loan	4.6277%	4.6277%	4.6277%	4.6277%	4.6277%
	Interest on loan	113.88	-	-	-	-
<b>3</b>	<b>USD 750M Drawl III (Refinancing of 4.375% Euro Bonds 20<sup>24</sup>)</b>					
	Gross Drawl opening	9,352.00	9,352.00	9,352.00	9,352.00	9,352.00
	Cummulative repayment of drawl till prev yr	-	-	-	1,336.00	2,672.00
	Net Loan opening	9,352.00	9,352.00	9,352.00	8,016.00	6,680.00
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	9,352.00	9,352.00	9,352.00	8,016.00	6,680.00
	Repayment of loan during the year	-	-	1,336.00	1,336.00	1,336.00
	Net loan closing	9,352.00	9,352.00	8,016.00	6,680.00	5,344.00
	Average net loan	9,352.00	9,352.00	8,684.00	7,348.00	6,012.00
	Rate of interest on loan	7.1686%	7.1686%	7.1686%	7.1686%	7.1686%
	Interest on loan	670.40	670.40	622.52	526.75	430.97
<b>4</b>	<b>BOND-XLII</b>					
	Gross Drawl opening	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
	Cummulative repayment of drawl till prev yr	800.00	1,200.00	1,600.00	2,000.00	2,000.00
	Net Loan opening	1,200.00	800.00	400.00	-	-
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	1,200.00	800.00	400.00	-	-
	Repayment of loan during the year	400.00	400.00	400.00	-	-
	Net loan closing	800.00	400.00	-	-	-
	Average net loan	1,000.00	600.00	200.00	-	-
	Rate of interest on loan	9.0300%	9.0300%	9.0300%	9.0300%	9.0300%
	Interest on loan	90.30	54.18	18.06	-	-

S.No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
<b>5</b>	<b>L2A Bond</b>					
	Gross Drawl opening	885.52	885.52	885.52	885.52	885.52
	Cummulative repayment of drawl till prev yr	-	-	-	-	-
	Net Loan opening	885.52	885.52	885.52	885.52	885.52
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	885.52	885.52	885.52	885.52	885.52
	Repayment of loan during the year	-	-	-	-	885.52
	Net loan closing	885.52	885.52	885.52	885.52	-
	Average net loan	885.52	885.52	885.52	885.52	442.76
	Rate of interest on loan	8.5100%	8.5100%	8.5100%	8.5100%	8.5100%
	<b>Interest on loan</b>	<b>75.36</b>	<b>75.36</b>	<b>75.36</b>	<b>75.36</b>	<b>37.68</b>
<b>6</b>	<b>L3A Bonds</b>					
	Gross Drawl opening	1,105.47	1,105.47	1,105.47	1,105.47	1,105.47
	Cummulative repayment of drawl till prev yr	-	-	-	-	-
	Net Loan opening	1,105.47	1,105.47	1,105.47	1,105.47	1,105.47
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	1,105.47	1,105.47	1,105.47	1,105.47	1,105.47
	Repayment of loan during the year	-	-	-	-	-
	Net loan closing	1,105.47	1,105.47	1,105.47	1,105.47	1,105.47
	Average net loan	1,105.47	1,105.47	1,105.47	1,105.47	1,105.47
	Rate of interest on loan	8.6900%	8.6900%	8.6900%	8.6900%	8.6900%
	<b>Interest on loan</b>	<b>96.07</b>	<b>96.07</b>	<b>96.07</b>	<b>96.07</b>	<b>96.07</b>
<b>7</b>	<b>L2 B Bonds</b>					
	Gross Drawl opening	323.79	323.79	323.79	323.79	323.79
	Cummulative repayment of drawl till prev yr	-	-	-	-	-
	Net Loan opening	323.79	323.79	323.79	323.79	323.79
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	323.79	323.79	323.79	323.79	323.79
	Repayment of loan during the year	-	-	-	-	323.79
	Net loan closing	323.79	323.79	323.79	323.79	-
	Average net loan	323.79	323.79	323.79	323.79	161.90
	Rate of interest on loan	8.7600%	8.7600%	8.7600%	8.7600%	8.7600%
	<b>Interest on loan</b>	<b>28.36</b>	<b>28.36</b>	<b>28.36</b>	<b>28.36</b>	<b>14.18</b>
<b>8</b>	<b>L3 B Bonds</b>					
	Gross Drawl opening	1,417.03	1,417.03	1,417.03	1,417.03	1,417.03
	Cummulative repayment of drawl till prev yr	-	-	-	-	-
	Net Loan opening	1,417.03	1,417.03	1,417.03	1,417.03	1,417.03
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	1,417.03	1,417.03	1,417.03	1,417.03	1,417.03
	Repayment of loan during the year	-	-	-	-	-
	Net loan closing	1,417.03	1,417.03	1,417.03	1,417.03	1,417.03
	Average net loan	1,417.03	1,417.03	1,417.03	1,417.03	1,417.03
	Rate of interest on loan	8.9400%	8.9400%	8.9400%	8.9400%	8.9400%
	<b>Interest on loan</b>	<b>126.68</b>	<b>126.68</b>	<b>126.68</b>	<b>126.68</b>	<b>126.68</b>
<b>9</b>	<b>L III Bonds</b>					
	Gross Drawl opening	3,500.00	3,500.00	3,500.00	3,500.00	3,500.00
	Cummulative repayment of drawl till prev yr	-	3,500.00	3,500.00	3,500.00	3,500.00
	Net Loan opening	3,500.00	-	-	-	-
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	3,500.00	-	-	-	-
	Repayment of loan during the year	3,500.00	-	-	-	-
	Net loan closing	-	-	-	-	-
	Average net loan	1,750.00	-	-	-	-
	Rate of interest on loan	9.2000%	9.2000%	9.2000%	9.2000%	9.2000%
	<b>Interest on loan</b>	<b>161.00</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

S.No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
<b>10</b>	<b>Bond LIV</b>					
	Gross Drawl opening	63,500.00	63,500.00	63,500.00	63,500.00	63,500.00
	Cummulative repayment of drawl till prev yr	38,100.00	63,500.00	63,500.00	63,500.00	63,500.00
	Net Loan opening	25,400.00	-	-	-	-
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	25,400.00	-	-	-	-
	Repayment of loan during the year	25,400.00	-	-	-	-
	Net loan closing	-	-	-	-	-
	Average net loan	12,700.00	-	-	-	-
	Rate of interest on loan	8.5200%	8.5200%	8.5200%	8.5200%	8.5200%
	<b>Interest on loan</b>	<b>1,082.04</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>11</b>	<b>Bond 60</b>					
	Gross Drawl opening	1,700.00	1,700.00	1,700.00	1,700.00	1,700.00
	Cummulative repayment of drawl till prev yr	-	-	-	1,700.00	1,700.00
	Net Loan opening	1,700.00	1,700.00	1,700.00	-	-
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	1,700.00	1,700.00	1,700.00	-	-
	Repayment of loan during the year	-	-	1,700.00	-	-
	Net loan closing	1,700.00	1,700.00	-	-	-
	Average net loan	1,700.00	1,700.00	850.00	-	-
	Rate of interest on loan	8.0800%	8.0800%	8.0800%	8.0800%	8.0800%
	<b>Interest on loan</b>	<b>137.36</b>	<b>137.36</b>	<b>68.68</b>	<b>-</b>	<b>-</b>
<b>12</b>	<b>Bond 61</b>					
	Gross Drawl opening	500.00	500.00	500.00	500.00	500.00
	Cummulative repayment of drawl till prev yr	166.67	166.67	166.67	333.33	333.33
	Net Loan opening	333.33	333.33	333.33	166.67	166.67
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	333.33	333.33	333.33	166.67	166.67
	Repayment of loan during the year	-	-	166.67	-	-
	Net loan closing	333.33	333.33	166.67	166.67	166.67
	Average net loan	333.33	333.33	250.00	166.67	166.67
	Rate of interest on loan	8.1300%	8.1300%	8.1300%	8.1300%	8.1300%
	<b>Interest on loan</b>	<b>27.10</b>	<b>27.10</b>	<b>20.33</b>	<b>13.55</b>	<b>13.55</b>
<b>13</b>	<b>Bond 66</b>					
	Gross Drawl opening	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-
	Net Loan opening	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
	Repayment of loan during the year	-	-	-	-	-
	Net loan closing	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
	Average net loan	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
	Rate of interest on loan	7.4000%	7.4000%	7.4000%	7.4000%	7.4000%
	<b>Interest on loan</b>	<b>148.00</b>	<b>148.00</b>	<b>148.00</b>	<b>148.00</b>	<b>148.00</b>
<b>14</b>	<b>Bond 67</b>					
	Gross Drawl opening	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-
	Net Loan opening	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00
	Repayment of loan during the year	-	-	-	-	1,000.00
	Net loan closing	1,000.00	1,000.00	1,000.00	1,000.00	-
	Average net loan	1,000.00	1,000.00	1,000.00	1,000.00	500.00
	Rate of interest on loan	8.3300%	8.3300%	8.3300%	8.3300%	8.3300%
	<b>Interest on loan</b>	<b>83.30</b>	<b>83.30</b>	<b>83.30</b>	<b>83.30</b>	<b>41.65</b>

S.No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
<b>15</b>	<b>Bond 69 (Refinancing of United Bank of India IV on 29.09.2019)</b>					
	Gross Drawl opening	1,400.00	1,400.00	1,400.00	1,400.00	1,400.00
	Cummulative repayment of drawl till prev yr.	-	-	-	-	-
	Net Loan opening	1,400.00	1,400.00	1,400.00	1,400.00	1,400.00
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	1,400.00	1,400.00	1,400.00	1,400.00	1,400.00
	Repayment of loan during the year	-	-	-	-	-
	Net loan closing	1,400.00	1,400.00	1,400.00	1,400.00	1,400.00
	Average net loan	1,400.00	1,400.00	1,400.00	1,400.00	1,400.00
	Rate of interest on loan	7.7650%	7.7650%	7.7650%	7.7650%	7.7650%
	<b>Interest on loan</b>	<b>108.71</b>	<b>108.71</b>	<b>108.71</b>	<b>108.71</b>	<b>108.71</b>
<b>16</b>	<b>Bond 72</b>					
	Gross Drawl opening	62,500.00	62,500.00	62,500.00	62,500.00	62,500.00
	Cummulative repayment of drawl till pray yr.	-	-	62,500.00	62,500.00	62,500.00
	Net Loan opening	62,500.00	62,500.00	-	-	-
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	62,500.00	62,500.00	-	-	-
	Repayment of loan during the year	-	62,500.00	-	-	-
	Net loan closing	62,500.00	-	-	-	-
	Average net loan	62,500.00	31,250.00	-	-	-
	Rate of interest on loan	6.7401%	6.7401%	6.7401%	6.7401%	6.7401%
	<b>Interest on loan</b>	<b>4,212.58</b>	<b>2,106.29</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>17</b>	<b>Corporation Bank-IV D1- Repayment from 11.01.2023(ICICI V Loan refinanced, which in turn was refinancing of Dena Bank, IOB-II, Allahabad Bank and UCO Bank)</b>					
	Gross loan - Opening	67,575.89	67,575.89	67,575.89	67,575.89	67,575.89
	Cumulative repayments of Loans upto previous year	15,016.87	22,525.30	30,033.73	37,542.16	45,050.60
	Net loan - Opening	52,559.03	45,050.60	37,542.16	30,033.73	22,525.30
	Increase/ Decrease due to FERV	-	-	-	-	-
	Increase/ Decrease due to ACE/Drawl during the year	-	-	-	-	-
	Total	52,559.03	45,050.60	37,542.16	30,033.73	22,525.30
	Repayments of Loans during the period	7,508.43	7,508.43	7,508.43	7,508.43	7,508.43
	Net loan closing	45,050.60	37,542.16	30,033.73	22,525.30	15,016.87
	Average Net Loan	48,804.81	41,296.38	33,787.95	26,279.51	18,771.08
	Rate of Interest on Loan	8.4623%	8.4623%	8.4623%	8.4623%	8.4623%
	<b>Interest on Loan</b>	<b>4,130.00</b>	<b>3,494.62</b>	<b>2,859.23</b>	<b>2,223.85</b>	<b>1,588.46</b>
<b>18</b>	<b>Union Bank of India-II D3</b>					
	Gross Drawl opening	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00
	Cummulative repayment of drawl till prev yr	7,500.00	8,500.00	9,500.00	10,000.00	10,000.00
	Net Loan opening	2,500.00	1,500.00	500.00	-	-
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	2,500.00	1,500.00	500.00	-	-
	Repayment of loan during the year	1,000.00	1,000.00	500.00	-	-
	Net loan closing	1,500.00	500.00	-	-	-
	Average net loan	2,000.00	1,000.00	250.00	-	-
	Rate of interest on loan	8.1000%	8.1000%	8.1000%	8.1000%	8.1000%
	<b>Interest on loan</b>	<b>162.00</b>	<b>81.00</b>	<b>20.25</b>	<b>-</b>	<b>-</b>

S.No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
<b>19</b>	<b>Union Bank of India-II D4</b>					
	Gross Drawl opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
	Cummulative repayment of drawl till prev yr.	3,750.00	4,250.00	4,750.00	5,000.00	5,000.00
	Net Loan opening	1,250.00	750.00	250.00	-	-
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	1,250.00	750.00	250.00	-	-
	Repayment of loan during the year	500.00	500.00	250.00	-	-
	Net loan closing	750.00	250.00	-	-	-
	Average net loan	1,000.00	500.00	125.00	-	-
	Rate of interest on loan	8.1000%	8.1000%	8.1000%	8.1000%	8.1000%
	Interest on loan	81.00	40.50	10.13	-	-
<b>20</b>	<b>Union Bank of India-II D9</b>					
	Gross Drawl opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
	Cummulative repayment of drawl till prev yr.	3,750.00	4,250.00	4,750.00	5,000.00	5,000.00
	Net Loan opening	1,250.00	750.00	250.00	-	-
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	1,250.00	750.00	250.00	-	-
	Repayment of loan during the year	500.00	500.00	250.00	-	-
	Net loan closing	750.00	250.00	-	-	-
	Average net loan	1,000.00	500.00	125.00	-	-
	Rate of interest on loan	8.1000%	8.1000%	8.1000%	8.1000%	8.1000%
	Interest on loan	81.00	40.50	10.13	-	-
<b>21</b>	<b>Union Bank of India -II D12.</b>					
	Gross Drawl opening	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00
	Cummulative repayment of drawl till prev yr.	7,500.00	8,500.00	9,500.00	10,000.00	10,000.00
	Net Loan opening	2,500.00	1,500.00	500.00	-	-
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	2,500.00	1,500.00	500.00	-	-
	Repayment of loan during the year	1,000.00	1,000.00	500.00	-	-
	Net loan closing	1,500.00	500.00	-	-	-
	Average net loan	2,000.00	1,000.00	250.00	-	-
	Rate of interest on loan	8.1000%	8.1000%	8.1000%	8.1000%	8.1000%
	Interest on loan	162.00	81.00	20.25	-	-
<b>22</b>	<b>State Bank of India-VIII D-4</b>					
	Gross Drawl opening	2,300.00	2,300.00	2,300.00	2,300.00	2,300.00
	Cummulative repayment of drawl till prev yr.	766.67	1,022.22	1,277.78	1,533.33	1,788.89
	Net Loan opening	1,533.33	1,277.78	1,022.22	766.67	511.11
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	1,533.33	1,277.78	1,022.22	766.67	511.11
	Repayment of loan during the year	255.56	255.56	255.56	255.56	255.56
	Net loan closing	1,277.78	1,022.22	766.67	511.11	255.56
	Average net loan	1,405.56	1,150.00	894.44	638.89	383.33
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	115.26	94.30	73.34	52.39	31.43
<b>23</b>	<b>State Bank of India-VIII D-8</b>					
	Gross Drawl opening	2,200.00	2,200.00	2,200.00	2,200.00	2,200.00
	Cummulative repayment of drawl till prev yr.	733.33	977.78	1,222.22	1,466.67	1,711.11
	Net Loan opening	1,466.67	1,222.22	977.78	733.33	488.89
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	1,466.67	1,222.22	977.78	733.33	488.89
	Repayment of loan during the year	244.44	244.44	244.44	244.44	244.44
	Net loan closing	1,222.22	977.78	733.33	488.89	244.44
	Average net loan	1,344.44	1,100.00	855.56	611.11	366.67
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	110.24	90.20	70.16	50.11	30.07

S.No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
<b>24</b>	<b>State Bank of India-VIII D-13</b>					
	Gross Drawl opening	1,800.00	1,800.00	1,800.00	1,800.00	1,800.00
	Cummulative repayment of drawl till prev yr	600.00	800.00	1,000.00	1,200.00	1,400.00
	Net Loan opening	1,200.00	1,000.00	800.00	600.00	400.00
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	1,200.00	1,000.00	800.00	600.00	400.00
	Repayment of loan during the year	200.00	200.00	200.00	200.00	200.00
	Net loan closing	1,000.00	800.00	600.00	400.00	200.00
	Average net loan	1,100.00	900.00	700.00	500.00	300.00
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	90.20	73.80	57.40	41.00	24.60
<b>25</b>	<b>State Bank of India-VIII D-15</b>					
	Gross Drawl opening	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
	Cummulative repayment of drawl till prev yr	500.00	666.67	833.33	1,000.00	1,166.67
	Net Loan opening	1,000.00	833.33	666.67	500.00	333.33
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	1,000.00	833.33	666.67	500.00	333.33
	Repayment of loan during the year	166.67	166.67	166.67	166.67	166.67
	Net loan closing	833.33	666.67	500.00	333.33	166.67
	Average net loan	916.67	750.00	583.33	416.67	250.00
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	75.17	61.50	47.83	34.17	20.50
<b>26</b>	<b>HDFC Bank Ltd.-III</b>					
	Gross Drawl opening	5,700.00	5,700.00	5,700.00	5,700.00	5,700.00
	Cummulative repayment of drawl till prev yr	1,900.00	2,533.33	3,166.67	3,800.00	4,433.33
	Net Loan opening	3,800.00	3,166.67	2,533.33	1,900.00	1,266.67
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	3,800.00	3,166.67	2,533.33	1,900.00	1,266.67
	Repayment of loan during the year	633.33	633.33	633.33	633.33	633.33
	Net loan closing	3,166.67	2,533.33	1,900.00	1,266.67	633.33
	Average net loan	3,483.33	2,850.00	2,216.67	1,583.33	950.00
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	276.93	226.58	176.23	125.88	75.52
<b>27</b>	<b>State Bank of India-VIII D-21</b>					
	Gross Drawl opening	800.00	800.00	800.00	800.00	800.00
	Cummulative repayment of drawl till prev yr	266.67	355.56	444.44	533.33	622.22
	Net Loan opening	533.33	444.44	355.56	266.67	177.78
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	533.33	444.44	355.56	266.67	177.78
	Repayment of loan during the year	88.89	88.89	88.89	88.89	88.89
	Net loan closing	444.44	355.56	266.67	177.78	88.89
	Average net loan	488.89	400.00	311.11	222.22	133.33
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	40.09	32.80	25.51	18.22	10.93
<b>28</b>	<b>Jammu &amp; Kashmir Bank-IV D2</b>					
	Gross Drawl opening	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00
	Cummulative repayment of drawl till prev yr	1,000.00	1,666.67	2,000.00	2,333.33	2,666.67
	Net Loan opening	2,000.00	1,333.33	1,000.00	666.67	333.33
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	2,000.00	1,333.33	1,000.00	666.67	333.33
	Repayment of loan during the year	666.67	333.33	333.33	333.33	333.33
	Net loan closing	1,333.33	1,000.00	666.67	333.33	-
	Average net loan	1,666.67	1,166.67	833.33	500.00	166.67
	Rate of interest on loan	7.9800%	7.9800%	7.9800%	7.9800%	7.9800%
	Interest on loan	133.00	93.10	66.50	39.90	13.30

S.No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
<b>29</b>	<b>SBI-IX D4</b>					
	Gross Drawl opening	500.00	500.00	500.00	500.00	500.00
	Cummulative repayment of drawl till prev yr.	166.67	277.78	333.33	388.89	444.44
	Net Loan opening	333.33	222.22	166.67	111.11	55.56
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	333.33	222.22	166.67	111.11	55.56
	Repayment of loan during the year	111.11	55.56	55.56	55.56	55.56
	Net loan closing	222.22	166.67	111.11	55.56	-
	Average net loan	277.78	194.44	138.89	83.33	27.78
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	22.78	15.94	11.39	6.83	2.28
<b>30</b>	<b>SBI-X D-2</b>					
	Gross Drawl opening	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
	Cummulative repayment of drawl till prev yr.	-	166.67	333.33	500.00	666.67
	Net Loan opening	1,500.00	1,333.33	1,166.67	1,000.00	833.33
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	1,500.00	1,333.33	1,166.67	1,000.00	833.33
	Repayment of loan during the year	166.67	166.67	166.67	166.67	166.67
	Net loan closing	1,333.33	1,166.67	1,000.00	833.33	666.67
	Average net loan	1,416.67	1,250.00	1,083.33	916.67	750.00
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	116.17	102.50	88.83	75.17	61.50
<b>31</b>	<b>SBI-X D-4</b>					
	Gross Drawl opening	500.00	500.00	500.00	500.00	500.00
	Cummulative repayment of drawl till prev yr.	-	55.56	111.11	166.67	222.22
	Net Loan opening	500.00	444.44	388.89	333.33	277.78
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	500.00	444.44	388.89	333.33	277.78
	Repayment of loan during the year	55.56	55.56	55.56	55.56	55.56
	Net loan closing	444.44	388.89	333.33	277.78	222.22
	Average net loan	472.22	416.67	361.11	305.56	250.00
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	38.72	34.17	29.61	25.06	20.50
<b>32</b>	<b>HDFC Bank Ltd-V D3</b>					
	Gross Drawl opening	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00
	Cummulative repayment of drawl till prev yr.	-	111.11	222.22	333.33	444.44
	Net Loan opening	1,000.00	888.89	777.78	666.67	555.56
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	1,000.00	888.89	777.78	666.67	555.56
	Repayment of loan during the year	111.11	111.11	111.11	111.11	111.11
	Net loan closing	888.89	777.78	666.67	555.56	444.44
	Average net loan	944.44	833.33	722.22	611.11	500.00
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	75.08	66.25	57.42	48.58	39.75
<b>33</b>	<b>Punjab National Bank-IV D1</b>					
	Gross Drawl opening	800.00	800.00	800.00	800.00	800.00
	Cummulative repayment of drawl till prev yr.	177.78	266.67	355.56	444.44	533.33
	Net Loan opening	622.22	533.33	444.44	355.56	266.67
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	622.22	533.33	444.44	355.56	266.67
	Repayment of loan during the year	88.89	88.89	88.89	88.89	88.89
	Net loan closing	533.33	444.44	355.56	266.67	177.78
	Average net loan	577.78	488.89	400.00	311.11	222.22
	Rate of interest on loan	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%
	Interest on loan	45.64	38.62	31.60	24.58	17.56

S.No.	Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
<b>34</b>	<b>Bank Of India-IV T1 D1</b>					
	Gross Drawl opening	8,800.00	8,800.00	8,800.00	8,800.00	8,800.00
	Cummulative repayment of drawl till prev yr.	-	733.33	1,466.67	2,200.00	2,933.33
	Net Loan opening	8,800.00	8,066.67	7,333.33	6,600.00	5,866.67
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	8,800.00	8,066.67	7,333.33	6,600.00	5,866.67
	Repayment of loan during the year	733.33	733.33	733.33	733.33	733.33
	Net loan closing	8,066.67	7,333.33	6,600.00	5,866.67	5,133.33
	Average net loan	8,433.33	7,700.00	6,966.67	6,233.33	5,500.00
	Rate of interest on loan	8.3500%	8.3500%	8.3500%	8.3500%	8.3500%
	Interest on loan	704.18	642.95	581.72	520.48	459.25
<b>35</b>	<b>HDFC Bank Ltd. IX D4</b>					
	Gross Drawl opening	25,431.57	25,431.57	25,431.57	25,431.57	25,431.57
	Cummulative repayment of drawl till prev yr.	-	2,119.30	4,238.60	6,357.89	8,477.19
	Net Loan opening	25,431.57	23,312.27	21,192.98	19,073.68	16,954.38
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	25,431.57	23,312.27	21,192.98	19,073.68	16,954.38
	Repayment of loan during the year	2,119.30	2,119.30	2,119.30	2,119.30	2,119.30
	Net loan closing	23,312.27	21,192.98	19,073.68	16,954.38	14,835.08
	Average net loan	24,371.92	22,252.62	20,133.33	18,014.03	15,894.73
	Rate of interest on loan	8.3750%	8.3750%	8.3750%	8.3750%	8.3750%
	Interest on loan	2,041.15	1,863.66	1,686.17	1,508.67	1,331.18
	<b>Total Loan-Cumulative</b>					
	Gross Drawl opening	2,95,844	2,95,844	2,95,844	2,95,844	2,95,844
	Cummulative repayment of drawl till prev yr.	1,09,426	1,56,968	2,32,799	2,45,955	2,52,544
	Net Loan opening	1,86,418	1,38,876	63,044	49,888	43,300
	Increase decrease due to FERV	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-
	Total	2,38,977	1,83,926	1,00,587	79,922	65,825
	Repayment of loan during the year	47,542	75,831	13,156	6,589	8,798
	Net loan closing	1,83,926	1,00,587	79,922	65,825	49,518
	Average net loan	2,11,452	1,42,257	90,254	72,873	57,672
	<b>Rate of interest on loan(%)</b>	<b>7.5693%</b>	<b>7.7436%</b>	<b>8.1645%</b>	<b>8.2357%</b>	<b>8.2265%</b>
	Interest on loan	16,005	11,016	7,369	6,002	4,744



## FORM- 15 COAL

Name of the Petitioner: NTPC Limited					
Name of the Generating Station : Barh STPS Stage - II ( 2X660 MW)					
		Apr-23			
SL.NO.	PARTICULARS	Unit	Domestic Coal		Imported Coal
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported Coal
<b>A</b>	<b>OPENING QUANTITY</b>				
1	Opening Quantity of Coal	(MT)	41247.68	394968.94	9625.08
2	Value of Stock	Rs.	127324795.2	1909217281	162652436.6
<b>B</b>	<b>QUANTITY</b>				
3	Quantity of Coal/Lignite supplied by Coal / Lignite Company	(MT)	75082.24	511081.28	15969.5
	- Qty Received (Pit Head)	(MT)			
	- Qty Received (Non Pit Head)	(MT)			
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	1248.49	0	0
5	Coal supplied by Coal / Lignite Company(3+/-4)	(MT)	73834	511081	15970
6	Normative Transit & Handling Losses (for Coal / Lignite based projects)	(MT)	590.67	4,088.65	31.94
	- Normative Loss (Pit Head)	(MT)			
	- Normative Loss (Non Pit Head)	(MT)			
7	Net Coal / Lignite supplied (5-6)	(MT)	73243.08	5,06,992.63	15937.56
<b>C</b>	<b>PRICE</b>				
8	Amount charged by the Coal / Lignite Company	(Rs.)	175677239	1843591486	268678483.8
9	Adjustment (+/-) in amount charged by Coal / Lignite Company	(Rs.)	-3015918.06	162437956.2	0
10	Handling Sampling and such other similar Charges	(Rs.)	1880082.39	12797632.51	0
11	Total amount charged (8+9+10)	(Rs.)	174541403	2,01,88,27,075.02	268678483.81
<b>D</b>	<b>TRANSPORTATION</b>				
12	Transportation charges by Rail/Ship/Road Transport	(Rs.)			
	By Rail	(Rs.)	78211174	458550874.9	-
	By Road	(Rs.)	0	6570523.29	-
13	Adjustment (+/-) in amount charged by Railways / Transport Company	(Rs.)	0	0	0
14	Demurrage charges, if any	(Rs.)	0	-	-
15	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)	305641.07	2080484.37	-
16	Total Transportation Charges (12+/-13 - 14 + 15)	(Rs.)	78516815	46,72,01,882.52	-
17	Other Charges	(Rs.)			
18	Total amount charged for coal / Lignite supplied including transportation (11 +16)	(Rs.)	253058218	2,48,60,28,957.54	26,86,78,483.81
<b>E</b>	<b>TOTAL COST</b>				
18	Landed Cost of Coal/Lignite. (2+17)/(1+7)	(Rs./MT)	3322.39	4872.99	16873.49
19	Blending Ratio (Domestic/Imported)	%	5	90.29	4.71
20	Weighted Average Cost of Coal or Lignite	(Rs./MT)	5,360.85		
<b>F</b>	<b>QUALITY</b>				
21	GCV of Domestic Coal of the Opening Coal Stock as per Bill of Coal Company	(Kcal / Kg)	4966	4645.00	
22	GCV of Domestic Coal Supplied as per Bill of Coal Company	(Kcal / Kg)	4584	4843.00	
23	GCV of Imported Coal of the Opening Stock as per Bill of Coal Company	(Kcal / Kg)			5650.00
24	GCV of Imported Coal Supplied as per Bill of Coal Company	(Kcal / Kg)			5650
25	Weighted average GCV of coal/ Lignite as Billed	(Kcal / Kg)			4783
26	GCV of Domestic Coal of the Opening Stock as Received at Station	(Kcal / Kg)	3391	3956.00	
27	GCV of Domestic Coal Supplied as Received at Station	(Kcal / Kg)	3360	3826.00	
28	GCV of Imported Coal of the Opening Stock as Received at Station	(Kcal / Kg)			4966
29	GCV of Imported Coal Supplied as Received at Station	(Kcal / Kg)			5049.000
30	Weighted average GCV of coal/ Lignite as Received	(Kcal / Kg)			3911

## FORM- 15 COAL

Name of the Petitioner: NTPC Limited					
Name of the Generating Station : Barh STPS Stage - II ( 2X660 MW)					
		May-23			
SL.NO.	PARTICULARS	Unit	Domestic Coal		Imported Coal
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported Coal
<b>A</b>	<b>OPENING QUANTITY</b>				
1	Opening Quantity of Coal	(MT)	49318.03	201767.83	400.52
2	Value of Stock	Rs.	163853750.8	983211820	6758158.32
<b>B</b>	<b>QUANTITY</b>				
3	Quantity of Coal/Lignite supplied by Coal / Lignite Company	(MT)	193529.34	618739.22	24073.2
	- Qty Received (Pit Head)	(MT)			
	- Qty Received (Non Pit Head)	(MT)			
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	3371.28	0.00	0.00
5	Coal supplied by Coal / Lignite Company(3+/-4)	(MT)	190158	618739	24073
6	Normative Transit & Handling Losses (for Coal / Lignite based projects)	(MT)	1521.26	4,949.91	48.15
	- Normative Loss (Pit Head)	(MT)			
	- Normative Loss (Non Pit Head)	(MT)			
7	Net Coal / Lignite supplied (5-6)	(MT)	188636.80	6,13,789.31	24025.05
<b>C</b>	<b>PRICE</b>				
8	Amount charged by the Coal / Lignite Company	(Rs.)	459620787	2167790790	393223159.8
9	Adjustment (+/-) in amount charged by Coal / Lignite Company	(Rs.)	-8140339.35	214723858.7	0.00
10	Handling Sampling and such other similar Charges	(Rs.)	4846034.22	15493420.45	0.00
11	Total amount charged (8+9+10)	(Rs.)	456326482	2,39,80,08,068.68	393223159.80
<b>D</b>	<b>TRANSPORTATION</b>				
12	Transportation charges by Rail/Ship/Road Transport	(Rs.)			
	By Rail	(Rs.)	178915849	563543349.6	-
	By Road	(Rs.)	4271303.2	7954586.9	-
13	Adjustment (+/-) in amount charged by Railways / Transport Company	(Rs.)			
14	Demurrage charges, if any	(Rs.)			
15	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)	787809.66	2518732.98	-
16	Total Transportation Charges (12+/-13 - 14 + 15)	(Rs.)	183974962	57,40,16,669.52	-
17	Other Charges	(Rs.)			
18	Total amount charged for coal / Lignite supplied including transportation (11 +16)	(Rs.)	640301444	2,97,20,24,738.20	39,32,23,159.80
<b>E</b>	<b>TOTAL COST</b>				
18	Landed Cost of Coal/Lignite. (2+17)/(1+7)	(Rs./MT)	3379.44	4849.74	16375.52
19	Blending Ratio (Domestic/Imported)	%	25	70.5	4.5
20	Weighted Average Cost of Coal or Lignite	(Rs./MT)	5000.77		
<b>F</b>	<b>QUALITY</b>				
21	GCV of Domestic Coal of the Opening Coal Stock as per Bill of Coal Company	(Kcal / Kg)	5018	4757.00	
22	GCV of Domestic Coal Supplied as per Bill of Coal Company	(Kcal / Kg)	0	4550.00	
23	GCV of Imported Coal of the Opening Stock as per Bill of Coal Company	(Kcal / Kg)			5650.00
24	GCV of Imported Coal Supplied as per Bill of Coal Company	(Kcal / Kg)			5650
25	Weighted average GCV of coal/ Lignite as Billed	(Kcal / Kg)			3728
26	GCV of Domestic Coal of the Opening Stock as Received at Station	(Kcal / Kg)	3371	3883.00	
27	GCV of Domestic Coal Supplied as Received at Station	(Kcal / Kg)	3522	3723.00	
28	GCV of Imported Coal of the Opening Stock as Received at Station	(Kcal / Kg)			5018
29	GCV of Imported Coal Supplied as Received at Station	(Kcal / Kg)			4901.000
30	Weighted average GCV of coal/ Lignite as Received	(Kcal / Kg)		3746	

## FORM-15 COAL

Name of the Petitioner: NTPC Limited					
Name of the Generating Station : Barh STPS Stage - II ( 2X660 MW)					
		Jun-23			
SL.NO.	PARTICULARS	Unit	Domestic Coal		Imported Coal
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported Coal
<b>A</b>	<b>OPENING QUANTITY</b>				
1	Opening Quantity of Coal	(MT)	61445.91	339168.55	3003.57
2	Value of Stock	Rs.	207653059.09	1644877820.05	49185051.81
<b>B</b>	<b>QUANTITY</b>				
3	Quantity of Coal/Lignite supplied by Coal / Lignite Company	(MT)	190164.92	465655.75	3617.20
	- Qty Received (Pit Head)	(MT)			
	- Qty Received (Non Pit Head)	(MT)			
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	999.32	0.00	0.00
5	Coal supplied by Coal / Lignite Company(3+/-4)	(MT)	189166	465656	3617
6	Normative Transit & Handling Losses (for Coal / Lignite based projects)	(MT)	1513.32	3,725.25	7.23
	- Normative Loss (Pit Head)	(MT)			
	- Normative Loss (Non Pit Head)	(MT)			
7	Net Coal / Lignite supplied (5-6)	(MT)	187652.28	4,61,930.50	3609.97
<b>C</b>	<b>PRICE</b>				
8	Amount charged by the Coal / Lignite Company	(Rs.)	468378139.92	1494007879.66	59488954.20
9	Adjustment (+/-) in amount charged by Coal / Lignite Company	(Rs.)	-2515048.16	248818106.15	0.00
10	Handling Sampling and such other similar Charges	(Rs.)	4761788.11	11660163.26	0.00
11	Total amount charged (8+9+10)	(Rs.)	470624880	1,75,44,86,149.07	59488954.20
<b>D</b>	<b>TRANSPORTATION</b>				
12	Transportation charges by Rail/Ship/Road Transport	(Rs.)			
	By Rail	(Rs.)	166491185.50	486183370.68	0.00
	By Road	(Rs.)	6648586.80	5986527.13	0.00
13	Adjustment (+/-) in amount charged by Railways / Transport Company	(Rs.)			
14	Demurrage charges, if any	(Rs.)			
15	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)	774113.94	1895568.37	0.00
16	Total Transportation Charges (12+/-13 - 14 + 15)	(Rs.)	173913886	49,40,65,466.18	-
17	Other Charges	(Rs.)			
18	Total amount charged for coal / Lignite supplied including transportation (11 +16)	(Rs.)	644538766	2,24,85,51,615.25	5,94,88,954.20
<b>E</b>	<b>TOTAL COST</b>				
18	Landed Cost of Coal/Lignite. (2+17)/(1+7)	(Rs./MT)	3421.11	4860.11	16432.05
19	Blending Ratio (Domestic/Imported)	%	22	76.82	1.18
20	Weighted Average Cost of Coal or Lignite	(Rs./MT)	4679.95		
<b>F</b>	<b>QUALITY</b>				
21	GCV of Domestic Coal of the Opening Coal Stock as per Bill of Coal Company	(Kcal / Kg)	4903	4601	
22	GCV of Domestic Coal Supplied as per Bill of Coal Company	(Kcal / Kg)	4518	4059	
23	GCV of Imported Coal of the Opening Stock as per Bill of Coal Company	(Kcal / Kg)			5650
24	GCV of Imported Coal Supplied as per Bill of Coal Company	(Kcal / Kg)			5650
25	Weighted average GCV of coal/ Lignite as Billed	(Kcal / Kg)			4153
26	GCV of Domestic Coal of the Opening Stock as Received at Station	(Kcal / Kg)	3490	3762	
27	GCV of Domestic Coal Supplied as Received at Station	(Kcal / Kg)	3350	3538	
28	GCV of Imported Coal of the Opening Stock as Received at Station	(Kcal / Kg)			4903
29	GCV of Imported Coal Supplied as Received at Station	(Kcal / Kg)			4834
30	Weighted average GCV of coal/ Lignite as Received	(Kcal / Kg)		3590	

## FORM- 15 COAL

Name of the Petitioner: NTPC Limited					
Name of the Generating Station : Barh STPS Stage - II ( 2X660 MW)					
		Jul-23			
SL.NO.	PARTICULARS	Unit	Domestic Coal		Imported Coal
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported Coal
<b>A</b>	<b>OPENING QUANTITY</b>				
1	Opening Quantity of Coal	(MT)	43645.60	190100.74	1243.54
2	Value of Stock	Rs.	149316301.99	923910491.52	20433889.62
<b>B</b>	<b>QUANTITY</b>				
3	Quantity of Coal/Lignite supplied by Coal / Lignite Company	(MT)	327576.61	487870.91	34621.40
	- Qty Received (Pit Head)	(MT)			
	- Qty Received (Non Pit Head)	(MT)			
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	0.00	0.00	0.00
5	Coal supplied by Coal / Lignite Company(3+/-4)	(MT)	327577	487871	34621
6	Normative Transit & Handling Losses (for Coal / Lignite based projects)	(MT)	2620.61	3,902.97	69.24
	- Normative Loss (Pit Head)	(MT)			
	- Normative Loss (Non Pit Head)	(MT)			
7	Net Coal / Lignite supplied (5-6)	(MT)	324956.00	4,83,967.94	34552.16
<b>C</b>	<b>PRICE</b>				
8	Amount charged by the Coal / Lignite Company	(Rs.)	861044595	1,68,78,12,128.72	441810549.61
9	Adjustment (+/-) in amount charged by Coal / Lignite Company	(Rs.)	-990706.44	16,24,23,106.91	0.00
10	Handling Sampling and such other similar Charges	(Rs.)	6980052	1,03,95,627.00	0.00
11	Total amount charged (8+9+10)	(Rs.)	86,70,33,940.41	1,86,06,30,862.63	44,18,10,549.61
<b>D</b>	<b>TRANSPORTATION</b>				
12	Transportation charges by Rail/Ship/Road Transport	(Rs.)			
	By Rail	(Rs.)	285764078.00	476898602.30	0.00
	By Road	(Rs.)	6172538.16	7274074.43	0.00
13	Adjustment (+/-) in amount charged by Railways / Transport Company	(Rs.)			
14	Demurrage charges, if any	(Rs.)			
15	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)	1193501	17,77,521.84	
16	Total Transportation Charges (12+/-13 - 14 + 15)	(Rs.)	293130117	48,59,50,198.57	-
17	Other Charges	(Rs.)			
18	Total amount charged for coal / Lignite supplied including transportation (11 + 16)	(Rs.)	1160164058	2,34,65,81,061.20	44,18,10,549.61
<b>E</b>	<b>TOTAL COST</b>				
18	Landed Cost of Coal/Lignite. (2+17)/(1+7)	(Rs./MT)	3552.56	4851.87	12913.41
19	Blending Ratio (Domestic/Imported)	%	38	58.16	3.84
20	Weighted Average Cost of Coal or Lignite	(Rs./MT)	4667.33		
<b>F</b>	<b>QUALITY</b>				
21	GCV of Domestic Coal of the Opening Coal Stock as per Bill of Coal Company	(Kcal / Kg)	4866	4279.00	
22	GCV of Domestic Coal Supplied as per Bill of Coal Company	(Kcal / Kg)	4474	4279.00	
23	GCV of Imported Coal of the Opening Stock as per Bill of Coal Company	(Kcal / Kg)			5650
24	GCV of Imported Coal Supplied as per Bill of Coal Company	(Kcal / Kg)			5650
25	Weighted average GCV of coal/ Lignite as Billed	(Kcal / Kg)			4368
26	GCV of Domestic Coal of the Opening Stock as Received at Station	(Kcal / Kg)	3385	3630.00	
27	GCV of Domestic Coal Supplied as Received at Station	(Kcal / Kg)	3226	3609.00	
28	GCV of Imported Coal of the Opening Stock as Received at Station	(Kcal / Kg)	0		4866
29	GCV of Imported Coal Supplied as Received at Station	(Kcal / Kg)	0		4865.000
30	Weighted average GCV of coal/ Lignite as Received	(Kcal / Kg)		3522	

## FORM- 15 COAL

Name of the Petitioner: NTPC Limited					
Name of the Generating Station : Barh STPS Stage - II ( 2X660 MW)					
		Aug-23			
SL.NO.	PARTICULARS	Unit	Domestic Coal		Imported Coal
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported Coal
<b>A</b>	<b>OPENING QUANTITY</b>				
1	Opening Quantity of Coal	(MT)	44,532.34	1,30,125.27	14678.70
2	Value of Stock	Rs.	15,82,03,947.79	63,13,50,513.38	189551993.51
<b>B</b>	<b>QUANTITY</b>				
3	Quantity of Coal/Lignite supplied by Coal / Lignite Company	(MT)	417075.02	6,17,701.16	64382.80
	- Qty Received (Pit Head)	(MT)			
	- Qty Received (Non Pit Head)	(MT)			
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	3921.51	0.00	0.00
5	Coal supplied by Coal / Lignite Company(3+/-4)	(MT)	413154	617701	64383
6	Normative Transit & Handling Losses (for Coal / Lignite based projects)	(MT)	3305.23	4,941.61	128.77
	- Normative Loss (Pit Head)	(MT)			
	- Normative Loss (Non Pit Head)	(MT)			
7	Net Coal / Lignite supplied (5-6)	(MT)	409848.28	6,12,759.55	64254.03
<b>C</b>	<b>PRICE</b>				
8	Amount charged by the Coal / Lignite Company	(Rs.)	1102358048	2,17,13,34,787.15	792472650.85
9	Adjustment (+/-) in amount charged by Coal / Lignite Company	(Rs.)	-9819636.60	18,73,01,712.78	0.00
10	Handling Sampling and such other similar Charges	(Rs.)	9621496	1,42,49,737.10	0.00
11	Total amount charged (8+9+10)	(Rs.)	1,10,21,59,907.89	2,37,28,86,237.03	79,24,72,650.85
<b>D</b>	<b>TRANSPORTATION</b>				
12	Transportation charges by Rail/Ship/Road Transport	(Rs.)			
	By Rail	(Rs.)	328341786.71	577944614.61	0.00
	By Road	(Rs.)	7858960.00	12461081.19	0.00
13	Adjustment (+/-) in amount charged by Railways / Transport Company	(Rs.)			
14	Demurrage charges, if any	(Rs.)			
15	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)	1286275.02	1905013.56	0.00
16	Total Transportation Charges (12+/-13 - 14 + 15)	(Rs.)	337487022	59,23,10,709.36	-
17	Other Charges	(Rs.)			
18	Total amount charged for coal / Lignite supplied including transportation (11 +16)	(Rs.)	1439646930	2,96,51,96,946.39	79,24,72,650.85
<b>E</b>	<b>TOTAL COST</b>				
18	Landed Cost of Coal/Lignite (2+17)/(1+7)	(Rs./MT)	3516.55	4841.33	12441.29
19	Blending Ratio (Domestic/Imported)	%	10.00	77.95	12.05
20	Weighted Average Cost of Coal or Lignite	(Rs./MT)	5625.01		
<b>F</b>	<b>QUALITY</b>				
21	GCV of Domestic Coal of the Opening Coal Stock as per Bill of Coal Company	(Kcal / Kg)	4865	4279	
22	GCV of Domestic Coal Supplied as per Bill of Coal Company	(Kcal / Kg)	4526	4214	
23	GCV of Imported Coal of the Opening Stock as per Bill of Coal Company	(Kcal / Kg)			5650
24	GCV of Imported Coal Supplied as per Bill of Coal Company	(Kcal / Kg)			5650
25	Weighted average GCV of coal/ Lignite as Billed	(Kcal / Kg)			4426
26	GCV of Domestic Coal of the Opening Stock as Received at Station	(Kcal / Kg)	3245	3615	
27	GCV of Domestic Coal Supplied as Received at Station	(Kcal / Kg)	3198	3420	
28	GCV of Imported Coal of the Opening Stock as Received at Station	(Kcal / Kg)			4865
29	GCV of Imported Coal Supplied as Received at Station	(Kcal / Kg)			4853
30	Weighted average GCV of coal/ Lignite as Received	(Kcal / Kg)		3598	

## FORM- 15 COAL

Name of the Petitioner: NTPC Limited					
Name of the Generating Station : Barh STPS Stage - II ( 2X660 MW)					
		Sep-23			
SL.NO.	PARTICULARS	Unit	Domestic Coal		Imported Coal
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported Coal
<b>A</b>	<b>OPENING QUANTITY</b>				
1	Opening Quantity of Coal	(MT)	49948.69	104888.91	1748.73
2	Value of Stock	Rs.	175646924.58	507801383.20	21756451.47
<b>B</b>	<b>QUANTITY</b>				
3	Quantity of Coal/Lignite supplied by Coal / Lignite Company	(MT)	371190.03	443222.72	42316.40
	- Qty Received (Pit Head)	(MT)			
	- Qty Received (Non Pit Head)	(MT)			
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	6802.98	0.00	0.00
5	Coal supplied by Coal / Lignite Company(3+/-4)	(MT)	364387	443223	42316
6	Normative Transit & Handling Losses (for Coal / Lignite based projects)	(MT)	2915.10	3,545.78	84.63
	- Normative Loss (Pit Head)	(MT)			
	- Normative Loss (Non Pit Head)	(MT)			
7	Net Coal / Lignite supplied (5-6)	(MT)	361471.95	4,39,676.94	42231.77
<b>C</b>	<b>PRICE</b>				
8	Amount charged by the Coal / Lignite Company	(Rs.)	921539647.00	1503073674.00	491249733.93
9	Adjustment (+/-) in amount charged by Coal / Lignite Company	(Rs.)	-17053038.57	110296907.83	0.00
10	Handling Sampling and such other similar Charges	(Rs.)	7902141.03	9435621.00	0.00
11	Total amount charged (8+9+10)	(Rs.)	91,23,88,749.46	1,62,28,06,202.83	49,12,49,733.93
<b>D</b>	<b>TRANSPORTATION</b>				
12	Transportation charges by Rail/Ship/Road Transport	(Rs.)			
	By Rail	(Rs.)	318867444.00	450929216.00	0.00
	By Road	(Rs.)	6994347.44	7893468.88	0.00
13	Adjustment (+/-) in amount charged by Railways / Transport Company	(Rs.)	0	0	0
14	Demurrage charges, if any	(Rs.)	0	-	-
15	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)	1398375.89	1669743.03	0.00
16	Total Transportation Charges (12+/-13 - 14 + 15)	(Rs.)	327260167	46,04,92,427.91	-
17	Other Charges	(Rs.)			
18	Total amount charged for coal / Lignite supplied including transportation (11 +16)	(Rs.)	1239648917	2,08,32,98,630.74	49,12,49,733.93
<b>E</b>	<b>TOTAL COST</b>				
18	Landed Cost of Coal/Lignite. (2+17)/(1+7)	(Rs./MT)	3440.02	4758.10	11664.40
19	Blending Ratio (Domestic/Imported)	%	18.00	74.56	7.44
20	Weighted Average Cost of Coal or Lignite	(Rs./MT)	5034.51		
<b>F</b>	<b>QUALITY</b>				
21	GCV of Domestic Coal of the Opening Coal Stock as per Bill of Coal Company	(Kcal / Kg)	4856	4226	
22	GCV of Domestic Coal Supplied as per Bill of Coal Company	(Kcal / Kg)	4462	4199	
23	GCV of imported Coal of the Opening Stock as per Bill of Coal Company	(Kcal / Kg)			5650
24	GCV of imported Coal Supplied as per Bill of Coal Company	(Kcal / Kg)			5650
25	Weighted average GCV of coal/ Lignite as Billed	(Kcal / Kg)			4359
26	GCV of Domestic Coal of the Opening Stock as Received at Station	(Kcal / Kg)	3203	3454	
27	GCV of Domestic Coal Supplied as Received at Station	(Kcal / Kg)	3299	3586	
28	GCV of imported Coal of the Opening Stock as Received at Station	(Kcal / Kg)			4856
29	GCV of imported Coal Supplied as Received at Station	(Kcal / Kg)			4854
30	Weighted average GCV of coal/ Lignite as Received	(Kcal / Kg)			3608

## FORM- 15 COAL

Name of the Petitioner: NTPC Limited					
Name of the Generating Station : Barh STPS Stage - II ( 2X660 MW)					
		Oct-23			
SL.NO.	PARTICULARS	Unit	Domestic Coal		Imported Coal
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported Coal
<b>A</b>	<b>OPENING QUANTITY</b>				
1	Opening Quantity of Coal	(MT)	91573.56	61488.66	5396.50
2	Value of Stock	Rs.	315014995.71	292569326.44	62946912.64
<b>B</b>	<b>QUANTITY</b>				
3	Quantity of Coal/Lignite supplied by Coal / Lignite Company	(MT)	349039.46	362286.73	52326.40
	- Qty Received (Pit Head)	(MT)			
	- Qty Received (Non Pit Head)	(MT)			
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	5978.15	0.00	0.00
5	Coal supplied by Coal / Lignite Company(3+/-4)	(MT)	343061	362287	52326
6	Normative Transit & Handling Losses (for Coal / Lignite based projects)	(MT)	2744.49	2,898.29	104.65
	- Normative Loss (Pit Head)	(MT)			
	- Normative Loss (Non Pit Head)	(MT)			
7	Net Coal / Lignite supplied (5-6)	(MT)	340316.82	3,59,388.44	52221.75
<b>C</b>	<b>PRICE</b>				
8	Amount charged by the Coal / Lignite Company	(Rs.)	854734159.51	1258721608.00	646921979.02
9	Adjustment (+/-) in amount charged by Coal / Lignite Company	(Rs.)	-14977588.74	59417155.22	0.00
10	Handling Sampling and such other similar Charges	(Rs.)	5975382.06	6202168.74	0.00
11	Total amount charged (8+9+10)	(Rs.)	845731953	1,32,43,40,931.96	646921979.02
<b>D</b>	<b>TRANSPORTATION</b>				
12	Transportation charges by Rail/Ship/Road Transport	(Rs.)			
	By Rail	(Rs.)	320764546.65	348144933.00	0.00
	By Road	(Rs.)	0.00	3830636.47	0.00
13	Adjustment (+/-) in amount charged by Railways / Transport Company	(Rs.)	0	0	0
14	Demurrage charges, if any	(Rs.)	0	-	-
15	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)	1292102.34	1330762.62	0.00
16	Total Transportation Charges (12+/-13 - 14 + 15)	(Rs.)	322046649	35,33,06,332.09	-
17	Other Charges	(Rs.)			
18	Total amount charged for coal / Lignite supplied including transportation (11 +16)	(Rs.)	1167778602	1,67,76,47,264.05	64,69,21,979.02
<b>E</b>	<b>TOTAL COST</b>				
18	Landed Cost of Coal/Lignite. (2+17)/(1+7)	(Rs./MT)	3433.26	4681.22	12320.21
19	Blending Ratio (Domestic/Imported)	%	70.00	19.35	10.65
20	Weighted Average Cost of Coal or Lignite	(Rs./MT)	4620.93		
<b>F</b>	<b>QUALITY</b>				
21	GCV of Domestic Coal of the Opening Coal Stock as per Bill of Coal Company	(Kcal / Kg)	4854	4204	
22	GCV of Domestic Coal Supplied as per Bill of Coal Company	(Kcal / Kg)	4458	4447	
23	GCV of Imported Coal of the Opening Stock as per Bill of Coal Company	(Kcal / Kg)			5650
24	GCV of Imported Coal Supplied as per Bill of Coal Company	(Kcal / Kg)			5650
25	Weighted average GCV of coal/ Lignite as Billed	(Kcal / Kg)			4578
26	GCV of Domestic Coal of the Opening Stock as Received at Station	(Kcal / Kg)	3287	3561	
27	GCV of Domestic Coal Supplied as Received at Station	(Kcal / Kg)	3413	3571	
28	GCV of Imported Coal of the Opening Stock as Received at Station	(Kcal / Kg)			4854
29	GCV of Imported Coal Supplied as Received at Station	(Kcal / Kg)			4871
30	Weighted average GCV of coal/ Lignite as Received	(Kcal / Kg)		3580	

## FORM-15 COAL

Name of the Petitioner: NTPC Limited					
Name of the Generating Station : Barh STPS Stage - II ( 2X660 MW)					
		Nov-23			
SL.NO.	PARTICULARS	Unit	Domestic Coal		Imported Coal
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported Coal
<b>A</b>	<b>OPENING QUANTITY</b>				
1	Opening Quantity of Coal	(MT)	55927.83	75137.94	5011.24
2	Value of Stock	Rs.	192014981.87	351738938.69	61739586.98
<b>B</b>	<b>QUANTITY</b>				
3	Quantity of Coal/Lignite supplied by Coal / Lignite Company	(MT)	332784.72	412672.84	14983.40
	- Qty Received (Pit Head)	(MT)			
	- Qty Received (Non Pit Head)	(MT)			
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	3441.91	0.00	0.00
5	Coal supplied by Coal / Lignite Company(3+/-4)	(MT)	329343	412673	14983
6	Normative Transit & Handling Losses (for Coal / Lignite based projects)	(MT)	2634.74	3,301.38	29.97
	- Normative Loss (Pit Head)	(MT)			
	- Normative Loss (Non Pit Head)	(MT)			
7	Net Coal / Lignite supplied (5-6)	(MT)	326708.07	4,09,371.46	14953.43
<b>C</b>	<b>PRICE</b>				
8	Amount charged by the Coal / Lignite Company	(Rs.)	800822548.77	1398963382.38	170534551.89
9	Adjustment (+/-) in amount charged by Coal / Lignite Company	(Rs.)	-8629754.75	70596706.29	0.00
10	Handling Sampling and such other similar Charges	(Rs.)	5696198.25	7063624.52	0.00
11	Total amount charged (8+9+10)	(Rs.)	797888992	1,47,66,23,713.19	170534551.89
<b>D</b>	<b>TRANSPORTATION</b>				
12	Transportation charges by Rail/Ship/Road Transport	(Rs.)			
	By Rail	(Rs.)	320826761.77	382774625.00	0.00
	By Road	(Rs.)	0.00	3274354.50	0.00
13	Adjustment (+/-) in amount charged by Railways / Transport Company	(Rs.)	0	0	0
14	Demurrage charges, if any	(Rs.)	0	-	-
15	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)	1222394.94	1515842.41	0.00
16	Total Transportation Charges (12+/-13 - 14 + 15)	(Rs.)	322049157	38,75,64,821.91	-
17	Other Charges	(Rs.)			
18	Total amount charged for coal / Lignite supplied including transportation (11 +16)	(Rs.)	1119938149	1,86,41,88,535.10	17,05,34,551.89
<b>E</b>	<b>TOTAL COST</b>				
18	Landed Cost of Coal/Lignite. (2+17)/(1+7)	(Rs./MT)	3428.72	4573.54	11634.26
19	Blending Ratio (Domestic/Imported)	%	35.00	62.65	2.35
20	Weighted Average Cost of Coal or Lignite	(Rs./MT)	4338.68		
<b>F</b>	<b>QUALITY</b>				
21	GCV of Domestic Coal of the Opening Coal Stock as per Bill of Coal Company	(Kcal / Kg)	4870	4413	
22	GCV of Domestic Coal Supplied as per Bill of Coal Company	(Kcal / Kg)	4283	4468	
23	GCV of Imported Coal of the Opening Stock as per Bill of Coal Company	(Kcal / Kg)			5650
24	GCV of Imported Coal Supplied as per Bill of Coal Company	(Kcal / Kg)			5650
25	Weighted average GCV of coal/ Lignite as Billed	(Kcal / Kg)			4435
26	GCV of Domestic Coal of the Opening Stock as Received at Station	(Kcal / Kg)	3387	3570	
27	GCV of Domestic Coal Supplied as Received at Station	(Kcal / Kg)	3354	3320	
28	GCV of Imported Coal of the Opening Stock as Received at Station	(Kcal / Kg)			4870
29	GCV of Imported Coal Supplied as Received at Station	(Kcal / Kg)			4872
30	Weighted average GCV of coal/ Lignite as Received	(Kcal / Kg)		3393	



## FORM- 15 COAL

Name of the Petitioner: NTPC Limited					
Name of the Generating Station : Barh STPS Stage - II ( 2X660 MW)					
		Dec-23			
SL.NO.	PARTICULARS	Unit	Domestic Coal		Imported Coal
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported Coal
<b>A</b>	<b>OPENING QUANTITY</b>				
1	Opening Quantity of Coal	(MT)	90621.97	113580.68	2992.68
2	Value of Stock	Rs.	310717783.70	519466351.99	34817574.22
<b>B</b>	<b>QUANTITY</b>				
3	Quantity of Coal/Lignite supplied by Coal / Lignite Company	(MT)	455748.42	408971.09	30069.90
	- Qty Received (Pit Head)	(MT)			
	- Qty Received (Non Pit Head)	(MT)			
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	5799.55	0.00	0.00
5	Coal supplied by Coal / Lignite Company(3+/-4)	(MT)	449949	408971	30070
6	Normative Transit & Handling Losses (for Coal / Lignite based projects)	(MT)	3599.59	3,271.77	60.14
	- Normative Loss (Pit Head)	(MT)			
	- Normative Loss (Non Pit Head)	(MT)			
7	Net Coal / Lignite supplied (5-6)	(MT)	446349.28	4,05,699.32	30009.76
<b>C</b>	<b>PRICE</b>				
8	Amount charged by the Coal / Lignite Company	(Rs.)	1159358168.08	1354711693.60	374741112.63
9	Adjustment (+/-) in amount charged by Coal / Lignite Company	(Rs.)	-14563191.66	66819441.94	0.00
10	Handling Sampling and such other similar Charges	(Rs.)	7717957.32	6925797.83	0.00
11	Total amount charged (8+9+10)	(Rs.)	1152512934	1,42,84,56,933.37	374741112.63
<b>D</b>	<b>TRANSPORTATION</b>				
12	Transportation charges by Rail/Ship/Road Transport	(Rs.)			
	By Rail	(Rs.)	373609882.09	331718154.78	0.00
	By Road	(Rs.)	0.00	3245294.24	0.00
13	Adjustment (+/-) in amount charged by Railways / Transport Company	(Rs.)	0	0	0
14	Demurrage charges, if any	(Rs.)	0	-	-
15	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)	1674068.94	1502245.03	0.00
16	Total Transportation Charges (12+/-13 - 14 + 15)	(Rs.)	375283951	33,64,65,694.05	-
17	Other Charges	(Rs.)			
18	Total amount charged for coal / Lignite supplied including transportation (11 +16)	(Rs.)	1527796885	1,76,49,22,627.42	37,47,41,112.63
<b>E</b>	<b>TOTAL COST</b>				
18	Landed Cost of Coal/Lignite. (2+17)/(1+7)	(Rs./MT)	3423.86	4399.15	12409.95
19	Blending Ratio (Domestic/Imported)	%	60.00	35.50	4.50
20	Weighted Average Cost of Coal or Lignite	(Rs./MT)	4174.30		
<b>F</b>	<b>QUALITY</b>				
21	GCV of Domestic Coal of the Opening Coal Stock as per Bill of Coal Company	(Kcal / Kg)	4871	4459	
22	GCV of Domestic Coal Supplied as per Bill of Coal Company	(Kcal / Kg)	4412	4169	
23	GCV of Imported Coal of the Opening Stock as per Bill of Coal Company	(Kcal / Kg)			5650
24	GCV of Imported Coal Supplied as per Bill of Coal Company	(Kcal / Kg)			5650
25	Weighted average GCV of coal/ Lignite as Billed	(Kcal / Kg)			4393
26	GCV of Domestic Coal of the Opening Stock as Received at Station	(Kcal / Kg)	3359	3357	
27	GCV of Domestic Coal Supplied as Received at Station	(Kcal / Kg)	3214	3225	
28	GCV of Imported Coal of the Opening Stock as Received at Station	(Kcal / Kg)			4871
29	GCV of Imported Coal Supplied as Received at Station	(Kcal / Kg)			4876
30	Weighted average GCV of coal/ Lignite as Received	(Kcal / Kg)		3317	

## FORM- 15 COAL

Name of the Petitioner: NTPC Limited					
Name of the Generating Station : Barh STPS Stage - II ( 2X660 MW)					
		Jan-24			
SL.NO.	PARTICULARS	Unit	Domestic Coal		Imported Coal
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported Coal
<b>A</b>	<b>OPENING QUANTITY</b>				
1	Opening Quantity of Coal	(MT)	85603.03	346483.66	80.42
2	Value of Stock	Rs.	293092898.32	1524245268.62	997970.65
<b>B</b>	<b>QUANTITY</b>				
3	Quantity of Coal/Lignite supplied by Coal / Lignite Company	(MT)	390004.12	524213.78	87686.40
	- Qty Received (Pit Head)	(MT)	0.00	0.00	87686.40
	- Qty Received (Non Pit Head)	(MT)	390004.12	524213.78	0.00
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	-3628.9	0.00	0.00
5	Coal supplied by Coal / Lignite Company(3+/-4)	(MT)	386375.22	524213.78	87686.40
6	Normative Transit & Handling Losses (for Coal / Lignite based projects)	(MT)	3091.00	4,193.71	175.37
	- Normative Loss (Pit Head)	(MT)			175.37
	- Normative Loss (Non Pit Head)	(MT)	3091.00	4,193.71	
7	Net Coal / Lignite supplied (5-6)	(MT)	383284.22	5,20,020.07	87511.03
<b>C</b>	<b>PRICE</b>				
8	Amount charged by the Coal / Lignite Company	(Rs.)	1009769785.35	1749923908.00	1087644834.34
9	Adjustment (+/-) in amount charged by Coal / Lignite Company	(Rs.)	-5058619.34	-16023082.09	0.00
10	Handling Sampling and such other similar Charges	(Rs.)	11647499.90	15655680.63	0.00
11	Total amount charged (8+9+10)	(Rs.)	1016358666	1,74,95,56,506.54	1087644834.34
<b>D</b>	<b>TRANSPORTATION</b>				
12	Transportation charges by Rail/Ship/Road Transport	(Rs.)	325575470.66	509766361.37	0.00
	By Rail	(Rs.)			
	By Road	(Rs.)	0	0.00	-
13	Adjustment (+/-) in amount charged by Railways / Transport Company	(Rs.)	0	0	0
14	Demurrage charges, if any	(Rs.)	0	-	-
15	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)	1509211.26	2028566.63	0.00
16	Total Transportation Charges (12+/-13 - 14 + 15)	(Rs.)	327084682	511794928	0
17	Other Charges	(Rs.)			
18	Total amount charged for coal / Lignite supplied including transportation (11 +16)	(Rs.)	1343443348	2,26,13,51,434.54	1,08,76,44,834.34
<b>E</b>	<b>TOTAL COST</b>				
18	Landed Cost of Coal/Lignite. (2+17)/(1+7)	(Rs./MT)	3490.26	4368.82	12428.64
19	Blending Ratio (Domestic/Imported)	%	40.00	55.13	4.87
20	Weighted Average Cost of Coal or Lignite	(Rs./MT)	4409.95		
<b>F</b>	<b>QUALITY</b>				
21	GCV of Domestic Coal of the Opening Coal Stock as per Bill of Coal Company	(Kcal / Kg)	4419	4254	0
22	GCV of Domestic Coal Supplied as per Bill of Coal Company	(Kcal / Kg)	4367	4990	0
23	GCV of Imported Coal of the Opening Stock as per Bill of Coal Company	(Kcal / Kg)	0	0	5650
24	GCV of Imported Coal Supplied as per Bill of Coal Company	(Kcal / Kg)	0	0	5650
25	Weighted average GCV of coal/ Lignite as Billed	(Kcal / Kg)			4615
26	GCV of Domestic Coal of the Opening Stock as Received at Station	(Kcal / Kg)	3239	3253	0
27	GCV of Domestic Coal Supplied as Received at Station	(Kcal / Kg)	3360	3445	0
28	GCV of Imported Coal of the Opening Stock as Received at Station	(Kcal / Kg)	0	0	4875
29	GCV of Imported Coal Supplied as Received at Station	(Kcal / Kg)	0	0	4908
30	Weighted average GCV of coal/ Lignite as Received	(Kcal / Kg)			3431

## FORM- 15 COAL

Name of the Petitioner: NTPC Limited					
Name of the Generating Station : Barh STPS Stage - II ( 2X660 MW)					
		Feb-24			
SL.NO.	PARTICULARS	Unit	Domestic Coal		Imported Coal
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported Coal
<b>A</b>	<b>OPENING QUANTITY</b>				
1	Opening Quantity of Coal	(MT)	62278.04	554579.91	38082.45
2	Value of Stock	Rs.	217366407.43	2422858316.82	473313118.71
<b>B</b>	<b>QUANTITY</b>				
3	Quantity of Coal/Lignite supplied by Coal / Lignite Company	(MT)	310121.49	450495.76	162682.20
	- Qty Received (Pit Head)	(MT)	0.00	0.00	162682.20
	- Qty Received (Non Pit Head)	(MT)	310121.49	450495.76	0.00
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	-1838.46	0.00	0.00
5	Coal supplied by Coal / Lignite Company(3+/-4)	(MT)	308283.03	450495.76	162682.20
6	Normative Transit & Handling Losses (for Coal / Lignite based projects)	(MT)	2466.26	3,603.97	325.36
	- Normative Loss (Pit Head)	(MT)			325.36
	- Normative Loss (Non Pit Head)	(MT)	2466.26	3,603.97	
7	Net Coal / Lignite supplied (5-6)	(MT)	305816.77	4,46,891.79	162356.84
<b>C</b>	<b>PRICE</b>				
8	Amount charged by the Coal / Lignite Company	(Rs.)	81,37,65,838.21	1,47,75,04,941.62	2052174232.50
9	Adjustment (+/-) in amount charged by Coal / Lignite Company	(Rs.)	-1310986.20	1,26,56,920.81	0.00
10	Handling Sampling and such other similar Charges	(Rs.)	92,62,961.64	1,34,55,774.84	0.00
11	Total amount charged (8+9+10)	(Rs.)	82,17,17,813.65	1,50,36,17,637.27	2052174232.50
<b>D</b>	<b>TRANSPORTATION</b>				
12	Transportation charges by Rail/Ship/Road Transport	(Rs.)	251682565.8	450055971.2	0
	By Rail	(Rs.)	0	0.00	-
	By Road	(Rs.)	0	0.00	-
13	Adjustment (+/-) in amount charged by Railways / Transport Company	(Rs.)	0	0	0
14	Demurrage charges, if any	(Rs.)	0	-	-
15	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)	1887841	27,42,359.23	-
16	Total Transportation Charges (12+/-13 - 14 + 15)	(Rs.)	253570407	452798330	0
17	Other Charges	(Rs.)			
18	Total amount charged for coal / Lignite supplied including transportation (11 +16)	(Rs.)	1,07,52,88,220.77	1,95,64,15,967.71	2,05,21,74,232.50
<b>E</b>	<b>TOTAL COST</b>				
18	Landed Cost of Coal/Lignite. (2+17)/(1+7)	(Rs./MT)	3511.74	4372.84	12599.76
19	Blending Ratio (Domestic/Imported)	%	23.00	66.51	10.49
20	Weighted Average Cost of Coal or Lignite	(Rs./MT)	5037.77		
<b>F</b>	<b>QUALITY</b>				
21	GCV of Domestic Coal of the Opening Coal Stock as per Bill of Coal Company	(Kcal / Kg)	4944	4688	0
22	GCV of Domestic Coal Supplied as per Bill of Coal Company	(Kcal / Kg)	4310	4894	0
23	GCV of Imported Coal of the Opening Stock as per Bill of Coal Company	(Kcal / Kg)	0	0	5650
24	GCV of Imported Coal Supplied as per Bill of Coal Company	(Kcal / Kg)	0	0	5650
25	Weighted average GCV of coal/ Lignite as Billed	(Kcal / Kg)			4788
26	GCV of Domestic Coal of the Opening Stock as Received at Station	(Kcal / Kg)	3350	3388	0
27	GCV of Domestic Coal Supplied as Received at Station	(Kcal / Kg)	3215	3287	0
28	GCV of Imported Coal of the Opening Stock as Received at Station	(Kcal / Kg)	0	0	4944
29	GCV of Imported Coal Supplied as Received at Station	(Kcal / Kg)	0	0	4920
30	Weighted average GCV of coal/ Lignite as Received	(Kcal / Kg)		3485	

FORM- 15 COAL					
Name of the Petitioner: NTPC Limited					
Name of the Generating Station : Barh STPS Stage - II ( 2X660 MW)					
		Mar-24			
SL.NO.	PARTICULARS	Unit	Domestic Coal		Imported Coal
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported Coal
<b>A</b>	<b>OPENING QUANTITY</b>				
1	Opening Quantity of Coal	(MT)	98043.41	4,57,740.51	106939.28
2	Value of Stock	Rs.	344303265.63	2,00,16,25,305.15	1347409604.20
<b>B</b>	<b>QUANTITY</b>				
3	Quantity of Coal/Lignite supplied by Coal / Lignite Company	(MT)	3,85,492.70	5,43,243.55	38157.30
	- Qty Received (Pit Head)	(MT)	-	0.00	38157.30
	- Qty Received (Non Pit Head)	(MT)	3,85,492.70	5,43,243.55	0.00
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	(MT)	-5141.71	0.00	0.00
5	Coal supplied by Coal / Lignite Company(3+/-4)	(MT)	380350.99	5,43,243.55	38157.30
6	Normative Transit & Handling Losses (for Coal / Lignite based projects)	(MT)	3042.81	4,345.95	76.32
	- Normative Loss (Pit Head)	(MT)	0.00	0.00	76.32
	- Normative Loss (Non Pit Head)	(MT)	3042.81	4,345.95	0.00
7	Net Coal / Lignite supplied (5-6)	(MT)	377308.18	5,38,897.60	38080.98
<b>C</b>	<b>PRICE</b>				
8	Amount charged by the Coal / Lignite Company	(Rs.)	97,14,76,837.00	1,85,88,95,229.25	446454939.30
9	Adjustment (+/-) in amount charged by Coal / Lignite Company	(Rs.)	-8946317.01	-71,89,645.61	0.00
10	Handling Sampling and such other similar Charges	(Rs.)	11515428	1,62,27,756.97	0.00
11	Total amount charged (8+9+10)	(Rs.)	974045948	1,86,79,33,340.61	446454939.30
<b>D</b>	<b>TRANSPORTATION</b>				
12	Transportation charges by Rail/Ship/Road Transport	(Rs.)	330569007	543834748.6	0
	By Rail	(Rs.)	0	0.00	-
	By Road	(Rs.)	0	0.00	-
13	Adjustment (+/-) in amount charged by Railways / Transport Company	(Rs.)	0	0	0
14	Demurrage charges, if any	(Rs.)	0	-	-
15	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.)	1412671	19,90,761.94	-
16	Total Transportation Charges (12+/-13 - 14 + 15)	(Rs.)	331981678	545825511	0
17	Other Charges	(Rs.)			
18	Total amount charged for coal / Lignite supplied including transportation (11 +16)	(Rs.)	1306027625	2,41,37,58,851.14	44,64,54,939.30
<b>E</b>	<b>TOTAL COST</b>				
18	Landed Cost of Coal/Lignite (2+17)/(1+7)	(Rs./MT)	3471.81	4430.28	12369.75
19	Blending Ratio (Domestic/Imported)	%	23.00	68.90	8.10
20	Weighted Average Cost of Coal or Lignite	(Rs./MT)	4852.98		
<b>F</b>	<b>QUALITY</b>				
21	GCV of Domestic Coal of the Opening Coal Stock as per Bill of Coal Company	(Kcal / Kg)	4326	4717	0
22	GCV of Domestic Coal Supplied as per Bill of Coal Company	(Kcal / Kg)	4360	4967	0
23	GCV of Imported Coal of the Opening Stock as per Bill of Coal Company	(Kcal / Kg)	0	0	5650
24	GCV of Imported Coal Supplied as per Bill of Coal Company	(Kcal / Kg)	0	0	5650
25	Weighted average GCV of coal/ Lignite as Billed	(Kcal / Kg)			4802
26	GCV of Domestic Coal of the Opening Stock as Received at Station	(Kcal / Kg)	3286	3370	0
27	GCV of Domestic Coal Supplied as Received at Station	(Kcal / Kg)	3355	3625	0
28	GCV of Imported Coal of the Opening Stock as Received at Station	(Kcal / Kg)	0	0	4941
29	GCV of Imported Coal Supplied as Received at Station	(Kcal / Kg)	0	0	4918
30	Weighted average GCV of coal/ Lignite as Received	(Kcal / Kg)		3585	

Name of the Petitioner: NTPC Limited								
Name of the Generating Station : Barh STPS Stage - II ( 2X660 MW)								
Month		Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	
S.No.	Particulars	Unit	LDO	LDO	LDO	LDO	LDO	
1	Opening Stock of Oil	KL	3092.88	3199.18	4813.71	4833.82	2903.58	3503.42
2	Value of Opening Stock	Rs.	377911365.	378547328	428591032	376002404	225731303	271360660
3	Quantity of Oil supplied by Oil Company	KL	219.82	3742.92	3928.11	361.88	2843.90	941.72
4	Adjustment (+/-) in quantity supplied by Oil Company	KL	0.00	0.00	0.00	0.00	0.00	0.00
5	Qty. of Oil supplied by Oil Company (3+4)	KL	219.820	3742.920	3928.110	361.880	2843.900	941.720
6	Normative Transit & Handling Losses	KL	0	0	0	0	0	0
7	Net Oil Supplied ( 5 - 6 )	KL	219.820	3742.920	3928.110	361.880	2843.900	941.720
8	Amount charged by the Oil Company	Rs.	14068363	239545913	251398092	27923752	219445114	72666434
9	Adjustment (+/-) in amount charged by Oil Company	Rs.	0.00	0.00	0.00	0.00	0.00	0.00
10	Handling, Sampling and such other similar charges	Rs.	0.00	0.00	0.00	0.00	0.00	0.00
11	Total amount charged (8+9+10)	Rs.	14068363	239545913	251398092	27923752	219445114	72666434
12	Transportation charges by rail/ship/road transport	Rs.						
13	Adjustment (+/-) in amount charged by Railways/Transport Company.	Rs.						
14	Demurrage charges, if any	Rs.						
15	Total Transportation Charges (12+13+14+15)	Rs.						
16	Others	Rs.	0	0	0	0	0	0
17	Total amount charged for Oil supplied including Transportation (11+15+16)	Rs.	14068363	239545913	251398092	27923752	219445114	72666434
18	Weighted average cost of Oil	Rs./ KL	118326.29	89035.47	77785.75	77742.41	77455.93	77393.97
19	GCV of Oil of the opening stock	Kcal/KL	9560	9371	9326	9486	9784	9457
20	Weighted average GCV of Oil	Kcal/KL	9371	9326	9486	9362	9457	9471

								FORM-15 -OIL
Name of the Petitioner: NTPC Limited								
Name of the Generating Station : Barh STPS Stage - II ( 2X660 MW)								
Month			Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
S.No.	Particulars	Unit	LDO	LDO	LDO	LDO	LDO	LDO
1	Opening Stock of Oil	KL	2508.97	4252.60	1412.02	4458.92	3378.19	2654.59
2	Value of Opening Stock	Rs.	194179218	323252434	107331322	335089181	253871978	199493208
3	Quantity of Oil supplied by Oil Company	KL	2966.71	0.00	3987.50	0.00	0.00	2967.80
4	Adjustment (+/-) in quantity supplied by Oil Company	KL	0.00	0.00	0.00	0.00	0.00	0.00
5	Qty. of Oil supplied by Oil Company (3+4)	KL	2966.710	0.000	3987.500	0.000	0.000	2967.800
6	Normative Transit & Handling Losses	KL	0	0	0	0	0	0
7	Net Oil Supplied ( 5 - 6 )	KL	2966.710	0.000	3987.500	0.000	0.000	2967.800
8	Amount charged by the Oil Company	Rs.	222043045	0	298443647	0	0	245046840
9	Adjustment (+/-) in amount charged by Oil Company	Rs.	0.00	0.00	0.00	0.00	0.00	0.00
10	Handling, Sampling and such other similar charges	Rs.	0.00	0.00	0.00	0.00	0.00	0.00
11	Total amount charged (8+9+10)	Rs.	222043045	0	298443647	0	0	245046840
12	Transportation charges by rail/ship/road transport	Rs.						
13	Adjustment (+/-) in amount charged by Railways/Transport Company.	Rs.						
14	Demurrage charges, if any	Rs.						
15	Total Transportation Charges (12+13+14+15)	Rs.						
16	Others	Rs.	0	0	0	0	0	0
17	Total amount charged for Oil supplied including Transportation (11+15+16)	Rs.	222043045	0	298443647	0	0	245046840
18	Weighted average cost of Oil	Rs./ KL	76012.88	76012.88	75150.32	75150.32	75150.32	79066.04
19	GCV of Oil of the opening stock	Kcal/KL	9471	9481	9500	9500	9510	9468
20	Weighted average GCV of Oil	Kcal/KL	9481	9500	9500	9510	9468	9499

Computation of Energy Charges													Form-15B ADDITIONAL FORM									
Name of the Petitioner: NTPC Limited																						
Name of the Generating Station : Barh STPS Stage - II ( 2X660 MW)																						
													2024-25	2025-26	2026-27	2027-28	2028-29					
Computation of Energy Charges													No of Days in the year	Days	365	365	365	366	365			
													Sp. Oil consumption	ml/kwh	0.5	0.5	0.5	0.5	0.5			
													Auxiliary consumption	%	5.75	5.75	5.75	5.75	5.75			
													Heat Rate	Kcal/Kwh	2,294.76	2,294.76	2,294.76	2,294.76	2,294.76			
1 Rate of Energy Charge from Sec. Fuel Oil/ Alternate Fuel (p/kwh)													4.060					Computation of Variable Charges				
													Variable Charge (Coal)	p/kwh	336.430	336.430	336.430	336.430	336.430			
													Variable Charge (Oil)	p/kwh	4.307	4.307	4.307	4.307	4.307			
2 Heat Contribution from SFO / Alternate Fuel													4.726					Total				
													Price of fuel from Form-15/15A									
													Coal Cost	(Rs./MT)	4816.92	4816.92	4816.92	4816.92	4816.92			
3 Heat Contribution from coal													2290.03					Oil Cost				
													(Rs./KL)					81190.22				
4 Specific Primary Fuel Consumption													0.658					Computation of Fuel Expenses for Calculation of IWC:				
													ESO in a year					(MUs)				
													ESO for 50 days					(MUs)				
5 Rate of Energy charge from Primary Fuel (p/kwh)													317.086					Cost of coal for 50 Days				
													(Rs: Lakh)					42692.42				
													Cost of oil for 2 months					(Rs: Lakh)				
													665.00					665.00				
6 Rate of Energy charge ex-bus (p/kWh)													340.738					Energy Expenses for 45 days				
													(Rs: Lakh)					38915.09				
Coal																						
		April '23	May'23	June'23	July'23	Aug'23	Sep'23	Oct'23	Nov'23	Dec'23	Jan'24	Feb'24	Mar'24	Wtd. Avg.								
Wtd. Avg. Price of Coal		Rs./MT	5360.85	5000.77	4679.95	4667.33	5625.01	5034.51	4620.93	4338.68	4174.30	4409.95	5037.77	4852.98	4816.92							
Wtd. Avg. GCV of Coal as received		kCal/Kg	3911.00	3746.00	3590.00	3522.00	3598.00	3608.00	3580.00	3393.00	3317.00	3431.00	3485.00	3585.00	3563.83							
Wtd. Avg. GCV of Coal as received after adjustment of 85 kcal/kg		kCal/Kg	3826	3661	3505	3437	3513	3523	3495	3308	3232	3346	3400	3500	3478.83							
Secondary Oil																						
Wtd. Avg. Price of Secondary Fuel		Rs/KL	118326.29	89035.47	77785.75	77742.41	77455.93	77393.97	76012.88	76012.88	75150.32	75150.32	75150.32	79066.04	81190.22							
Wtd. Avg. GCV of Secondary Fuel		kCal/L	9371.00	9326.00	9486.00	9362.00	9457.00	9471.00	9481.00	9500.00	9500.00	9510.00	9468.00	9499.00	9452.58							

Petitioner

Details of Water Charges

Name of the Petitioner:	NTPC Ltd					
Name of the Generating Station:	Barh-II (2 x 660 MW)					

Amount in lakhs

S. No.	Details of Water charges (excluding water cess)		Quantity allocated (Allocation for Barh-I (3x660 MW) & Barh-II (2x660 MW))	Normative consumption	Rate specified (as per govt. notification or agreement)	Spillage of water (in percentage)	Amount Claimed
	Name of source and quantity: River Ganga		Unit (Cusecs)	Unit m3			
1	2024-25		180	40471200	Rs. 18/ Kilogallon		987.00
2	2025-26		SHALL BE PROVIDED AT THE TIME OF TRUE-UP.				924.00
3	2026-27						924.00
4	2027-28						924.00
5	2028-29						924.00

Note : All details are provisional subject to revision

(Petitioner)







## Calculation of Interest on Normative Loan

Name of the Company :		NTPC Limited					
Name of the Power Station :		Barh-II (2x660 MW)					
		(Amount in Rs Lakh)					
S. No.	Particulars	Existing 2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7	8
1	Gross Normative loan – Opening	7,24,197.19	7,47,381.86	7,52,254.02	7,54,625.07	7,54,625.07	7,54,625.07
2	Cumulative repayment of Normative loan up to previous year	3,53,848.64	4,07,710.31	4,62,868.69	5,18,293.48	5,73,805.48	6,29,317.47
3	<b>Net Normative loan – Opening</b>	<b>3,70,348.55</b>	<b>3,39,671.55</b>	<b>2,89,385.33</b>	<b>2,36,331.59</b>	<b>1,80,819.60</b>	<b>1,25,307.60</b>
4	Add: Increase due to addition during the year / period	20727.26	4,872.15	2,371.05	-	-	2,628.08
5	Less: Decrease due to de-capitalisation during the year / period	-532.90	-	-	-	-	-
6	Less: Decrease due to reversal during the year / period	-	-	-	-	-	-
7	Add: Increase due to discharges during the year / period	2990.31	-	-	-	-	-
8	<b>Net addition in loan during the period (4+5+6+7)</b>	<b>23184.68</b>	<b>4872.15</b>	<b>2371.05</b>	<b>0.00</b>	<b>0.00</b>	<b>2628.08</b>
9	Less: Repayment of Loan	54126.52	55,158.38	55,424.79	55,512.00	55,512.00	25,841.84
10	Repayment adjustment on account of de capitalisation	265.05	-	-	-	-	-
11	Repayment adjustment on account of discharges/reversals corresponding to un-discharged liabilities deducted as on 1.4.2009	-	-	-	-	-	-
12	<b>Net Normative loan - Closing</b>	<b>3,39,141.46</b>	<b>2,89,385.33</b>	<b>2,36,331.59</b>	<b>1,80,819.60</b>	<b>1,25,307.60</b>	<b>1,02,093.84</b>
13	<b>Average Normative loan</b>	<b>3,54,744.90</b>	<b>3,14,528.44</b>	<b>2,62,858.46</b>	<b>2,08,575.59</b>	<b>1,53,063.60</b>	<b>1,13,700.72</b>
14	Weighted average rate of interest	7.5749	7.5693	7.7436	8.1645	8.2357	8.2265
15	<b>Interest on Loan</b>	<b>26871.65</b>	<b>23807.61</b>	<b>20354.58</b>	<b>17029.05</b>	<b>12605.92</b>	<b>9353.54</b>
							(Petitioner)

**Calculation of Interest on Working Capital**

<b>Name of the Company :</b>		NTPC Ltd					
<b>Name of the Power Station :</b>		Barh-II (2x660 MW)					
(Amount in Rs Lakh)							
<b>S. No.</b>	<b>Particulars</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>	<b>2027-28</b>	<b>2028-29</b>
1	2						
1	Cost of Coal/Lignite	46994.95	42692.42	42692.42	42692.42	42692.42	42692.42
2	Cost of Main Secondary Fuel Oil	702.15	665.00	665.00	665.00	666.82	665.00
3	Fuel Cost						
4	Liquid Fuel Stock						
5	O & M Expenses	3418.30	3964.68	3756.27	3996.40	4169.52	4363.58
6	Maintenance Spares	8203.93	9515.24	9015.06	9591.37	10006.85	10472.59
7	Receivables	66963.36	63726.04	63039.74	63018.73	62667.96	58926.17
8	Total Working Capital	126282.69	120563.38	119168.49	119963.92	120203.57	117119.75
9	Rate of Interest	12.0000	11.9000	11.9000	11.9000	11.9000	11.9000
10	Interest on Working Capital	15153.92	14347.04	14181.05	14275.71	14304.22	13937.25

Petitioner

## Summary of issue involved in the petition

Name of the Company :		NTPC Limited
Name of the Power Station :		Barh-II (2x660 MW)
1	Petitioner:	NTPC Limited
2	Subject	Petition Under Section 62 and 79 (1) (a) of the Electricity Act, 2003 read with Chapter-III of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 and Chapter-3, Regulation-9 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for approval of tariff of Barh Super Thermal Power Station, Stage-I (2 X 660 MW) for the period from 01.04.2024 to 31.03.2029.
3		<p>i) Approve tariff of Barh Super Thermal Power Station Stage-II (2x660 MW) for the tariff period 01.04.2024 to 31.03.2029.</p> <p>ii) Allow the recovery of filing fees as &amp; when paid to the Hon'ble Commission and publication expenses from the beneficiaries.</p> <p>iii) Consider station heat rate based on design heat rate with applicable operating margin.</p> <p>iv) Allow reimbursement of Ash Transportation Charges directly from the beneficiaries on monthly basis, subject to true up.</p> <p>v) Grant liberty to approach the Hon'ble Commission to allow for the recovery of pay/wage revision due in 2024-29 period as additional O&amp;M over and above the normative O&amp;M.</p> <p>vi) Pass any other order as it may deem fit in the circumstances mentioned above.</p>
4	Respondents:	
	Name of Respondents	
	a. North Bihar Power Distribution Company Ltd.	
	b. South Bihar Power Distribution Company Ltd.	
	c. Jharkhand Bijlee Vitran Nigam Ltd.	
	d. Power Department, Govt. of Sikkim	
5	Project Scope	(2x660) MW Super Thermal Power Station
	Cost	
	Commissioning	
	Claim	As per Petition
	AFC (lakhs)	Refer Form-1
	Capital cost (lakhs) as on 01.04.2024	Refer Form-1(1)
	NAPAF (Gen)	85%
	Any Specific	

IS/70-04-401/2008-Part-9-189

Government of Bihar  
Water Resources DepartmentResolution

Date: 03.10.16

Subject - Increment in Water charges rate for Industrial, Commercial and Municipal use.

Under Para-62 of Bihar Irrigation Act, 1907 (Bihar Act - 11, 1904) there is provision for fixation of water charges rate for Industrial, Commercial and Municipal use.

Water charges rate ₹ 4.50 (Rupees four and paise fifty) only per thousand gallon for Industrial, Commercial and Municipal use effective from 1<sup>st</sup> April 1998 is hereby increased to ₹ 18.00 (Rupees eighteen) only per thousand gallon.New Water charges rate will be effective from 3<sup>rd</sup> October 2016.

This has the approval of the State Cabinet.

By the order of Governor of Bihar

*K.S.*  
03.10.16  
(Yogendra Chitr Singh)  
Joint Secretary (Engineering)  
Water Resources Department

Memo No- IS/70-04-401/2008-Part-9-189

Date: 03.10.16

Copy to - Accountant General (Accounts &amp; Enrolments), Bihar/ Accountant General (Accounts), Bihar, Birkhand Patel Marg, Patna for information and necessary action.

*K.S.*  
03.10.16  
(Yogendra Chitr Singh)  
Joint Secretary (Engineering)  
Water Resources Department

Memo No- 15/20-04-01/2008-Part-B-189

Panna, Dated- 03-10-16

Copy to :- PA to Honorable Minister, Water Resources Department, Bhopal, Panna (Chief Secretary, Bhopal, Panna (Principal Secretary, Cabinet Secretariat Department, Panna (Principal Secretary Finance Department, Panna (Principal Secretary, Industry Department, Panna (Principal Secretary, Town Development and Housing Department Panna (Personnel Assistant to the Principal Secretary, Water Resources Department, Panna (All Engineer in Chief (All Chief Engineer (All Superintending Engineer (All Joint Secretary (All Executive Engineer, Water Resources Department) for information and necessary action.

  
(Yogeshwar Dhan Singh)  
Joint Secretary (Engineering)  
Water Resources Department

Memo No- 15/20-04-01/2008-Part-B-189

Panna, Dated- 03-10-16

Copy to :- Superintendent, Secretariat Printing Press, Gwalior, Panna in two hard copies along with CD for information and necessary action. Please publish it in the next extra ordinary publication and provide 200 (Two hundred) copies to Water Resources Department.

  
(Yogeshwar Dhan Singh)  
Joint Secretary (Engineering)  
Water Resources Department

copy

2016

15/89-34-401/2009-सर्टि-4-189

बिहार सरकार  
जन संसाधन विभाग

संकेत

दिनांक- 03/10/16

विषय :- औद्योगिक, व्यावसायिक एवं म्युनिसिपल उद्योगों हेतु जन प्रसार दर में वृद्धि।

बिहार सिमेंट्स लिमिटेड (1967) (बिहार लिमिटेड-11, 1968) को उद्योग 82 के अंतर्गत औद्योगिक, व्यावसायिक एवं म्युनिसिपल उद्योगों हेतु जन प्रसार दर निर्धारित करने का प्रार्थना है।

औद्योगिक, व्यावसायिक एवं म्युनिसिपल उद्योगों हेतु 01 अप्रैल, 1968 से प्रचलित जन प्रसार दर ₹ 4.50 (चार रुपये पचास पैसे) प्रति हजार वोल्ट में वृद्धि करके ₹ 18.00 (अठारह) प्रति हजार वोल्ट निर्धारित किया जाऊ है।

नया जन प्रसार दर दिनांक 03/10/2016 से प्रचाली होगा।

इस पर मन्त्रिमण्डल की मंजूरी प्राप्त है।

बिहार सरकार के अध्यक्ष से,

  
03/10/16

(सोपानन धारी सिंह)

संयुक्त सचिव (अभियन्तार)

जन संसाधन विभाग

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03/10/16

(सोपानन धारी सिंह)

संयुक्त सचिव (अभियन्तार)

जन संसाधन विभाग



39

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आपका-15/26-04-401/2008-सर्द-187 /सदर दिनांक-03-10-16

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03/10/16  
(परमेश्वर शर्मा शर्मा)  
संयुक्त सचिव (अभियंता)  
जल संसाधन विभाग

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03/10/16  
(परमेश्वर शर्मा शर्मा)  
संयुक्त सचिव (अभियंता)  
जल संसाधन विभाग

201

# National Disaster Management Guidelines

## Chemical Disasters (Industrial)

# National Disaster Management Guidelines

## Chemical Disasters (Industrial)



National Disaster Management Authority  
Government of India

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Vice Chairman  
**National Disaster Management Authority**  
 Government of India

## **FOREWORD**

Preparation of guidelines for various types of disasters forms an important part of the mandate of the National Disaster Management Authority (NDMA). Chemical Disaster (Industrial) is one such high priority subject, as it can be a highly traumatic event. At times, it can result in irreparable damage to the environment, both biotic and abiotic, and also cause fatality to a large number of population. Consequently, the work on preparation of comprehensive guidelines on Chemical disasters was undertaken on priority over a year back.

Formulation of these guidelines has involved active participation and contributions of 275 experts, including stakeholders like representatives of central ministries and departments, regulatory agencies, research and development organisations, professionals from scientific and technical institutes/academies like the National Safety Council and various DM institutes and apex industrial associations/consortia of the corporate sector. Help and advice of the officials at the functional level were also taken to incorporate practical aspects of the functioning.

The work commenced with an Extended Group of approximately 60 experts, identifying 'the felt needs' and determining the critical objectives. A Core Group of 8 members, constituted out of this group, thereafter, prepared draft guidelines taking into account the operational, administrative, financial and legal aspects. These draft papers were reviewed extensively, a number of times by the Extended Group, and then finalized in a national workshop held at the Disaster Management Institute, Bhopal.

The underlying philosophy of these guidelines is to build on existing structures and mechanisms. The 'National Disaster Management Guidelines—Chemical Disasters' document calls for a proactive, participatory, well-structured, fail-safe, multi-disciplinary and multi-sectoral approach involving all stakeholder groups, aimed at refining and strengthening the national mechanisms in this field, from stages of planning to field operations. These guidelines contain all the details that are required by the planners and implementers and will help in the preparation of plans by the central ministries/departments and the states.

I take this opportunity to express my deep appreciation of the commitment of various stakeholder groups who extended their willing support and cooperation to our efforts. I am grateful to the members of the Core Group, who put in endless hours of work. I also wish to convey my gratitude to the members of the NDMA, Extended Group, and other experts whose contributions have resulted into the preparation

*Continued*



of these guidelines. I would also like to commend the significant contributions made by the Ministry of Environment and Forests, the National Safety Council, Mumbai and the Disaster Management Institute, Bhopal in preparation of these guidelines. And finally, I am pleased to place on record my sincere appreciation for Lt Gen (Dr.) J.R. Bhandwaj, PVSM, AVSM, VSM, PHS (Retd), Member, NDMA, who guided and coordinated the entire exercise.

New Delhi  
30 April 2007



**General NC Vij**  
PVSM, UYSM, AVSM (Retd)



Member  
**National Disaster Management Authority**  
 Government of India

## **ACKNOWLEDGEMENTS**

I am thankful to the Core Group Members for their untiring efforts in helping the NDMA in the formulation of the National Guidelines on Chemical Disaster Management. I would like to place on record the significant contribution made by the Ministry of Environment and Forests, New Delhi and National Safety Council, Mumbai for helping in designing the format of the document and providing lots of technical inputs from time-to-time. The Disaster Management Institute, Bhopal also deserves special recognition for providing inputs related to On-Site and Off-Site emergency plans.

I would also like to express my sincere thanks to the representatives of the other central ministries and departments concerned, regulatory agencies, R&D organisations, professionals from scientific and technical institutes/academics, technocrats from leading national institutions and apex industrial associations/consortiums of the corporate sectors for the valuable inputs that helped us in improving the content and presentation of the document.

The efforts of Dr. Rakesh Kumar Sharma, Scientist 'F' and Additional Director, Defence Research Laboratory, Tezpur, Assam, and Dr. Raman Chawla, Senior Research Officer, NDMA, in providing knowledge-based technical inputs to the core group, are highly appreciated. Thanks are also due to Mr. Rubaab Sood and the secretarial staff of the NDMA including Mr. Deepak Sharma and Mr. D.K. Ray for their dedicated work during the convening of various workshops, meeting and preparation of the final document.

Finally, I would like to express my gratitude to General N.C. Viji, PVSM, UYSM, AVSM (Retd), Vice Chairman, NDMA and all Members of the NDMA for their constructive criticism and suggestions that guided us in formulating these guidelines.

New Delhi  
 30 April 2007

**Lt Gen (Dr) JR Bhardwaj**  
 PVSM, AVSM, VSM, PHS (Retd)  
 MD DCP PhD FICP FAMS FRC Path (London)

# Abbreviations

ADPC	Asian Disaster Preparedness Centre
AERB	Atomic Energy Regulatory Board
AMAI	Alkali Manufacturers Association of India
APELL	Awareness and Preparedness for Emergencies at Local Level
ASME	American Society of Mechanical Engineers
ASSOCHAM	Associated Chambers of Commerce and Industry
BIS	Bureau of Indian Standards
BLEVE	Boiling Liquid Expanding Vapour Explosion
CA (EPPR) Rules	Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996
CAS	Crisis Alert System
CCG	Central Crisis Group
CCR	Central Control Room
CDM	Chemical Disaster Management
CETP	Common Effluent Treatment Plant
CFEES	Centre for Fire, Explosive and Environment Safety
CIF	Chief Inspector of Factories
CII	Confederation of Indian Industry
CIR	Community Information Representative
CLI	Central Labour Institute
CMVR	Central Motor Vehicles Rules
CPAP	Continuous Positive Air Pressure
CPCB	Central Pollution Control Board
CRR	Community Response Representative
CSIR	Council of Scientific and Industrial Research
DAE	Department of Atomic Energy
DCG	District Crisis Group
DCR	District Control Room
DCS	Distributed Control System
DDMA	District Disaster Management Authority
DDMAP	District Disaster Management Action Plans
DEA	Department of Economic Affairs
DGFASLI	Directorate General Factory Advice Service and Labour Institutes
DGFT	Director General Foreign Trade
DISH	Directorate of Industrial Safety and Health
DM	Disaster Management
DMI	Disaster Management Institute
DMIS	Disaster Management Information System
DMP	Disaster Management Plan
DRDO	Defence Research and Development Organisation

DRM	Disaster Risk Management
DTIE	Division of Technology, Industry & Economics
EIA	Environment Impact Assessment
EIP	Emergency Information Panel
EMP	Emergency Management Plan
ENVIS	Environmental Information Systems
EOC	Emergency Operations Centre
ERC	Emergency Response Centre
ERF	Environment Relief Fund
ERRIS	Environment Risk Reporting and Information Systems
ESIC	Employee State Insurance Corporation
FE	Functional Exercise
FICCI	Federation of Indian Chambers of Commerce and Industry
FSD	Full-Scale Drill
GIDC	Gujarat Industrial Development Corporation
GIS	Geographic Information System
GPS	Global Positioning System
HAZAN	Hazard Analysis
HAZCHEM	Hazardous Chemical
HAZMAT	Hazardous Material
HAZOP	Hazard and Operability Study
HPC	High Powered Committee
HPCL	Hindustan Petroleum Corporation Ltd
HSE	Health, Safety and Environment
IATA	International Air Transport Association
ICA	Indian Chemical Association
ICAO	International Civil Aviation Organization
ICC	Indian Chamber of Commerce
ICMA	Indian Chemical Manufacturers' Association (now called Indian Chemical Council)
ICMR	Indian Council of Medical Research
ICSC	International Chemical Safety Cards
IDLH	Immediately Dangerous to Life and Health
IDRN	India Disaster Resource Network
IIT	Indian Institute of Chemical Technology
IIM	Indian Institute of Management
IIT	Indian Institute of Technology
ILO	International Labour Organization
IMO	International Maritime Organization
IPCL	Indian Petrochemicals Corporation Limited
IPCS	International Programme on Chemical Safety
IRPTC	International Register for Potentially Toxic Chemicals
IS	Indian Standards
ISDR	International Strategy for Disaster Reduction
ITRC	Industrial Toxicology Research Centre

LAMP	Local Accident Mitigation and Prevention
LCG	Local Crisis Group
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
MAH Unit	Major Accident Hazard Unit
MAHC	Major Accident Hazard Control
MAHCAD	Major Accident Hazard Control Advisory Division
MARG	Mutual Aid Response Group
MARPOL	Maritime Pollution
MFR	Medical First Responders
MHA	Ministry of Home Affairs
MIS	Management Information System
MoA	Ministry of Agriculture
MoC & F	Ministry of Chemicals and Fertilizers
MoC & I	Ministry of Commerce and Industry
MoD	Ministry of Defence
MoEF	Ministry of Environment & Forests
MoF	Ministry of Finance
MoH & FW	Ministry of Health and Family Welfare
MoHI & PE	Ministry of Heavy Industries and Public Enterprises
MoLE	Ministry of Labour and Employment
MoP & NG	Ministry of Petroleum and Natural Gas
MoSRT & H	Ministry of Shipping, Road Transport and Highways
MSDS	Material Safety Data Sheet
MSIHC Rules	The Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989
NAC	National APELL Centre
NCDC	National Civil Defence College
NCL	National Chemical Laboratory
NCT	National Capital Territory
NDMA	National Disaster Management Authority
NDRF	National Disaster Response Force
NEC	National Executive Committee
NEERI	National Environmental Engineering Research Institute
NFSC	National Fire Service College
NGOs	Non-Governmental Organizations
NHAI	National Highway Authority of India
NICNET	National Informatics Centre Network
NIDM	National Institute of Disaster Management
NIOH	National Institute of Occupational Health
NOCs	No Objection Certificates
NSC	National Safety Council
OISD	Oil Industry Safety Directorate
PCC	Pollution Control Committee
PESO	Petroleum and Explosives Safety Organisation

PM	Preventive Maintenance
PMS	Pipeline Management System
PPE	Personal Protective Equipment
PPP	Public Private Partnership
PVOs	Private Voluntary Organisations
PWD	Public Works Department
QCI	Quality Council of India
QRMT	Quick Reaction Medical Team
QRT	Quick Reaction Team
QSP	Quick Start Programme
RC	Responsible Care
R&D	Research and Development
RLI	Regional Labour Institute
RTO	Regional Transport Officer
SAICM	Strategic Approach to International Chemical Management
SCG	State Crisis Group
SDMA	State Disaster Management Authority
SDRF	State Disaster Response Force
SEC	State Executive Committee
SMEs	Small and Medium Enterprises
SOLAS	Safety of Life at Sea
SOPs	Standing Operating Procedures
SPCB	State Pollution Control Board
STEL	Short Term Exposure Limit
TOR	Terms of Reference
TQ	Threshold Quantity
TREMCARD	Transport Emergency Card
TTE	Table Top Exercise
UN	United Nations
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
USAID	United States Agency for International Development
UTs	Union Territories
WAD	Waste Air Destruction
WEC	World Environment Centre
WHO	World Health Organization

# Executive Summary

## Background

The growth of chemical industries has led to an increase in the risk of occurrence of incidents associated with hazardous chemicals (HAZCHEM). A chemical industry that incorporates the best principles of safety, can largely prevent such incidents. Common causes for chemical accidents are deficiencies in safety management systems and human errors, or they may occur as a consequence of natural calamities or sabotage activities. Chemical accidents result in fire, explosion and/or toxic release. The nature of chemical agents and their concentration during exposure ultimately decides the toxicity and damaging effects on living organisms in the form of symptoms and signs like irreversible pain, suffering, and death. Meteorological conditions such as wind speed, wind direction, height of inversion layer, stability class, etc., also play an important role by affecting the dispersion pattern of toxic gas clouds. The Bhopal Gas tragedy of 1984—the worst chemical disaster in history, where over 2000 people died due to the accidental release of the toxic gas Methyl isocyanate, is still fresh in our memories. Such accidents are significant in terms of injuries, pain, suffering, loss of lives, damage to property and environment. A small accident occurring at the local level may be a prior warning signal for an impending disaster. Chemical disasters, though low in frequency, have the potential to cause significant immediate or long-term damage.

A critical analysis of the lessons learnt from major chemical accidents exhibited various deficiencies. Laxity towards safety measures, non-conformation to techno-legal regimes and a low

level of public consultation are a few such shortcomings. The scenario called for concerted and sustained efforts for effective risk reduction strategies and capacity development under a national authority to decrease the occurrence of such incidents and lessen their impact. Although tremendous efforts have been made to minimise such accidents and to improve emergency preparedness at all levels, substantial efforts are still required to predict the occurrence of disasters; assess the damage potential, issue warnings, and to take other precautionary measures to mitigate their effects. Another pressing need is to properly assess the potential of chemical emergencies and develop tools for emergency planning and response to minimise the damage in case of any eventuality.

## Risks Posed by HAZCHEM

Increased industrial activities and the risks associated with HAZCHEM and enhanced vulnerability lead to industrial and chemical accidents. Chemical accidents may originate in the manufacturing or formulation facility, or during the process operations at any stage of the product cycle, material handling, transportation and storage of HAZCHEM. Vulnerability is sometimes compounded due to the location of Major Accident Hazard (MAH) industries closer to densely populated areas. Chemical and industrial accidents generally occur due to technical failures that can be anticipated. The risk associated with them can thus be predicted and reduced effectively by identification of risk areas, risk assessment and designing pre-operative measures. The occurrence of chemical accidents and probability thereof, manifesting in a disaster, remain a cause of concern.

## The Genesis of National Disaster Management Guidelines—Chemical Disasters

There has been a paradigm shift in the government's focus from its rescue, relief, and restoration-centric approach to a planning, prevention/mitigation and preparedness approach. It has been realised that effective Chemical Disaster Management (CDM) is possible by the adoption of preventive and mitigation strategies as most chemical disasters are preventable in comparison to natural disasters that are difficult to predict and prevent.

With this renewed emphasis, the National Disaster Management Authority (NDMA) took up the task of strengthening CDM in recognition of the gravity of the risk posed by HAZCHEM. The main stakeholders in the management of chemical disasters are Ministry of Environment and Forests (MoEF, the nodal ministry), Ministry of Home Affairs (MHA), Ministry of Health and Family Welfare (MoH & FW), Ministry of Labour and Employment (MoLE), Ministry of Agriculture (MoA), Ministry of Shipping, Road Transport and Highways (MoSRT & H), Ministry of Defence (MoD), Ministry of Chemicals and Fertilizers (MoC & F), Ministry of Petroleum and Natural Gas (MoP & NG), Department of Atomic Energy (DAE), state governments and Union Territories (UTs) and the chemical industries. As a first step, a meeting of the stakeholders including representatives of Research and Development (R&D) organisations, professionals from scientific and technical institutes, academics, technocrats from leading national institutions and apex industrial associations/consortiums of corporate sectors was convened on 17 February 2006, with a view to pool the knowledge in this multidisciplinary field. A core group of experts was constituted from amongst these participants. Several meetings of the core group were subsequently held and a draft document was evolved for bridging the gaps that

were identified. These deliberations acknowledged several initiatives taken up by the government and other stakeholders. The draft document was reviewed by a group of experts on 18 May 2006, for evolving a consensus among various stakeholders including the nodal ministry. Detailed inputs from MAH units and regulators were obtained during a meeting held during 7–8 September 2006, at Bhopal. The recommendations and action points that emerged out of these deliberations have resulted in the development of the National Guidelines for the Management of Chemical Disasters (hereinafter referred to as the Guidelines).

### Structure of Guidelines

The present work is an important step in the direction of the development of plans for the management of chemical disasters. The Guidelines have been prepared to provide directions to ministries, departments and state authorities for the preparation of their detailed Disaster Management (DM) plans. These Guidelines call for a proactive, participatory, well-structured, fail-safe, multi-disciplinary and multi-sectoral approach at various levels.

The Guidelines consist of seven chapters; the details of which are as follows:

**Chapter 1** provides an introductory brief of risks, vulnerabilities and consequences of chemical accidents, provides an account of causal factors of chemical disasters so as to restrict and contain them, and enlists major chemical accidents—their initiators, and impact on human lives and the environment. The aims and objectives of the Guidelines focus on all aspects of the DM cycle to assist the ministries and departments of the Government of India, state governments and other agencies to prepare DM plans.



Chapter 2 reviews the existing regulatory framework and practices. It furnishes an overview of the institutional framework with details of the monitoring mechanisms and compliance by central and state governments. It also provides an overview of the functioning of research institutes, autonomous bodies, professional institutes, Non-Governmental Organizations (NGOs) and MAH units, their compliance to statutory safeguards, and the efforts of the MoEF in setting up crisis management groups in industrial areas to ensure chemical safety. Various initiatives highlighting substantial work done in the area of emergency response and management systems in installations, storages and transport sectors are also illustrated. A bird's eye view of international best practises and developments within India is also given.

Chapter 3 gives an overview of the salient gaps identified in various aspects of the management of chemical accidents, transport accidents and medical emergencies.

The management of chemical disasters will aim at prevention and mitigation with the introduction of safer process technologies, improved performance of safety devices and reduction of human error. Immediate effects of a disaster can be mitigated through installing engineering systems like scrubbers, flares and venting systems. The various work areas and activities that can be undertaken within the framework of the Guidelines are described in chapters 4 to 6.

Chapter 4 includes comprehensive guidelines for a regulatory framework, code of practises, procedures and standards, testing and information, technical and technological information, preparedness including education, training, creation of appropriate infrastructure, capacity development, awareness generation, institutional framework, networking and communication, R&D, and response, relief and rehabilitation for CDM. The roles and responsibilities of various stakeholders at centre,

state and district levels are also described. The salient highlights include:

- Strengthening of the present regulatory framework to meet the defined national policies and aspirations; augmentation of technical support functions.
- A supportive and technology neutral regulation framework.
- Legislation on land-use policy (buffer zone around chemical industry).
- Standardisation of national codes and practises.
- Emphasis on regular safety audit, identification and selection of professional organisations and their accreditation.
- Commissioning and decommissioning of chemical industries.
- Preparation of On-Site and Off-Site Plans.
- Regular testing of emergency plans.
- Need of medical first responders and medical inventory to deal with specialised chemical accidents at the installation site.
- Crisis management plans of hospitals to manage the victims of chemical emergencies.
- Concept of mobile hospital and mobile teams.
- Issues related to public health response, medical rehabilitation and harmful effects on the environment.
- Post-disaster documentation and analysis.

Chapter 5 comprises comprehensive guidelines for installations and storages (including isolated storages of HAZCHEM) that contain good engineering practises for safety, accident reporting, investigation and analysis checklists and safety promotional activities as important tools for effective CDM.

Chapter 6 deals with guidelines related to chemical accidents during transportation of HAZCHEM. The areas covered include:

- Preparation of a highway DM plan.
- Modification of rules pertaining to transport emergencies.
- Specific roles and responsibilities of MAH units, transporters, drivers, authorities and aspects related to emergency communication systems and training of various stakeholders.
- The need for the development of an efficient pipeline management system.

Chapter 7 sets out the approach to implementation of the Guidelines and also highlights the key points for ensuring the implementation of the plans prepared by the central ministries, departments and states. The strategy to be adopted for the important activities to be included in the Action Plan are given below:

- Putting in place a national mechanism for covering all major disasters and reporting mechanisms at the district level.
- Dovetailing regulations governing HAZCHEM safety with the Disaster Management Act, 2005 (DM Act, 2005).
- Establishing a risk management framework criterion for chemical assessment.
- Strengthening of the institutional framework for CDM and its integration with the activities of the NDMA, State Disaster Management Authorities (SDMAs), District Disaster Management Authorities (DDMAs) and other stakeholders.
- Renewed focus on model safety codes/standards for prevention of accidents at industry level by matching processes and technologies for safety installations

comparable with the best available in the world.

- Identifying infrastructure needs for preparing mitigation plans.
- Implementing a financial strategy for the allocation of funds for different national and state/district level mitigation projects.
- Establishing an efficient information network for dissemination of alerts, warning and response messages.
- Identifying/recognising training institutions.
- Strengthening the National Disaster Response Force (NDRF), fire services, medical first responders and other emergency responders.
- Revamping of home guards and civil defence for CDM.
- Developing a national medical emergency plan binding all government, private and public hospitals with unified, well-established triage and other emergency procedures.
- Developing highway DM plans for all the identified stretches, nodal points, and Standard Operating Procedures (SOPs) integrated in the driver's kit.
- Establishing a register of relevant national and international institutes and information exchange programmes.
- Establishing post-disaster documentation procedures, epidemiological surveys and minimum criteria for relief and rehabilitation.
- Sensitising the community on chemical disasters.
- Sensitising all stakeholders, especially the management of MAH units for a more proactive role in prevention of chemical

accidents by instituting regular internal audits of plant safety measures, activation of On-Site emergency plans and establishment of mutual aid arrangements.

The MoEF, as the nodal ministry, will prepare a detailed Action Plan in accordance with these Guidelines with specific tasks, activities, targets and timeframes that will also form a part of the national DM plan.

In view of the expected time lapse between the formulation and approval of the DM plan, an interim arrangement has also been suggested, highlighting the following features:

- Baseline information on hazard identification and risk assessment in chemical installations and pipelines.
- Incorporation of Geographic Information System (GIS) technology.
- Identification and incorporation of legislative and institutional framework for disaster preparedness with specific and measurable indicators.

- Risk mapping.
- Development and improvement of relevant databases including isolated storages and warehouses.
- Preparation of a National Response Plan.
- Pooling of resources available on transport routes of chemicals.
- Crisis Alert System (CAS) and continued training programmes.

The activities mentioned above will be initiated with immediate effect and will be further intensified in due course of time. An institutional framework for the management of chemical disasters will be set up at the national level, which will integrate and strengthen the existing institutional mechanisms on CDM. For efficient and coordinated management, the state governments will issue guidelines for the preparation of district and local level plans in accordance with these Guidelines. The objective is to evolve an attainable and practical approach for the management of chemical disasters in India with the participation of all stakeholders including local communities for On-Site and Off-Site emergencies.

# 5 Guidelines for Industrial (Chemical) Installations and Storages

## 5.1 Industrial (Chemical) Installations

A prime area of concern is the strengthening of the industrial systems for the prevention and management of chemical accidents. Such provisions shall be established to continuously re-engineer (improve and upgrade) the system. As a part of government policy, it is envisaged that the present regulatory inspection and monitoring framework will evolve measures to encourage self-regulation, public consultation and PPP. These activities would develop credibility at all levels.

The important guidelines are listed below:

### 5.1.1 Good Engineering for Safety

This is applicable for the prevention and minimisation of all disasters—both man-made and natural. In the context of industrial disasters, good engineering is the first step in achieving safety. The setting up of new industries by an occupier shall be done in consultation with the state inspectorate, considering all parameters including geographical, seismological, demographic and environmental factors. The process engineering and control including detailed evaluation at the design stage are essential inputs for safety.

Engineering methods to control hazards include:

- i) Change of processes: to shift to less hazardous processes.
- ii) Change of material: to shift to less hazardous material.
- iii) Change of equipment: to replace machinery before the expiry of residual life.

- iv) Detailed engineering of each equipment under requirement, capacity, specifications and regular maintenance of history sheets for fault analysis.
- v) Regular testing of critical equipment/storage vessels through non-destructive testing (radiography, thickness survey, hydraulic testing etc.).
- vi) Isolation and enclosures: Storages will be isolated and enclosed to minimise the impact of weather conditions (heat radiation, thermal and cryogenic stresses) and will be directly connected to containment including Waste Air Destruction (WAD) systems.
- vii) Hazard and Operability Study (HAZOP) and Hazard Analysis (HAZAN) studies for early identification of hazards; regular structural audit.
- viii) Management Information System (MIS) is a significant area for monitoring at the management level. It is divided into three categories:
  - a. Checking normal day-to-day operations; compliance of statutory requirements; monitoring reports, and reporting of exceptions to the top management.
  - b. This deals with emergency control systems (chemicals and fire contingency plans), training and retraining of employees, transporters, drivers and cleaners, stockists, distributors, retailers, community

leaders, consumers, first responders—the police, fire services, home guards, civil defence, NDRF, SDRF and medics/paramedics. This also covers HAZOP/HAZAN studies: regular appraisal and updating.

- c. Provision, maintenance and regular upgrading of safety including PPE; maintenance of daily check charts of PPE, work permit system (including stoppage, start-up chemical manufacturing/storage equipment hardware).

### 5.1.2 Accident Reporting, Investigation and Analysis

- i) The basic concept is the 'Principles of Examination'. The examination will aim at identification of operational difficulties, fault in design, and inspection procedures after an accident.
- ii) There is a need to synthesise a prediction model that can spot problems/difficulties prospectively as well as retrospectively.
- iii) To identify principal causes of accidents or near misses.
- iv) To identify deficiencies in the process/operation/hardware/instrumentation.
- v) To find out and critically evaluate unsafe practices requiring correction.
- vi) To find out and finalise needs for engineering revision.

### 5.1.3 Safety Promotional Activities

Accident prevention needs proactive and reactive participation of all activities like:

- i) Installation of sensors and monitors, their regular maintenance and calibration at the plant perimeter to trigger alarms to the plant personnel as well as public.

- ii) Safety competitions, exhibitions, film/video shows, seminars, debates.
- iii) Celebration of Safety Day/Week
- iv) Safety hoardings at strategic points.
- v) Frequent visit to other model industries.
- vi) Institution of chemical safety award system.

### 5.1.4 Other Areas of Attention

Efficacy of safety systems shall be checked daily and listed with special emphasis on the following:

- i. Provisions of two-to-three tier safety.
- ii. Early-warning system.
- iii. Two-to-three tier power back-up system for safety of equipment/provision.
- iv. Start-up and shutdown procedures.
- v. Daily exceptional reporting for top management based on status of full preparedness/compliance according to latest internal safety audit; internal audit highlights; high accident potential jobs, actions or conditions to be dealt on priority basis. The audit shall indicate shortfalls according to accident potential.
- vi. Best maintenance and preventive maintenance practices.
  - a. Regular improvisation of safety systems based on global success stories.
  - b. Toxicology (complete MSDS as ready reckoner for warnings/instructions).
  - c. Mock drills of warning alarm systems.
  - d. Instrumentation.
  - e. Written down preventive maintenance and breakdown maintenance practices and check listing of each on a daily basis.

- f. Regular (daily basis) trials of stand by systems.
- g. Key points to be kept in mind while setting SOPs for safety include:
  1. Use of danger and information tags.
  2. No substitutions of tags from one another.
  3. Information or instruction tag shall be used to convey special instructions for the equipment.
  4. The instruction tag shall not be used where a danger tag is required to identify a particular equipment as that equipment, if operated can cause an accident.
  5. The operator/shift officer shall assume responsibility for the use and removal of danger tags.
  6. Locking out of chemical plant equipment.
  7. Colour codes will be devised for locking.
  8. All locks will be placed on a breaker with a process until work is completed.
  9. The principle of isolation of equipment under maintenance repair without exception.

Based upon the actual inventory of HAZCHEM, adequacy of the preparedness and response is required to be established in the plant. It is essential to develop the DM capabilities both within the plant perimeter and in the vicinity on the basis of the dynamic quantitative risk assessment analysis. Meteorological data like wind direction shall be either obtained from concerned functionaries, or generated in-house for the proper management of chemical emergencies.

The best engineering practises practised the world over like those followed by the American Society of Mechanical Engineering (ASME) and others shall be modified and adapted in the Indian context under the authority of the BIS. Some of the major features of chemical safety procedures practised are shown in Annexure H for ready reference.

## 5.2 Storages

The storages of HAZMAT in an installation, or isolated storages are major sources of chemical disasters. The existing legal regulatory requirement provided through The Petroleum Act, 1934 and The Explosives Act, 1884, the Static and Mobile Pressure Vessels (Unfired) Rules 1951, the Gas Cylinder Rules, 2004, the MSIHC Rules, 1989, and the Factories Act, 1948, and various rules framed by the states give comprehensive guidelines to all installations and storages for the purpose of maintenance and operation of storage, tank farms and vessels. However, there are some glaring gaps with regard to safety, containment and neutralisation of toxic spill and release at the installation and storage site. Necessary provisions need to be enacted for fail-safe safety measures.

Important guidelines for installations and isolated storages are:

- i) Factories/Storages having Off-Site consequences need to be treated at par with MAH factories in view of the probability of occurrence of accident due to the risks associated with bulk storage of HAZMAT.
- ii) Standards in respect of design and construction with provisions for maintenance shall be laid down. The design shall be so formulated such that there would not be any effect of micrometeorological factors like temperature, pressure, humidity, air flow and protection from static charges.

- iii) The storages of large inventories of HAZMAT should go with corresponding safety, containment measures, good engineering and environmental practises. Better safety and containment measures for safety release installations should be used, like valves, rupture discs and monitors etc., to protect the storages.
- iv) At the installation level, storages require a risk assessment strategy addressing all the risk areas including the following components:
  - a. Safety and security provisions.
  - b. Pipelines transferring the HAZMAT to other plants/locations, or outside the premises.
  - c. Instrumentation especially—Distributed Control Systems (DCSs).
  - v) Comprehensive guidelines are available for safe storages, testing and monitoring of storage vessels and areas, and for checking the residual life of vessels, pipelines and other equipment used in storage of HAZCHEMs. In addition, a testing system, its frequency and a certification system also exist. However, there is an urgent need of critical evaluation and review pertaining to the following areas:
    - a. Defining and ensuring the limits of quantity of HAZMAT as per the capacity of storage facility.
    - b. Simultaneous storage of non-compatible hazardous and toxic material.
    - c. Restriction of keeping storage vessels open to the sky due to the impact of weather conditions on the content of storage vessels.
- d. The concept of residual life with regard to depletion of various tolerances etc., needs to be re-evaluated from time-to-time, as many other factors and stresses responsible for the breakdown of vessels appear with ageing.
- e. Proper and adequate provisions of safety to cater to thermal and cryogenic stresses will be taken care of during the designing mode.
- f. A full-scale containment and neutralisation system shall be established for HAZCHEM that are not manufactured but stored in bulk quantities for in-house use. Such HAZCHEM include liquids like ammonia in ice manufacturing, LPG, furnace oils, compressed gas including chlorine in the pulp and paper industry, oxygen in Common Effluent Treatment Plants (CETPs), hydrogen in vegetable oil manufacturing and other inflammable fuels used in industries.
- g. Special provisions including the usage of lightning arrestors for gases (such as hydrogen that can make an explosive mixture with air, running the possible risk of exploding) as lightning acts as a catalyst for such a reaction.
- h. Ensure availability of a stand-by power supply system which shall operate in the case of failure/disruption of the main power supply and simultaneously requiring containment/neutralisation of stored liquid/gaseous chemicals to a designated place.

## Annexures

## Annexure-A

## Some Major Chemical Accidents in India (2002–06)

S. No.	Name of Unit	Date of Accident	Source	Death/Injury/Missing: Losses
1.	GACL, Vadodara, Gujarat	05.09.2002	Chlorine gas —explosion	4/20/nil
2.	IPCL, Gandhar, Gujarat	20.12.2002	Chlorine gas —release	Nil/16 workers & 300 villagers in Jageshwar affected/nil
3.	IOC Refineries, Digboi, Assam	07.03.2003	Fire in motor spirit tank	Nil/Product loss Rs11.55crore
4.	Ranbaxy Laboratories Ltd., Mohali, Punjab	11.06.2003	Toluene	2/19/nil
5.	BPCL Bottling Plant, Dhar, Madhya Pradesh	05.10.2003	LPG leak from tank lorry	Nil
6.	Orient Paper Mills, Amla, Shahdol, Madhya Pradesh	13.10.2003	Liquid chlorine	Nil/88/nil: 5 m pipe affected
7.	IDL Gulf Oil, Kukkatpally, Hyderabad, Andhra Pradesh	25.11.2003	Explosion	8/5/1
8.	Anil Enterprises, Zakhira, Rohtak, Haryana	28.04.2004	Fire in LPG fired oven	6/2/nil
9.	HIL Udyogmandal, Kerala	06.07.2004	Toluene fire	Nil
10.	Shyamal Industries, GIDC, Vatva, Ahmedabad, Gujarat	12.04.2004	Benzene fire	Nil
11.	Chemical Factory, Dombivili, Maharashtra	31.05.2004	Hexane release —fire	1/8/Nil
12.	Chemplast, Mettur, Tamil Nadu	18.07.2004	Chlorine leak	Nil/27/nil



13.	Gujarat Refinery, Vadodara, Gujarat	29.10.2004	Explosion in slurry settler	2/13/nil
14.	Ranbaxy Laboratories Ltd., Mohali, Punjab	30.10.2004	Fire in dryer room	1/2/nil
15.	Matrix Laboratory Ltd. Unit 1, Kazipally, Medak District, Andhra Pradesh	05.03.2005	Sodium hydride	8/nil/nil
16.	Gujarat Refinery, Gujarat	15.08.2005	Fire	Nil
17.	Coromandal Fertilizer Ltd., Ennore, Tamil Nadu	22.07.2005	Ammonia	Nil/5/nil
18.	Gulf Oil Corporation Ltd., Sanathnagam, Hyderabad, Andhra Pradesh	04.10.2005	Explosion/fire	2/2/nil
19.	Orchid Chemicals and Pharmaceuticals Ltd., Alathur, Kancheepuram District, Tamil Nadu	03.11.2005	Explosion with fire	2/4/nil
20.	Aurobindo Pharma Ltd., Unit-V, IDA Fashamyaram Medak Dist., Andhra Pradesh	28.11.2005	Explosion while drying cloxaciline sodium	1/4/nil
21.	Indian Oil Corporation Ltd., Mathura Refinery, Mathura, Uttar Pradesh	29.12.2005	Fire	1/nil/nil
22.	Kanoria Chemicals and Industries Ltd. Feriukoot, Sonbhadra, Uttar Pradesh	29.03.2006	Chlorine release	6/23/nil
23.	Anjana Explosives Ltd., Paddakaparthi, Nalgonda District, Andhra Pradesh	18.07.2006	Spillage of hazardous	5/nil/nil
24.	Ravi Organics Ltd., Muzaffarnagar, Uttar Pradesh	19.09.2006	Gas release	1/nil/nil
25.	Reliance Industries Refinery, Jamnagar, Gujarat	25.10.2006	Leaked hot vacuum gas oil catches fire in air	2/nil/nil

Government of India  
Ministry of Labour and Employment

NATIONAL POLICY ON SAFETY, HEALTH AND ENVIRONMENT AT WORK  
PLACE

1. PREAMBLE

- 1.1 The Constitution of India provide detailed provisions for the rights of the citizens and also lays down the Directive Principles of State Policy which set an aim to which the activities of the state are to be guided.
- 1.2 These Directive Principles provide
- (a) for securing the health and strength of employees, men and women;
  - b) that the tender age of children are not abused;
  - c) that citizens are not forced by economic necessity to enter avocations unsuited to their age or strength;
  - d) just and humane conditions of work and maternity relief are provided; and
  - e) that the Government shall take steps, by suitable legislation or in any other way, to secure the participation of employee in the management of undertakings, establishments or other organisations engaged in any industry.
- 1.3 On the basis of these Directive Principles as well as international instruments, Government is committed to regulate all economic activities for management of safety and health risks at workplaces and to provide measures so as to ensure safe and healthy working conditions for every working man and woman in the nation. Government recognizes that safety and health of workers has a positive impact on productivity and economic and social development. Prevention is an integral part of economic activities.

as high safety and health standard at work is as important as good business performance for new as well as existing industries.

- 1.4 The formulation of policy, priorities and strategies in occupational safety, health and environment at work places, is undertaken by national authorities in consultation with social partners for fulfilling such objectives. A critical role is played by the Government and the social partners, professional safety and health organizations in ensuring prevention and in also providing treatment, support and rehabilitation services.
- 1.5 Government of India firmly believes that without safe, clean environment as well as healthy working conditions, social justice and economic growth cannot be achieved and that safe and healthy working environment is recognized as a fundamental human right. Education, training, consultation and exchange of information and good practices are essential for prevention and promotion of such measures.
- 1.6 The changing job patterns and working relationships, the rise in self employment, greater sub-contracting, outsourcing of work, homework and the increasing number of employees working away from their establishment, pose problems to management of occupational safety and health risks at workplaces. New safety hazards and health risks will be appearing along with the transfer and adoption of new technologies. In addition, many of the well known conventional hazards will continue to be present at the workplace till the risks arising from exposure to these hazards are brought under adequate control. While advancements in technology have minimized or eliminated some hazards at workplace, new risks can emerge in their place which needs to be addressed.
- 1.7 Particular attention needs to be paid to the hazardous operations and of employees in risk prone conditions such as migrant employees and various vulnerable groups of employees arising out of greater mobility in the

workforce with more people working for a number of employers, either consecutively or simultaneously.

- 1.8 The increasing use of chemicals, exposure to physical, chemical and biological agents with hazard potential unknown to people; the indiscriminate use of agro-chemicals including pesticides, agricultural machineries and equipment; industries with major accident risks; effects of computer controlled technologies and alarming influence of stress at work in many modern jobs pose serious safety, health and environmental risks.
- 1.9 The fundamental purpose of this National Policy on Safety, Health and Environment at workplace, is not only to eliminate the incidence of work related injuries, diseases, fatalities, disaster and loss of national assets and ensuring achievement of a high level of occupational safety, health and environment performance through proactive approaches but also to enhance the well-being of the employee and society, at large. The necessary changes in this area will be based on a co-ordinated national effort focused on clear national goals and objectives.
- 1.10 Every Ministry or Department may work out their detailed policy relevant to their working environment as per the guidelines on the National Policy.

## **2. GOALS:**

The Government firmly believes that building and maintaining national preventive safety and health culture is the need of the hour. With a view to develop such a culture and to improve the safety, health and environment at work place, it is essential to meet the following requirements:-

- 2.1 providing a statutory framework on Occupational Safety and Health in respect of all sectors of industrial activities including the construction sector, designing suitable control systems of compliance, enforcement and incentives for better compliance.
- 2.2 providing administrative and technical support services.

- 2.3. providing a system of incentives to employers and employees to achieve higher health and safety standards .
- 2.4. providing for a system of non-financial incentives for improvement in safety and health.
- 2.5. establishing and developing the research and development capability in emerging areas of risk and providing for effective control measures.
- 2.6. Focusing on prevention strategies and monitoring performance through improved data collection system on work related injuries and diseases.
- 2.7. Developing and providing required technical manpower and knowledge in the areas of safety, health and environment at workplaces in different sectors.
- 2.8. Promoting inclusion of safety, health and environment, improvement at workplaces as an important component in other relevant national policy documents.
- 2.9. Including safety and occupational health as an integral part of every operation.

### 3. OBJECTIVES:

3.1 The policy seeks to bring the national objectives into focus as a step towards improvement in safety, health and environment at workplace. The objectives are to achieve:-

- a) Continuous reduction in the incidence of work related injuries, fatalities, diseases, disasters and loss of national assets.
- b) Improved coverage of work related injuries, fatalities and diseases and provide for a more comprehensive data base for facilitating better performance and monitoring.
- c) Continuous enhancement of community awareness regarding safety, health and environment at workplace related areas.
- d) Continually increasing community expectation of workplace health and safety standards.

- e) Improving safety, health and environment at workplace by creation of “green jobs” contributing to sustainable enterprise development.

#### 4. ACTION PROGRAMME

For the purpose of achieving the goals and objectives mentioned in paragraphs 2 and 3 above, the following action programme is drawn up and where necessary time bound action programme would be initiated, namely:-

##### 4.1. Enforcement

- 4.1.1 by providing an effective enforcement machinery as well as suitable provisions for compensation and rehabilitation of affected persons;
- 4.1.2 by effectively enforcing all applicable laws and regulations concerning safety, health and environment at workplaces in all economic activities through an adequate and effective labour inspection system;
- 4.1.3 By establishing suitable schemes for subsidy and provision of loans to enable effective implementation of the policy;
- 4.1.4 by ensuring that employers, employees and others have separate but complementary responsibilities and rights with respect to achieving safe and healthy working conditions;
- 4.1.5 by amending expeditiously existing laws relating to safety, health and environment and bring them in line with the relevant international instruments;
- 4.1.6 by monitoring the adoption of national standards through regulatory authorities;
- 4.1.7 by facilitating the sharing of best practices and experiences between national and international regulatory authorities;
- 4.1.8 by developing new and innovative enforcement methods including financial incentives that encourage and ensure improved workplace performance;
- 4.1.9 by making an enabling legislation on Safety, Health and Environment at Workplaces;

4.1.10 by setting up safety and health committees wherever deemed appropriate;

## **4.2 National Standards**

4.2.1 by developing appropriate standards, codes of practices and manuals on safety, health and environment for uniformity at the national level in all economic activities consistent with international standards and implementation by the stake holders in true spirit,

4.2.2 by ensuring stakeholders awareness of and accessibility to applicable policy, documents, codes, regulations and standards;

## **4.3 Compliance**

4.3.1 by encouraging the appropriate Government to assume the fullest responsibility for the administration and enforcement of occupational safety, health and environment at workplace, provide assistance in identifying their needs and responsibilities in the area of safety, health and environment at workplace, to develop plans and programmes in accordance with the provisions of the applicable Acts and to conduct experimental and demonstration projects in connection therewith;

4.3.2 by calling upon the co-operation of social partners in the supervision of application of legislations and regulations relating to safety, health and environment at work place;

4.3.3 by continuous improvement of Occupational Safety and Health by systems approach to the management of Occupational Safety and Health including developing guidance on Occupational Safety and Health management systems, strengthening voluntary actions, including mechanisms for self-regulatory concept and establishing auditing mechanisms which can test and authenticate occupational safety and health management systems;

- 4.3.4 by providing specific measures to prevent catastrophes, and to co-ordinate and specify the actions to be taken at different levels, particularly in the industrial zones with high potential risks;
- 4.3.5 by recognising the best safety and health practices and providing facilitation for their adoption;
- 4.3.6 by providing adequate penal provisions as deterrent for violation of laws for the time being in force;
- 4.3.7 by encouraging all concerned to adopt and commit to "Responsible Care" and / or "Corporate Social Responsibility" to improve safety, health and environment at workplace performance;
- 4.3.8 by ensuring a suitable accreditation machinery to recognise institutions, professionals and services relating to safety, health and environment at workplace for uniformity and greater coverage as also authenticating safe management system;
- 4.3.9 by encouraging employers to ensure occupational safety and health management systems, establish them in efficient manner to improve workplace safety and health;
- 4.3.10 by specifically focusing on such occupational diseases like pneumoconiosis and silicosis; developing a framework for its prevention and control as well as develop technical standards and guidelines for the same;
- 4.3.11 by promoting safe and clean technology and progressively replacing materials hazardous to human health and environment;

#### **4.4 Awareness**

- 4.4.1 by increasing awareness on safety, health and environment at workplace through appropriate means;
- 4.4.2 by providing forums for consultations with employers' representatives, employees representatives and community on matters of national concern.



- relating to safety, health and environment at work place with the overall objective of creating awareness and enhancing national productivity;
- 4.4.3 by encouraging joint labour-management efforts to preserve, protect and promote national assets and to eliminate injuries and diseases arising out of employment;
- 4.4.4 by raising community awareness through structured, audience specific approach;
- 4.4.5 by continuously evaluating the impact of such awareness and information initiatives;
- 4.4.6 by maximizing gains from the substantial investment in awareness campaigns by sharing experience and learning;
- 4.4.7 by suitably incorporating teaching inputs on safety, health and environment at work place in schools, technical, medical, professional and vocational courses and distance education programme;
- 4.4.8 by securing good liaison arrangements with the International organisations;
- 4.4.9 by providing medical criteria wherever necessary which will assure insofar as practicable that no employee will suffer diminished health, functional capacity, or life expectancy as a result of his work place activities and that in the event of such occupational diseases having been contracted, is suitably compensated;
- 4.4.10 by providing practical guidance and encouraging employers and employees in their efforts to reduce the incidence of occupational safety and health risks at their places of employment and to impress upon employers and employees to institute new programmes and to improve existing programmes for providing safe and healthful working conditions, requiring employers to ensure that workers and their representatives are consulted, trained, informed and involved in all measures related to their safety and health at work;

#### **4.5 Research and Development**

- 4.5.1 by providing for research in the field of safety, health and environment at workplace, including the social and psychological factors involved, and by developing innovative methods, techniques including computer aided Risk Assessment Tools, and approaches for dealing with safety, health and environment at workplace problems which will help in establishing standards;
- 4.5.2 by exploring ways to discover latent diseases, establishing causal connections between diseases and work environmental conditions, updating list of occupational diseases and conducting other research relating to safety, health and environmental problems at workplace;
- 4.5.3 by establishing research priorities as per national requirements; exploring partnerships and improving communications with various national and international research bodies;
- 4.5.4 by ensuring a coordinated research approach and an optimal allocation of resources in Occupational Safety and Health sector for such purposes;

#### **4.6 Occupational safety and health skills development**

- 4.6.1 by building upon advances already made through employer and employee initiative for providing safe and healthy working conditions;
- 4.6.2 by providing for training programmes to increase the number and competence of personnel engaged in the field of occupational safety, health and environment at workplace;
- 4.6.3 by providing information and advice, in an appropriate manner, to employers and employees organisations, with a view to eliminating hazards or reducing them as far as practicable;
- 4.6.4 by establishing occupational health services aimed at protection and promotion of health of employee and improvement of working conditions and by providing employee access to these services in different sectors of economic activities;

4.6.5 by integrating health and safety into vocational, professional and labour related training programmes as also management training including small business practices;

4.6.6 by adopting Occupational Safety and Health training curricula in workplace and industry programmes;

#### **4.7 Data collection**

4.7.1 by compiling statistics relating to safety, health and environment at work places, prioritising key issues for action, conducting national studies or surveys or projects through governmental and non-governmental organisations;

4.7.2 by reinforcing and sharing of information and data on national occupational safety, health and environment at work place information amongst different stake holders through a national network system on Occupational Safety and Health;

4.7.3 by extending data coverage relevant to work-related injury and disease, including measures of exposure, and occupational groups that are currently excluded, such as self-employed people;

4.7.4 by extending data systems to allow timely reporting and provision of information;

4.7.5 by developing the means for improved access to information;

#### **4.8 Review**

4.8.1 An initial review and analysis shall be carried out to ascertain the current status of safety, health and environment at workplace and building a national Occupational Safety and Health profile.

4.8.2 National Policy and the action programme shall be reviewed at least once in five years or earlier if felt necessary to assess relevance of the national goals and objectives.

## 5. Conclusion

- 5.1 There is a need to develop close involvement of social partners to meet the challenges ahead in the assessment and control of workplace risks by mobilising local resources and extending protection to such working population and vulnerable groups where social protection is not adequate.
- 5.2 Government stands committed to review the National Policy on Safety, Health and Environment at Workplace and legislations through tripartite consultation, improve enforcement, compilation and analysis of statistics, develop special programmes for hazardous operations and other focus sectors, set up training mechanisms, create nation-wide awareness, arrange for the mobilisation of available resources and expertise.
- 5.3 The National Policy and programme envisages total commitment and demonstration by all concerned stake holders such as Government and social partners. Our goals and objectives will be that through dedicated and concerted efforts consistent with the requirements of safety, health and environment at work place and thereby improving the quality of work and working life.

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## GOVERNMENT OF KARNATAKA

## DEPARTMENT OF FACTORIES, BOILERS, INDUSTRIAL SAFETY &amp; HEALTH

CSMC/TEQ/CR-13/2013-14

Phone No: 080-36531200

Fax No: 080-36531302

Directorate of Factories, Boilers, Industrial Safety & Health, Kempe Gowda 2<sup>nd</sup> floor, Near Bangalore Dairy, IT Compound, Bannerghatta road, Bangalore-56. Dated 23/01/2013.

To  
General Manager,  
M/s. NIV Limited,  
Kudgi Nagar Thermal Power Project,  
Plot No. 5, Madhalur Nagar,  
Mannur Road, Bangalore-560 009

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Subject: Site Clearance for setting up of super thermal power project  
Reference: 1. Your letter dated 01/05/2013  
2. Proceedings of Task force committee meeting held on 12/08/2013  
3. Your reply mail dated 19/09/2013.

We are pleased to inform you that the Task Force Committee in its meeting held on 12/08/2013 has reviewed the presentation documents details of the site, has considered it, and has consented in principle to issue the Site Clearance for the proposed expansion of the establishment of super thermal power project for generating electrical power of 2 X 500 MW at Near Kudgi village, Basavara (pocra) Taluk, Bannerghatta (Taluk).

The site clearance is issued subject to the following conditions:

1. The replacing of highly hazardous chlorine with available less hazardous alternative chemicals like chlorine dioxide, sodium hypochlorite shall be considered.
2. The mobile hydrogen cylinder bank with manifold system shall be adopted in place of loose Hydrogen Cylinders.
3. The safety check shall be prepared in storing, handling and usage of Hydrogen and its holding capacity shall be limited to a minimum required quantity.
4. The scientific safety, health and environment (SHE) department shall be formed under the direct control & supervision of the occupier. This department shall be supported by the senior level qualified and competent officers with adequate field staff.
5. The effective online monitoring system shall be adopted to monitor the work environment with special trust to fugitive emission of radiation, noise level etc.
6. No building of structure shall be constructed without obtaining a prior approval of plan by Director, Department of Factories, Boilers, Industrial Safety and Health.
7. The pre and periodical medical examination shall be carried out to all the category of employees including contract and casual. The medical surveillance shall be carried out by creating a base line health data and shall have the provision for organizing the same and continuous basis.

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4. The suggestions for improvement submitted by the committee shall be incorporated in the site safety emergency plan. The same shall be submitted for scrutiny and approval.
5. The provisions of rule 50a of Building and Other Construction Workers (Regulation of Employment and Conditions of Service) (Karnataka) Rules 2006 shall be complied to ensure occupational safety and health of the construction workers involved in project. The compliance shall be monitored regularly by the district officers of our department and by the Director of Factories, Mines, Industrial Safety and Health.

**Suggestions:**

1. The industry shall adopt the rain harvesting system.
2. The industry shall adopt solar water heating system at least conforming to standards laid in other industries as similar water heating in the concern of.

All the above suggestions shall be complied and a report submitted to the

Director of Factories, Mines, Industrial Safety and Health, Bangalore immediately upon receipt of this order for your kind attention.

Yours faithfully,

Director  
Factories, Mines  
and Industrial Safety and Health  
Industrial Safety and Health, Bangalore

Three copy attached

Annexure—

GOVERNMENT OF KARNATAKA  
DEPARTMENT OF FACTORIES, BOILERS INDUSTRIAL SAFETY & HEALTH

CSME/TFC/EH-13/2013-14

Directorate of Factories, Boilers, Industrial Safety &  
Health, Karmika Bhavana 2<sup>nd</sup> floor, Near Bengaluru  
Dairy, III Compound Bannerghatta Road  
Bengaluru -29 Date 23.05.2013

Phone No. 080-26531200

Fax No. 080-26531202

To  
General Manager  
M/s HTTC Limited  
Kudgi Super Thermal Power Project

Sir,

Subject: Site Clearance setting up of super thermal power project reg

Reference: 1. Your letter dtd. 03.05.2013  
2. Proceedings of Task Force Committee Meeting held on 12.09.2013  
3. Your reply mail dated 19.09.2013

We are pleased to inform that the Task Force Committee in its meeting held on 12.09.2013 has reviewed the presentation documents details of the safety systems adopted etc and has concurred in principle to issue the Site Clearance for the initial location for the establishment of super thermal power project for generating electricity of 2x500 MW at New Kudgi village, Basavana Bagewadi, Bijapur District.

The Site clearance is issued subject to the following conditions:

1. The replacing of highly hazardous chlorine with available less hazardous alternative chemicals like chlorine dioxide, sodium hypochlorite shall be considered.
2. The mobile hydrogen cylinder bank with manifold system shall be adopted in place of loose hydrogen cylinders.
3. The Safety check shall be prepared in storing, handling and usage of hydraulic and its handling capacity shall be limited to a minimum required quantity.
4. The exclusive safety health and environment (SHE) department shall be formed under the direct control and supervision of the occupy. This department shall be supported by no senior level qualified and competent executive with adequate field staff.
5. The effective online monitoring system shall be adopted to ensure the safe and healthy work environment with special trust to fugitive emission, its radiation noise level etc. No building

of structure shall be constructed with obtaining a prior approval of plans by Director, Department of Factories, Boilers, Industrial Safety & Health.

6. No building or structure shall be constructed with obtaining a prior approval of plans by Director, Deptt of factories, boilers, industrial safety and health.
7. The pre and periodical medical examination shall be carried out to all the category of employees including contract and casual. The medical surveillance shall be carried out by creating a base line health data and shall have the provision for updating the same and continuous basis.
8. The mitigation measures as submitted in the presentation and as suggested by committee shall be incorporated in the on site emergency plans. The same shall be submitted for scrutiny and approval.
9. The provision of rule no. 251 of Building and Other Construction Workers (Regulation for employment and condition of service) (Karnataka) Rules 2006 shall be complied to ensure occupational safety and health of construction workers involved in the project. The compliance shall be regularly to jurisdiction officer of our department and to the director of factories, boilers, industrial safety and health.

#### SUGGESTIONS:

1. The industry shall adopt the rain-harvesting system to harvest at least 80% of the rain water.
2. The industry shall adopt solar energy system at least catering to street lighting to street light and in other suitable areas like water heating in the canteen, etc.

Yours faithfully

Chairman  
Task Force Committee  
And Director of Factories Boilers,  
Industrial safety and Health, Bangalore

  
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BY REGD. POST

## STATE POLLUTION CONTROL BOARD, ODISHA

(Department of Forest & Environment, Govt. of Odisha)  
Paribesh Bhawan, A/114, Nilakanthnagar, Unit-VIII  
Bhubaneswar - 751012

No. 2755 /

Ind-II-NOC-5592

Date 28-02-14OFFICE MEMORANDUM

In consideration of the application for obtaining Consent to Establish for Dertipal Super Thermal Power Project of M/s. NTPC Ltd., the State Pollution Control Board has been pleased to convey its Consent to Establish under section 25 of Water (Prevention & Control of Pollution) Act, 1974 and section 23 of Air (Prevention & Control of Pollution) Act, 1981 to set up of Thermal Power Plant of capacity 1800 MW (x200 MW, stage-I), Air/Power/Dertipal (Plot No. 5 Khata No. as mentioned in application form) in the district of Sundargarh with the following conditions.

GENERAL CONDITIONS:

1. This Consent to establish is valid for the new materials, product, manufacturing process and capacity mentioned in the application form. This order is valid for five years, which means the proponent shall commence construction of the project within a period of five years from the date of issue of this order. If the proponent fails to do substantial physical progress of the project within five years then a renewal of this consent to establish shall be sought by the proponent.
2. Adequate effluent treatment facilities are to be provided such that the quality of sewage and trade effluent satisfies the standards as prescribed under Environment Protection Rule, 1986 or as prescribed by the Central Pollution Control Board and/or State Pollution Control Board or otherwise stipulated in the special conditions.
3. All emission from the industry as well as the ambient air quality and noise shall conform to the standards as laid down under Environment (Protection) Act, 1986 or as prescribed by Central Pollution Control Board/State Pollution Control Board or otherwise stipulated in the special conditions.
4. Appropriate method of disposal of solid waste is to be adopted to avoid environmental pollution.
5. The industry shall comply to the provisions of Environment Protection Act, 1986 and the rules made there under with their amendments from time to time such as the Hazardous Waste Management, Handling and Transboundary Movement Rules, 2008 and amendment thereof, Hazardous Chemical Rules, (Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 etc. and amendments there under. The industry shall also comply to the provisions of Public Liability Insurance Act, 1991, if applicable.
6. The industry shall apply for grant of Consent to operate under section 25(2) of Water (Prevention & Control of Pollution) Act, 1974 & Air (Prevention & Control of Pollution) Act, 1981 at least 3 (three) months before the commercial production and obtain Consent to Operate from this Board. ✓
7. This consent to establish is subject to statutory and other clearances from Govt. of Odisha and/or Govt. of India, as and when applicable. ✓

{ 1 }

SPECIAL CONDITIONS :-

1. The proponent shall obtain environmental clearance for the proposal as per EIA notification, 2008 and the construction activity for the proposal shall commence after obtaining environmental clearance. ✓
2. The proponent shall carry out the construction activity as per the approved lay out map. Any deviation in approved layout map during construction activity shall be treated as violation of consent condition and appropriate action (including revocation of consent to establish) shall be taken as per law. If the proponent desires to change the approved plant layout map, they can submit a modified plant layout map surrendering the previous one before going for physical construction. ✓
3. The unit shall not use 330 acres land earmarked for green belt development for other purpose. ✓
4. The industry shall set up its own fly ash brick manufacturing unit along with establishment of unit-I so that fly ash generated from the unit-I can be utilized for fly ash brick making and which will be used for civil construction of unit-II. } ← 3 ✓
5. The industry has proposed to use 30% imported high GCV coal. They shall keep adequate space for installation of flue gas de-sulphurization unit in case substantial increase in G.L.C concentration of SO<sub>2</sub> is observed. ✓
6. The industry shall construct ash pond over 400 acres of area as earmarked in the revised land use break-up. Under no circumstance land earmarked for ash pond shall be used for any other purpose. Consent to operate for power plant shall only be considered when ash pond will be ready for ash disposal. ✓
2. The unit shall suitably divert all the public roads passing through the proposed project. ✓
3. The unit shall develop thick green belt with high boundary wall along the boundary of the project as human habitations are close to the proposed site. ✓
4. The unit shall include rain water harvesting proposal during execution of the project. ✓
5. The unit shall submit year wise along with percentage wise fly ash utilisation plan to the Board in the end of the year. ✓
6. The unit shall be based on zero discharge concepts and in no case any effluents shall be discharge to any water body. ✓
7. The unit shall obtain necessary clearances such as forest clearance, wild life clearance, clearance from water resources department etc. from the appropriate authorities as applicable. ✓
8. The unit shall adopt adequate safety measures in construction. If ash dyke and detail constructional feature shall be submitted to the Board within one month from the date of issue of consent to establish. ✓
9. The height of each stack of power plant boiler shall not be less than 275 meters from the ground. The power plant shall have two stacks for flue gas emission. ✓
10. The unit shall install ESP in the stack attached to power plant boiler such that particulate matter emission shall not exceed 50 mg/Nm<sup>3</sup>. They should make provision for one spare bed during the design of ESP. If more than one field of ESP fails, the plant should trip automatically through an interlocking system. ✓

{2}

11. The unit shall provide port hole and platform at suitable location with safe approach to conduct emission monitoring at the stack.
12. The unit shall provide dust extraction system at crusher house, boiler burner to control dust emission. CHP shall be installed in a shed and coal carrying conveyor belts shall be covered.
13. Separate energy meter shall be installed for all the pollution control equipments and its records shall be maintained for verification of the Board from time to time.
14. Necessary preventive measures shall be taken during construction phase so that the ambient air quality including noise shall conform to National Ambient Air Quality standards and standards for noise in industrial area as per Annexure-I. The unit shall install adequate dust extraction as well as dust suppression system at all potential dust generating points to control fugitive dust emission; and the ambient air quality inside the factory premises shall conform to the standard with reference to National Ambient Air Quality Standard prescribed by MoEF, Govt. of India dtd.16.11.2009 enclosed as Annexure - II.
15. The construction material which has potential to be air borne, shall be transported in covered trucks.
16. The roads inside the plant premises shall be back topped. Permanent high pressure water sprinkling system shall be installed for regular spraying of water on roads to minimize fugitive dust emission.
17. The unit shall take adequate measures for controlling of fugitive dust emission during transportation of fly ash for utilisation. Good housekeeping practices shall be followed to improve the work environment. All roads and shop floors shall be cleaned regularly.
18. At least 5 continuous ambient air quality monitoring stations around the industry shall be set up to monitor PM-10, PM-2.5, SO<sub>2</sub>, NO<sub>x</sub>, CO and other important parameters as given in as per Annexure - II above within at least to the distance in down wind direction and where maximum ground level concentration is anticipated. The exact location of the monitoring stations shall be finalized in consultation with the State Pollution Control Board. The proponent shall install continuous online ambient air quality monitoring and stack monitoring system with display facility at the gate. A detail proposal to this effect shall be submitted.
19. Pneumatic conveyor system shall be provided as dust collection system for ESP dust. Slop shall be provided for collection of bottom ash and fly ash. Conveyor belt shall be closed and bag filter shall be provided at transfer points of conveyor system to control fugitive emission.
20. Air pollution Control devices shall be maintained properly. Fabric bags and cages in bag house shall be checked regularly and replaced whenever required. Adequate availability of space shall be assured for immediate replacement.
21. All the wastewater generated shall be discharged to a common monitoring basin before it is reused in the plant for various process.
22. The Blow down shall meet the following standards before it is discharged to the common basin.

Boiler Blow Down :

Suspended solids	-	100 mg/l (max)	}
Oil & Grease	-	20.0 mg/l (max)	
Copper (Total)	-	1.0 mg/l (max)	
Iron (total)	-	1.0 mg/l (max)	

{3}

**Cooling Tower Blow Down**

Free available Chlorine	0.5 mg/l (Max)
Zinc	1.0 mg/l (Max)
Chromium (total)	2.0 mg/l (Max)
Phosphate	0.2 mg/l (Max)

23. The wastewater generated from leakages, blow downs and DM plant shall be treated individually to meet the prescribed standard of effluent discharge to inland surface water and stored in a common basin (i.e. guard pond) for utilization for plantation, dust suppression, ash handling and green belt purpose inside the factory premises. Lining shall be provided in guard pond to prevent any seepage into ground to avoid ground water contamination. The proponent shall submit detail drawing with specification of ETP within 6 months.
24. The proponent shall provide cartand drains around coal storage area followed by series of settling tanks to retain the solids, if any, in order to reduce the load on common monitoring basin.
25. The unit shall furnish details of the control measures at coal loading and unloading points.
26. The acid/water generated during boiler cleaning shall be properly neutralized so that the pH of cleaning water remains within the range of 6.0 - 9.0. After neutralization this water can be discharged to the common monitoring basin.
27. Oil catch pits shall be provided in oil handling area of power plant for collection of spillage.
28. The unit shall provide treatment system such as Reverse osmosis plant to treat the waste water generated from cooling tower blow down and reuse the same in the process.
29. The storm water drains shall be maintained separately without being mixed up with the industrial effluent or sewage effluent. The domestic effluent from the industry as well as the colony shall be treated in proper sewage treatment plant to meet the prescribed BIS standard (SS - 30mg/l, BOD - 20mg/l) before being discharged or utilized for green belt development.
30. The industry shall adopt High Concentration Slurry Disposal (HCSO) method for ash disposal. A detail design of the ash disposal area, the dykes, run off and seepage collection system etc shall be made and submitted within 3 months from the date of issue of this consent to establish.
31. A comprehensive ash utilization plan shall be prepared within the frame work of Fly Ash Notification, 2002 and its amendment thereof. The plan should explore all possible means of utilization with realistic timelines and utilization options. The ash utilization plan submitted by the proponent is not adequate. A detailed ash utilization plan is to be submitted keeping in view of less ash at the time of consent to operate application.
32. The proponent shall take precautionary measures to prevent surface run off from ash disposal area during torrential rain. A detailed proposal to this effect is to be submitted within 3 months.
33. Rain water harvesting structure shall be developed inside the plant premises as per concept and practices made by DMPCB and maximum efforts shall be made to reuse harvested rain water, with a definite plan and programme to reduce the drawal of fresh water from water bodies.
34. The unit shall explore the possibility of disposal of fly ash in abandoned mine pit for complete utilization of fly ash.
35. The unit shall submit details of hazardous chemicals and storage facility and risk assessment to the Dept.
36. The industry shall comply with all the conditions stipulated under Charter on Corporate Responsibility for Environmental Protection (CREP) guidelines in a time bound manner as envisaged there in.

[4]

37. A toe drain shall be provided around the ash mound. The seepage water collected in the toe drain shall be monitored every month with respect to pH, SS, O&G and fluoride and shall meet the following standards
- pH-8.5 to 8.5  
SS-100mg/l  
O&G-10mg/l and  
Fluoride-2.0mg/l
- and the monitoring report shall be submitted to the Board quarterly.
38. Regular monitoring of runoff water from the disposal area and excess ash water shall be carried out with respect to pH, SS, O&G and fluoride content and monitoring report shall be submitted to the Board every quarter.
39. Ash pond shall be lined with HDPE or any other suitable impermeable lining such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.
40. The Project Proponent shall carry out detail hydrogeological study of the ash pond site (incorporating soil analysis, ground water quality (fluorides & heavy metals), surface water quality (fluoride & heavy metals) and drainage network of the area and the change in hydrological status shall be monitored annually.
41. Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (P, Cd, Hg, Cr, As, Pb) and records shall be maintained and submitted to the Board. The data so obtained should be compared with the baseline data so as to assure that the ground water quality is not adversely affected due to the project.
42. The entire upstream face of the dyke shall be provided with stone pitching or brick lining or precast tile lining to prevent erosion of the slope by wave action during heavy wind.
43. The entire area of the ash dyke shall be provided with fencing and unauthorized entry within this ash pond area shall be strictly prohibited. Security guards shall be posted for vigilance of the ash dyke area round the clock. This is very important as there are chances of sabotage. The entire dyke perimeter shall have accessible roads. The entire dyke area shall be provided with street lights or flood lights for inspection during night time. A site office shall be constructed with a full time engineer responsible for inspection and monitoring of the ash dykes.
44. The industry shall construct a Sewage Treatment Plant (STP) for treatment of wastewater to be generated from domestic source and the treated sewage shall be discharged to the common monitoring basin.
45. The unit shall explore the possibility to use chlorine dioxide for treatment of water instead of chlorine gas. ←
46. Plantation activity shall be planned in such a way so that trees will have better growth by the time the unit starts operation.
47. The proponent shall deploy vehicles which conform to the latest BPS emission specification. The proponent shall also give a detail proposal to control noise pollution during construction phase. The proponent shall prepare pollution prevention and environment management plan for construction phase and operation phase separately and should submit to the Board three months prior to commencement of construction and operation respectively.
48. The rising temperature during summer in the area is a major concern. The unit shall conduct a detailed study on contribution of thermal heat to atmosphere due to the proposed project and its impact on ambient temperature during different season. The study should also investigate the heat island effect due to the project.

[5]

49. The industry shall provide screen at the water intake system of Hirakud reservoir for protection of aquatic life.
50. The industry shall set up a full-fledged environment monitoring laboratory and an environment management cell with qualified personnel for monitoring of pollutants and effective remedial measures in case of necessity. Head of the environmental management cell shall report to the unit head.
51. The civil construction shall be carried out with the fly ash bricks. If the fly ash bricks are not available locally the civil construction may be carried out with other bricks with prior intimation to the concerned Regional Office of SPC Board. A statement indicating use of fly ash bricks during construction period shall be submitted to the Board every year for record.
52. The land on which the unit is proposed to be established the power plant shall be converted to industrial use (Iam) by the competent authority. The copy of said land conversion document shall be submitted to the Board along with consent to operate application.
53. A green belt of adequate width and density preferably with local species along the periphery of the power plant shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% of the total land area shall be under permanent green cover. In such a manner that, afforestation shall be taken up at least in 20% of the total green belt area and progressively achieve 100% in a span of five years.
54. No production activity shall commence prior to installation of the pollution control devices. In case, it is found that the plant is operating without installation of appropriate pollution control equipment(s) and without permission for trial operation from the Board, a direction of closure shall be issued wrt 31-A of Air (PCP) Act, 1981 and wrt 31-A of Water (PCP) Act, 1974 without any further notice in this regard.
55. The Board may impose further conditions or modify the conditions stipulated in this order during installation and / or at the time of obtaining consent to operate and may revoke this clearance in case the stipulated conditions are not implemented and / or any information suppressed in the application form.

Encl: Approved layout Map & Annexures

  
MEMBER SECRETARY

To

Shri S. K. Reddy, General Manager,  
Deerpali Super Thermal Power Project (DSTPP) of  
M/s. NTPC Ltd.,  
3<sup>rd</sup> & 4<sup>th</sup> Floor, Amba Tower, Hospital Road,  
Sundergarh - 770001.

Memo No. \_\_\_\_\_

Copy forwarded to:

1. District Magistrate & Collector, Sundergarh.
2. District Industries Centre, Sundergarh.
3. Director, Factories & Boiler, Bhubaneswar.
4. Regional Officer, SPC Board, Fourkela.
5. Sr. Env. Engineer (Consent), SPC Board, Bhubaneswar.
6. DFO, Sundergarh.
7. Hazardous Waste Management Cell, SPC Board, Bhubaneswar.
8. Copy to Guard file.

DR. ENV. ENGINEER (N)

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GOVT OF KARNATAKA  
Department Of Factories, Boilers, Industrial Security And Health

Office of the Director  
Karnika Bhavana, B floor, Bommarpalli Road,  
Bangalore-29, Date: 13.04.2016

**Proceedings of the Department of Factories, Boilers, Industrial Security and Health**

Read with: Sec 6(1) of Factories Act 1948 and Rule 3 of Karnataka Factories Rules, 1969

**Subj: Approval of factory drawings in respect of M/s. Kudgi Super Thermal Power Project (NTFC Limited) as per Factories Act 1948--Reg.**

Ref: 1) Application Form 1 dated 27.01.2016

2) Site inspection dated 05.02.2016

3) Final Scrutiny dated 07.04.2016

The maps of M/s NTFC Limited, Kudgi Super Thermal Power Project, Vijayapura have been scrutinized as per the Factories Act 1948 and the Rules framed and conceived there under and the blue prints of the factory's buildings and machinery layouts have been approved subject to the conformity of all provisions conceived as per Factories Act 1948 concerned and clause 3(4) of Karnataka Factories Rules, 1969 and also conformity of following conditions:

1. To modify the use of hazardous chlorine chemical to minimum hazardous chlorine chemical and to strictly comply with all the conditions laid down in the letter as per the condition of this office letter no. CSMC/TFC/CR-13/2013-14 Date 23.09.2013.
2. To get those buildings and machinery layout maps approved which are not approved earlier or the maps involving modifications. Such maps should be submitted for approval.
3. Before starting use of all the buildings and structures of the factory, authentication certificate should be separately obtained as per Form 1A from authorized Civil Engineers and submitted to the Field Officer. Then only these should be used.

Ninety nine maps as approved are sent enclosed herewith. Kindly acknowledge.

Director of Factories &  
Boilers,  
Bangalore

To:  
The Occupier,  
M/s. Kudgi Super Thermal Power Project  
NTFC Limited  
Kudgi, Taluk: Basavanna Bagewadi, Dist: Vijayapura

For kind information please

*G. S. Srinivas*

*S. Srinivas*

*ಕೆ. ಎಸ್. ಸುಬ್ರಹ್ಮಣ್ಯ*

*ಕೆ. ಎಸ್. ಸುಬ್ರಹ್ಮಣ್ಯ*

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**ANNEXURE A/7**

**F. No. Z-13025/12/2015-LRC**  
**Government of India**  
**Ministry of Labour and Employment**

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Shram Shakti Bhawan, New Delhi

Dated: 23<sup>rd</sup> March, 2018

**OFFICE MEMORANDUM**

Sub:- The draft Labour Code on Occupational Safety, Health and Working Conditions, 2018. – inviting comments/suggestions/inputs Reg.

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The undersigned is directed to say that the Ministry of Labour & Employment has been taking steps for simplification, amalgamation and rationalization of Central Labour Laws which is also in tandem with recommendations of 2<sup>nd</sup> National Commission on Labour. The various existing Acts are being proposed to be subsumed in four major Labour Codes viz., Code on Wages, Code on Industrial Relations, Code of Social Security and Code on Occupational Safety, Health and Working Conditions.

2. Now, the Ministry has prepared a preliminary draft on Code on Occupational Safety, Health and Working Conditions, 2018, by amalgamating 13 labour laws relating to safety and health standards, health and working conditions, welfare provisions for the employees and leave and hours of work. The following Acts have been merged.

- (a) The Factories Act, 1948 (Act no. 63 of 1948)
- (b) The Mines Act, 1952 (Act no. 35 of 1952)
- (c) The Dock Workers (Safety, Health and Welfare) Act, 1986 (Act no. 54 of 1986)
- (d) The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 (Act No. 27 of 1996)
- (e) The Plantations Labour Act, 1951 (Act No. 69 of 1951)
- (f) The Contract Labour (Regulation and Abolition) Act, 1970
- (g) The Inter-State Migrant workmen (Regulation of Employment and Conditions of Service) Act, 1979
- (h) The Working Journalist and other News Paper Employees (Conditions of Service and Misc. Provision) Act, 1955
- (i) The Working Journalist (Fixation of rates of wages) Act, 1958
- (j) The Motor Transport Workers Act, 1961
- (k) Sales Promotion Employees (Condition of Service) Act, 1976

  
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- (l) The Beedi and Cigar Workers (Conditions of Employment) Act, 1966  
 (m) The Cine Workers and Cinema Theatre Workers Act, 1981

3. Your specific inputs/suggestions are requested on the various aspects of the code including threshold/applicability, the registration/ licensing and processes there of, National/State Occupational Safety & Health Boards, the broad aspects on working and health conditions, safety standards, welfare measures, enforcement mechanism, penalties, rule making powers of the Central and State Governments and the various items incorporated in the three schedules.

4. The preliminary draft is enclosed for inviting comments/suggestions of the various stakeholders including general public. It is requested that the comments/suggestions to this Ministry by 22.04.2018 on the address, i.e. Under Secretary (LRC), Ministry of Labour & Employment, Room No. 17A, Shram Shakti Bhawan, Rafi Marg, New Delhi – 110 001 or through email: [jk\\_singh68@nic.in](mailto:jk_singh68@nic.in). The suggestions/comments should be in the following format:

Format			
Section/Sub-section/Clause/Proviso of the code	Issue/problem identified in the relevant clause	Proposed change/correction that is suggested	Reason for the proposed change

(Anita Tripathi)  
 Deputy Secretary to the Government of India  
 Ph: 23711354

Encl: 65 pages of the Code

To  
 All stakeholders.

## Draft

## CODE ON OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS, 2018

Arrangement of Clauses:**Chapter I: Preliminary**

1. Short title, extent and commencement
2. Definitions

**Chapter II: Registration**

3. Registration of certain establishments
4. Appeal
5. Notice by employer of commencement and cessation of operation

**Chapter III: Duties of Employer and Employees, etc.**

6. Duties of employer
7. Duties and responsibilities of owners, agents and managers in relation to mine
8. Duties of manufacturers
9. Duties of architects, project engineers and designers
10. Notice of certain accident
11. Notice of certain dangerous occurrences
12. Notice of certain diseases
13. Duties of employees
14. Rights of employee
15. Duty not to interfere with or misuse things

**Chapter IV: Occupational Safety and Health**

16. National Occupational Safety and Health Advisory Board
17. State Occupational Safety and Health Advisory Board
18. Occupational Safety and Health Standards
19. Research related activities
20. Safety and occupational health surveys
21. Statistics
22. Safety Committee and Safety Officers

**Chapter V: Health and Working Conditions**

23. Responsibility of employer for maintaining health and working conditions

**Chapter VI: Welfare Provisions**

24. Washing facilities in the establishment, etc.

**Chapter VII: Hours of Work and Annual Leave with Wages**

25. Weekly and daily working hours, etc.
26. Weekly and compensatory holidays
27. Extra wages for overtime
28. Night shifts
29. Prohibition of overlapping shifts
30. Restriction on double employment in factory and mine
31. Notice of periods of work
32. Annual leave with wages, etc.

**Chapter VIII: Maintenance of Registers, Records and Returns etc.**

33. Maintenance of registers and records and filing of returns

**Chapter IX: Facilitators and other Authority**

34. Appointment of Facilitators
35. Powers of Facilitators

- 36. Special powers of Facilitator in respect of factory, mines and dock work and building and other construction work
- 37. Secrecy of information by Chief Facilitator or Facilitator, etc.
- 38. Facilities to be afforded to the Facilitator
- 39. Powers of Special Officer to enter, measure, etc. in relation to mine
- 40. Medical Officer

#### Chapter X: Special Provision relating to Employment of Women

- 41. Applicability of the chapter
- 42. Restriction on employment of women
- 43. Prohibition on employment of women in dangerous operation

#### Chapter XI - Special Provisions for Contract Labour and Inter State Migrant Worker, etc.

##### PART-I Contract Labour and Inter State Migrant Worker

- 44. Applicability of this Part
- 45. Appointment of licensing officers
- 46. Licensing of contractors
- 47. Grant of licence
- 48. No fees or Commission or any cost to workers
- 49. Information regarding work order to be given to the appropriate Government
- 50. Revocation, suspension and amendment of license
- 51. Appeal
- 52. Liability of Principal Employer for welfare facilities
- 53. Effect of employing contract labour from a non-licensed Contractor
- 54. Responsibility of Payment of wages
- 55. Experience Certificate
- 56. Prohibition of employment of contract labour
- 57. Power to exempt in special cases
- 58. Facilities to Inter- State Migrant workers
- 59. Displacement allowance
- 60. Journey allowance etc.
- 61. Pest liabilities

##### PART- II Audio-Visual Workers

- 62. Prohibition of employment of audio-visual worker without agreement

##### PART- III Mines

- 63. Managers
- 64. Code not to apply in certain cases
- 65. Exemption from provision regarding employment
- 66. Decision of question whether a mine is under this Code

##### PART- IV Beedi and Cigar Workers

- 67. Licence to industrial premises and person
- 68. Appeals
- 69. Permission to work by employees outside industrial premises
- 70. Part not to apply to self employed persons in private dwelling houses

##### PART -V Building and other Construction Worker

- 71. Prohibition of employment of certain persons in certain building or other construction work

##### PART- VI Factory

- 72. Approval, licensing and registration of factories
- 73. Liability of owner of premises in certain circumstances
- 74. Power to apply the Code to certain premises
- 75. Dangerous operations
- 76. Constitution of Site Appraisal Committee
- 77. Compulsory disclosure of information by the occupier
- 78. Specific responsibility of the occupier in relation to hazardous processes
- 79. Power of Central Government to appoint Inquiry Committee
- 80. Emergency standards

81. Permissible limits of exposure of chemicals and toxic substances
82. Workers' participation in safety management
83. Right of workers to warn about imminent danger
84. Power to direct inquiry into cases of accident or disease in a factory
85. Appeal against the order of facilitator in case of factory
86. Power to make exempting rules and order
- Chapter XIII: Offences, Penalties and Procedure**
87. General penalty for offences
88. Causing obstruction to deter Chief Facilitator or Facilitator from duty, etc.
89. Non-maintenance of register and records and non-filing of returns, etc. etc.
90. Contravention of provisions regarding employment of worker including women, audio-visual worker and contract labour, etc.
91. Falsification of records, etc.
92. Penalty on disclosure of information
93. Penalty for wrongfully disclosing results of analysis of a sample of substance used or intended to be used
94. Penalty for contravention of the provisions of duties relating to hazardous processes
95. Penalty for contravention of the provisions of duties relating to safety provisions resulting in an accident
96. Failure to appoint manager in a mine
97. Offences by employees
98. Prosecution of owner, agent or manager of a mine
99. Exemption of owner, agent or manager of a mine or occupier of a factory from liability in certain cases
100. Offences by companies, etc.
101. Limitation of Prosecution and cognizance of offence
102. Jurisdiction of a court for entertaining proceedings, etc., for offence
103. Power of Court to make orders
104. Compounding of offences
- Chapter XIII: Miscellaneous**
105. Delegation of powers
106. Onus as to age
107. Onus of proving limits of what is practicable, etc.
108. Effect of law and agreements inconsistent with this Code
109. Power of the appropriate Government to direct inquiry in certain cases
110. Publication of reports
111. Powers of Central Government to give directions
112. General restriction on disclosure of information
113. Jurisdiction of civil courts barred
114. Protection of action taken in good faith
115. Power to exempt in special cases
116. Power to exempt during public emergency
117. Power to exempt public institution
118. Persons required to give notice, etc., legally bound to do so
119. Power to remove difficulties
120. Power of the appropriate Government to make rules
121. Power of the Central Government to make rules
122. Power of the State Government to make rules
123. Power of Central Government to make regulations in relation to mines and dock work
124. Prior publication of regulation and rules in relation to mine and dock work
125. Power to make regulation without previous publication
126. Bye-laws
127. Laying regulations, rules and bye laws before parliament
128. Laying of rules made by State Government
129. Repeal and Savings
- The First Schedule
- The Second Schedule
- The Third Schedule

**Draft**  
**CODE ON OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS, 2018**

**A**  
**BILL**

to consolidate and amend the laws regulating the occupational safety, health and working conditions of the persons employed in an establishment and the matters connected therewith or incidental thereto.

BE it enacted by Parliament in the sixty-ninth Year of the Republic of India as follows:-

**Chapter I**  
**Preliminary**

**1. Short title, extent and commencement:**

1. This Act may be called the Code on Occupational Safety, Health and Working Conditions, 2018.
2. It extends to the whole of India;  
Provided that the provision of this Code in so far as are concerned with the beedi and cigar and plantation shall not be applicable in the state of Jammu and Kashmir.
3. It shall come into force on such date as the Central Government may, by notification appoint; and different dates may be appointed for different provisions of this Code and any reference in any such provision to the commencement of this Code shall be construed as a reference to the coming into force of that provision.

**2. Definitions – [1] In this Code, unless the context otherwise requires,-**

(a) "adolescent" shall have the meaning as assigned to it in clause (i) of section 2 of the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986 (61 of 1986);

(b) "adult" means a person who has completed his eighteenth year;

(c) "agent" when used in relation to a mine, means every person, superior to the manager and whether appointed as such or not, who, acting or purporting to act on behalf of the owner, takes part in the management, control, supervision or direction of the mine or of any part thereof;

(d) "appropriate Government" means -

- (i) in relation to an establishment carried on by or under the authority of the Central Government, railways, mines, oil fields, major ports, air transport services, telecommunication, banking and insurance company or a corporation or other authority established by a Central Act or a central public sector undertaking; subsidiary companies set up by the principal undertakings or autonomous bodies owned or controlled by the Central Government, the Central Government; and
- (ii) in relation to any other establishment, the State Government of a State in which the other establishment is situate.

Explanation - For removal of doubt, it is clarified that in respect of the contract labour supplied by a contractor for the purposes of an establishment, the appropriate Government for the establishment shall also be the appropriate Government for such contract labour;

(e) "audio-visual" production means audio-visual produced in wholly or partly in India including animation, cartoon depiction and audio-visual advertisement.

(f) "audio-visual worker" means a person, who is employed, directly or through any contractor, in or in connection with the audio-visual production to work as an artiste including actor, musician, singer, anchor, news reader or dancer or to do any work, skilled, unskilled, manual, supervisory, technical, artistic or otherwise, and his remuneration with respect to such employment in or in connection with the production of

audio-visual does not exceed, where remuneration is by way of monthly wages or where such remuneration is by way of lump sum, in each case, the amount notified in this regard by the Central Government;

(g) "building or other construction work" means the construction, alteration, repair, maintenance or demolition in relation to, buildings, streets, roads, railways, tramways, airfields, irrigation, drainage, embankment and navigation works, flood control works (including storm water drainage works), generation, transmission and distribution of power, water works (including channels for distribution of water), oil and gas installations, electric lines, internet towers, wireless, radio, television, telephone, telegraph and overseas communications, dams, canals, reservoirs, watercourses, tunnels, bridges, viaducts, aqua-ducts, pipelines, towers, cooling towers, transmission towers and such other work as may be specified in this behalf by the Central Government, by notification, but does not include any building or other construction work of any factory or mine or any building or other construction work employing less than ten workers or any building or other construction work related to residential property not being more than the amount as may be notified by the Central Government from time to time;

(h) "building workman" means a person who is employed to do any skilled, semi-skilled or unskilled, manual, technical or clerical work for hire or reward, whether the terms of employment be expressed or implied, in connection with any building or other construction work, but does not include any such person who is employed mainly in a managerial or supervisory or administrative capacity;

(i) "cargo" includes anything carried or to be carried in a ship or other vessel, or vehicle;

(j) "competent person", in relation to any provision of this Code, means a person or an institution recognised as such by the Chief Facilitator for the purposes of carrying out tests, examinations and inspections required to be done in an establishment having regard to-

- (i) the qualifications and experience of the person and facilities available at his disposal; or
- (ii) the qualifications and experience of the persons employed in such institution and facilities available therein;

(k) "competent authority" means any authority notified by the appropriate Government to perform all or any of the functions of the competent authority under this Code and for such areas as may be specified in the notification;

(l) "contract labour" means a worker who shall be deemed to be employed in or in connection with the work of an establishment when he is hired in or in connection with such work by or through a contractor, with or without the knowledge of the principal employer and includes inter-state migrant worker;

Explanation 1. For removal of doubt, it is clarified that where in or in connection with the work of an establishment, a worker, who is regularly employed in an establishment of a contractor, is hired in or in connection with such work of the first said establishment by or through the contractor, with or without the knowledge of the principal employer, shall not be deemed as "contract labour" for the purposes of this clause.

Explanation 2.- For the purposes of Explanation 1, the expression "regularly employed in an establishment of a contractor", in case of a worker, means such worker who is employed by the contractor for any activity of his establishment and his employment is governed by mutually accepted standards of the conditions of employment (including engagement on permanent basis), and gets periodical increment in the pay, social security coverage and other welfare benefits in accordance with the law for the time being in force in such employment, but does not include part time employee.

(m) "contractor", in relation to an establishment, means a person, who-

- (i) undertakes to produce a given result for the establishment, other than a mere supply of goods or articles of manufacture to such establishment, through contract labour; or
- (ii) supplies contract labour for any work of the establishment as mere human resource; and includes a sub-contractor;

(n) "chief facilitator" means a Chief Facilitator appointed under sub-section (3) of section 34;

(o) "controlled industry" means any industry the control of which by the Union has been declared by any Central Act to be expedient in the public interest;

(p) "day" means a period of twenty-four hours beginning at mid-night;

(q) "dock work" means any work in or within the vicinity of any port in connection with, or required, for, or incidental to, the loading, unloading, movement or storage of cargoes into or from ship or other vessel, port, dock, storage place or landing place, and includes –

- (i) work in connection with the preparation of ships or other vessels for receipt or discharge of cargoes or leaving port; and
- (ii) all repairing and maintenance processes connected with any hold, tank structure or lifting machinery or any other storage area on board the ship or in the docks;
- (iii) chipping, painting or cleaning of any hold, tank, structure or lifting machinery or any other storage area in board the ship or in the docks;

(r) "employee" means, –

- (i) in respect of an establishment, a person, excluding an apprentice engaged under the Apprentices Act, 1961, employed on wages by such establishment to do any skilled, semi-skilled, unskilled, manual, operational, supervisory, managerial, administrative, technical or clerical work for hire or reward, whether the terms of employment be express or implied; and
- (ii) a person declared to be an employee by the appropriate Government;

but does not include any member of the Armed Forces of the Union;

Provided that notwithstanding anything contained in this clause, in case of a mine a person is said to be "employed" in a mine who works as the manager or who works under appointment by the owner, agent or manager of the mine or with the knowledge of the manager, whether for wages or not –

- (a) in any mining operation (including the concomitant operations of handling and transport of minerals upto the point of dispatch and of gathering sand and transport thereof to the mine);
- (b) in operations or services relating to the development of the mine including construction of plan therein but excluding construction of buildings, roads, wells and any building work not directly connected with any existing or future mining operations;
- (c) in operating, servicing, maintaining or repairing any part of any machinery used in or about the mine;
- (d) in operations, within the premises of the mine, of loading for dispatch of minerals;
- (e) in any office of the mine;
- (f) in any welfare, health, sanitary or conservancy services required to be provided under this Code relating to mine, or watch and ward, within the premises of the mine excluding residential area; or
- (g) in any kind of work whatsoever which is preparatory or incidental to, or connected with, mining operations;

(s) "employer" means a person who employs employees in his establishment and where the establishment is carried on by any department of Central Government or State Government, the authority specified, by the head of such department, in this behalf or where no authority, is so specified the head of the department and in relation to an establishment carried on by a local authority, the Chief Executive of that authority, and includes, –

- (i) in relation to an establishment which is a factory, the occupier of the factory;
- (ii) in relation to any other establishment, the person who, or the authority which has ultimate control over the affairs of the establishment and where said affairs are entrusted to a manager or managing director, such manager or managing director;
- (iii) in relation to mine, the owner of the mine; and
- (iv) Contractor;

(t) "establishment" means a place where any industry, trade, business, manufacture, dock work or occupation is carried on including a factory, mine, motor transport undertaking, newspaper establishment, plantation, in which ten or more workers are employed;

(u) "facilitator" means a facilitator appointed under sub-section (1) of section 34;



(v) "factory" means any premises including the precincts thereof—

- (i) whereon ten or more workers are working, or were working on any day of the preceding twelve months, and in any part of which a manufacturing process is being carried on with the aid of power, or is ordinarily so carried on, or
- (ii) whereon twenty or more workers are working, or were working on any day of the preceding twelve months, and in any part of which a manufacturing process is being carried on without the aid of power, or is ordinarily so carried on,—

but does not include a mine, or a mobile unit belonging to the armed forces of the Union, railway running shed or a hotel, restaurant or eating place.

Explanation I.—For computing the number of workers for the purposes of this clause all the workers in 10 different groups and relays] in a day shall be taken into account;

Explanation II.—For the purposes of this clause, the mere fact that an Electronic Data Processing Unit or a Computer Unit is installed in any premises or part thereof, shall not be construed to make it a factory if no manufacturing process is being carried on in such premises or part thereof.

(w) "family", when used in relation to a worker, means—

- (i) his or her spouse, and
- (ii) children including adopted children of the worker dependant upon him, who have not completed their eighteenth year,

and includes parents and widow sister, dependent upon him;

(x) "godown" means any warehouse or other place, by whatever name called, used for the storage of any article or substance required for any manufacturing process which means any process for, or incidental to, making, finishing or packing or otherwise treating any article or substance with a view to its use, sale, transport, delivery or disposal as finished products;

(y) "hazardous process" means any process or activity in relation to an industry specified in the First Schedule where, unless special care is taken, raw materials used therein or the intermediate or finished products, by-products, hazardous substances, wastes or effluents thereof would—

- (i) cause material impairment to the health of the persons engaged in or connected therewith, or
- (ii) result in the pollution of the general environment;

Provided that the Central or State Government may, by notification, amend the First Schedule by way of addition, omission or variation of any industry specified in the said Schedule.

(z) "hazardous substance" means any substance as prescribed or preparation of which by reason of its chemical or physico-chemical properties or handling is liable to cause physical or health hazards to human being or may cause harm to other living creatures, plants, micro-organisms, property or the environment;

(za) "industrial premises" means any place or premises (not being a private dwelling house), including the precincts thereof, in which or in any part of which any industry, trade, business, occupation or manufacturing is being ordinarily carried on with or without the aid of power and includes a godown attached thereto;

(zb) "industry" means any systematic activity carried on by co-operation between an employer and worker (whether such worker is employed by such employer directly or by or through any agency, including a contractor) for the production, supply or distribution of goods or services with a view to satisfy human wants or wishes (not being wants or wishes which are merely spiritual or religious in nature), whether or not,—

- (i) any capital has been invested for the purpose of carrying on such activity; or
- (ii) such activity is carried on with a motive to make any gain or profit;

but does not include —

- (i) any activity of the Government relating to the sovereign functions of the Government, including all the activities carried on by the departments of the Central Government dealing with defence, research, atomic energy and space; and
- (ii) any domestic service;

(zc) "inter-State migrant worker" means any person who is recruited by or through a contractor in one State under an agreement or other arrangement for employment in an establishment in another State;

(zd) "machinery" means any article or combination of articles assembled, arranged or connected and which is used or intended to be used for converting any form of energy to performing work, or which is used or intended to be used, whether incidental thereto or not, for developing, receiving, storing, containing, confining, transforming, transmitting, transferring or controlling any form of energy;

(ze) "manufacturing process" means any process for—

- (i) making, altering, repairing, ornamenting, finishing, packing, drying, washing, cleaning, breaking up, demolishing, or otherwise treating or adapting any article or substance with a view to its use, sale, transport, delivery or disposal; or
- (ii) pumping oil, water, sewage or any other substance; or
- (iii) generating, transforming or transmitting power; or
- (iv) composing, printing, printing by letter press, lithography, offset, photogravure, screen printing, 3-Dimensional printing, prototyping, flexography or other types of printing process or book binding; or
- (v) constructing, reconstructing, repairing, refitting, finishing, or breaking up ships or vessels; or
- (vi) preserving or storing any article in cold storage; or
- (vii) such other purposes as the Central Government may notify;

(zf) "medical officer" means the medical officer appointed under sub-section (1) of section 49;

(zg) "mine" means any excavation where any operation for the purpose of searching for or obtaining minerals has been or is being carried on and includes—

- (i) all borings, bore holes, oil wells and accessory crude conditioning plants, including the pipe conveying mineral oil within the oilfields;
- (ii) all shafts, in or adjacent to and belonging to a mine, whether in the course of being sunk or not;
- (iii) all levels and inclined planes in the course of being driven;
- (iv) all opencast workings;
- (v) all conveyors or aerial ropeways provided for the bringing into or removal from a mine of minerals or other articles or for the removal of refuse there from;
- (vi) all adits, levels, planes, machinery works, railways, tramways and sidings in or adjacent to and belonging to a mine;
- (vii) all protective works being carried out in or adjacent to a mine;
- (viii) all workshops and stores situated within the precincts of a mine and under the same management and used primarily for the purposes connected with that mine or a number of mines under the same management;
- (ix) all power stations, transformer sub-stations, converter stations, rectifier stations and accumulator storage stations for supplying electricity solely or mainly for the purpose of working the mine or a number of mines under the same management;

- (v) any premises for the time being used for depositing sand or other material for use in a mine or for depositing refuse from a mine or in which any operations in connection with such sand refuse or other material is being carried on, being premises exclusively occupied by the owner of the mine;
- (vi) any premises in or adjacent to and belonging to a mine or which any process ancillary to the getting, dressing or preparation for sale of minerals or of coke is being carried on;

and includes a mine owned by the Government;

(zh) "minerals" means all substances which can be obtained from the earth by mining, digging, drilling, dredging, hydraulic, quarrying, or by any other operation and includes mineral oils (which in turn include natural gas and petroleum);

(zi) "motor transport undertaking" means a motor transport undertaking employing motor transport worker and engaged in carrying passengers or goods or both by road for hire or reward, and includes a private carrier;

(zj) "motor transport worker" means a person who is employed in a motor transport undertaking directly or through an agency, whether for wages or not, to work in a professional capacity on a transport vehicle or to attend to duties in connection with the arrival, departure, loading or unloading of such transport vehicle and includes a driver, conductor, cleaner, station staff, line checking staff, booking clerk, cash clerk, depot clerk, time-keeper, watchman or attendant, but does not include—

- (i) any such person who is employed in a factory;
- (ii) any such person to whom the provisions of any law for the time being in force regulating the conditions of service of persons employed in shops or commercial establishments apply;

(zk) "newspaper" means any printed periodical work containing public news or comments on public news and includes such other class of printed periodical work as may, from time to time, be notified in this behalf by the Central Government;

(zl) "newspaper establishment" means an establishment under the control of any person or body of persons, whether incorporated or not, for the production or publication of one or more newspaper or for conducting any news agency or syndicate and includes newspaper establishments specified as one establishment as below, namely:—

- (1) two or more newspaper establishments under common control shall be deemed to be one newspaper establishment;
- (2) two or more newspaper establishments owned by an individual and his or her spouse shall be deemed to be one newspaper establishment unless it is shown that such spouse is a sole proprietor or partner or a shareholder of a corporate body on the basis of his or her own individual funds;
- (3) two or more newspaper establishments publishing newspapers bearing the same or similar title and in the same language in any place in India or bearing the same or similar title but in different languages in the same State or Union territory shall be deemed to be one newspaper establishment.

Explanation 1 — For the purposes of sub-clause (3) two or more establishments shall be deemed to be under common control—

- (a) (i) where the newspaper establishments are owned by a common individual or individuals;
- (ii) where the newspaper establishments are owned by firms, if such firms have a substantial number of common partners;
- (iii) where the newspaper establishments are owned by bodies corporate, if one body corporate is a subsidiary of the other body corporate, or both are subsidiaries of a common holding company or a substantial number of their equity shares are owned by the same person or group of persons, whether incorporated or not;
- (iv) where one establishment is owned by a body corporate and the other is owned by a firm, if a substantial number of partners of the firm together hold a substantial number of equity shares of the body corporate;

- (v) where one is owned by a body corporate and the other is owned by a firm having bodies corporate as its partners if a substantial number of equity shares of such bodies corporate are owned, directly or indirectly, by the same person or group of persons, whether incorporated or not, or
- (b) where there is functional integrity between concerned newspaper establishments.

Explanation 2. – For the purposes of this clause,

- (a) different departments, branches and centers of newspaper establishments shall be treated as parts thereof;
- (b) a printing press shall be deemed to be a newspaper establishment if the principal business thereof is to print newspaper.

(zm) "notification" means a notification published in the Gazette of India or the official gazette of a state, as the case may be, and the expression "notify" with its grammatical variation and cognate expressions shall be construed accordingly;

(zn) "occupier" of a factory means the person who has ultimate control over the affairs of the factory;

Provided that-

- (i) in the case of a firm or other association of individuals, any one of the individual partners or members thereof shall be deemed to be the occupier;
- (ii) in the case of a company, any one of the directors shall be deemed to be the occupier;
- (iii) in the case of a factory owned or controlled by the Central Government or any State Government, or any local authority, the person or persons appointed to manage the affairs of the factory by the Central Government, the State Government or the local authority, as the case may be, shall be deemed to be the occupier;

Provided further that in the case of a ship which is being repaired, or on which maintenance work is being carried out, in a dry dock which is available for hire, the owner of the dock shall be deemed to be the occupier for all purposes except the matters as may be prescribed by the Central Government which are directly related to the condition of ship for which the owner of ship shall be deemed to be the occupier;

(zo) "office of the mine" means an office at the surface of the mine concerned;

(zp) "open cast working" means a quarry, that is to say, an excavation where any operation for the purpose of searching for or obtaining minerals has been or is being carried on, not being a shaft or an excavation which extends below superjacent ground;

(zq) "ordinarily employed" with reference to any establishment or part thereof, means the average number of persons employed per day in the establishment or part thereof during the preceding calendar year obtained by dividing the number of man days worked by the number of working days excluding rest days and other non-working days.

(zr) "owner", in relation to a mine, means any person who is the immediate proprietor or lessee or occupier of the mine or of any part thereof and in the case of a mine the business whereof is being carried on by a liquidator or receiver, such liquidator or receiver; but does not include a person who merely receives a royalty, rent or fine from the mine, or is merely the proprietor of the mine, subject to any lease grant or licence for the working thereof, or is merely the owner of the soil and not interested in the minerals of the mine; but any contractor or sub-lessee for the working of a mine or any part thereof shall be jointly and severally liable under the provisions of the Code with the owner;

(zs) "plantation" –

(A) means any land used or intended to be used for –

- (i) growing tea, coffee, rubber, cinchona or cardamom which admeasures five hectares or more

- (ii) growing any other plant, which admeasures five hectares or more and in which persons are employed or were employed on any day of the preceding twelve months, if, after obtaining the approval of the Central Government, the State Government, by notification, so directs.

Explanation.—Where any piece of land used for growing any plant referred to in paragraph (i) or paragraph (ii) of this sub-clause admeasures less than five hectares and is contiguous to any other piece of land not being so used, but capable of being so used, and both such pieces of land are under the management of the same employer, then, for the purposes of this sub-clause, the piece of land first mentioned shall be deemed to be a plantation, if the total area of both such pieces of land admeasures five hectares or more; and

(B) also means any land which the state government may, by notification, declares and which is used or intended to be used for growing any plant referred to in paragraph (i) or paragraph (ii) of sub-clause (A), notwithstanding that it admeasures less than five hectares:

Provided that no such declaration shall be made in respect of such land which admeasures less than five hectares immediately before the commencement of this Code; and

(C) includes offices, hospitals, dispensaries, schools and any other premises used for any purpose connected with any plantation within the meaning of sub-clause (A) and sub-clause (B); but does not include factory on the premises;

(x) "prescribed" means prescribed by rules made by the Central Government or the State Government, as the case may be, under this Code.

(zu) "principal employer", where the contract labour is employed or engaged, means—

- (i) in relation to any office or department of the Government or a local authority, the head of that office or department or such other officer as the Government or the local authority, as the case may be, may specify in this behalf;
- (ii) in a factory, the owner or occupier of the factory and where a person has been named as the manager of the factory, the person so named;
- (iii) in a mine, the owner or agent of the mine and where a person has been named as the manager of the mine, the person so named;
- (iv) in relation to any other establishment, any person responsible for the supervision and control of the establishment.

(zv) "producer", in relation to audio-visual production means the person by whom the arrangements necessary for producing such audio-visual (including the raising of finances and engaging audio-visual workers for producing audio-visual) are under-taken;

(zw) "production", in relation to production of audio-visual, including any of the activities in respect of making thereof;

(xx) "qualified medical practitioner" means a medical practitioner who possesses any recognised medical qualification as defined in clause (h) of section 2 of the Indian Medical Council Act, 1956 (102 of 1956) and who is enrolled on a State Medical register as defined in clause (k) of that section;

(zy) "relay" - where work of the same kind is carried out by two or more sets of persons working during different periods of the day each of such sets is called a "relay" and each such periods is called a "shift";

(zz) "sales promotion employees" means any person by whatever name called (including an apprentice) employed or engaged in any establishment for hire or reward to do any work relating to promotion of sales or business, or both, but does not include any such person—

- (i) who, being employed or engaged in a supervisory capacity, draws wages exceeding fifteen thousand rupees per mensem or an amount as may be notified by the Central Government from time to time; or
- (ii) who is employed or engaged mainly in a managerial or administrative capacity.

(zza) "serious bodily injury" means any injury which involves, or in all probability will involve, the permanent loss of any part or section of a body or the use of any part or section of a body, or the permanent loss of or

injury to the sight or hearing or any permanent physical incapacity or the fracture of any bone or one or more joints or bones of any phalanges of hand or foot:

(zb) "standards," "regulations" and "rules" respectively means standards, regulations and rules made under this Code:

(zc) "week" means a period of seven days beginning at midnight on Saturday night or such other night as may be approved in writing for a particular area by the Chief Facilitator :

(zd) "worker" means any person (except an apprentice as defined under clause (aa) of section 2 of the Apprentices Act, 1961) employed in any industry to do any manual, unskilled, skilled, technical, operational, clerical or supervisory work for hire or reward, whether the terms of employment be express or implied, and includes working journalists and sales promotion employees for the purposes of any proceeding under this Code in relation to an industrial dispute, includes any such person who has been dismissed, discharged or retrenched or otherwise terminated in connection with, or as a consequence of, that dispute, or whose dismissal, discharge or retrenchment has led to that dispute, but does not include any such person—

- (i) who is subject to the Air Force Act, 1950, or the Army Act, 1950, or the Navy Act, 1957; or
- (ii) who is employed in the police service or as an officer or other employee of a prison; or
- (iii) who is employed mainly in a managerial or administrative capacity; or
- (iv) who is employed in a supervisory capacity drawing wage of exceeding fifteen thousand rupees per month or an amount as may be notified by the Central Government from time to time.

Explanation.— For the purposes of this clause, the expression "industrial dispute" shall have the same meaning as assigned to it in clause (k) of section 2 of the Industrial Disputes Act 1947:

(ze) "Working Journalist" means a person whose principal avocation is that of a journalist and who is employed as such, either whole-time or part-time, in, or in relation to, one or more newspaper establishment, and includes an editor, a leader-writer, news editor, sub-editor, feature-writer, copy-tester, reporter, correspondent, cartoonist, news-photographer and proof-reader, but does not include any such person who is employed mainly in a managerial, supervisory or administrative capacity:

(2) A person working or employed in or in connection with mine is said to be working or employed—

- (a) "below ground" if he is working or employed
  - (i) in a shaft which has been or is in the course being sunk; or
  - (ii) in any excavation which extends below superjacent ground; and
- (b) "above ground" if he is working in an open cast working or in any other manner not specified in clause (a).

## Chapter II Registration

3. Registration of certain establishments. — (1) Every employer of an establishment, employing ten or more employees, shall, register

- (a) such establishment to which this Code applies at its commencement; and
- (b) such other establishment to which this Code may be applicable at any time after such commencement;

within a period of six months from such commencement or, as the case may be, from the date on which this Code becomes so applicable to such establishment, by making an application to the registering officer appointed by the appropriate government (hereinafter referred to as the registering officer) for the registration of such establishment:

Provided that the registering officer may entertain any such application for registration after the expiry of such period on payment of such late fees as may be prescribed by the appropriate government.

(2) Every application under sub-section (1) shall be submitted in prescribed manner to the registering officer in such form and shall contain such particulars and shall be accompanied by such fees as may be prescribed by the appropriate government.

(3) After the receipt of an application under sub-section (1), the registering officer shall register the establishment and issue a certificate of registration to the employer thereof in such form and within such time and subject to such conditions as may be prescribed by the Central Government.

Provided that where an establishment is ministry, department, attached office or subordinate office of the Central Government or a State Government, then, the registration of the establishment is not required under this section.

Explanation – For the purposes of this sub-section, the expression "attached office or sub-ordinate office of the Central Government or a State Government" means such offices of the Central Government or State Government, as the case may be, -

- (i) to whom any execution of policy of such Government has been decentralized for executive convenience; or
- (ii) which are responsible for providing executive direction required in implementation of the policies laid down by the Ministry or department of the Government to which they are attached or subordinate; or
- (iii) which generally function as field establishments or an agencies responsible for the detailed execution of the policies of the concerned Government; or

which, are, having regard to the nature of their responsibilities and functions, have been declared by the concerned Government to be the attached offices or subordinate offices.

(4) Where, after the registration of an establishment under this Code, any change occurs in the ownership or management or other particulars prescribed by the Central Government in respect of such establishment, the particulars regarding such change shall be intimated by the employer to the registering officer within thirty days of such change in such form as may be prescribed by the Central Government.

(5) The employer of an establishment shall, within thirty days of the closing of establishment -

- (a) inform the closing of such establishment;
- (b) certify payment of all dues to the workers,

to the registering officer in such manner as may be prescribed by the Central Government and the registering officer shall, on receiving such information and certificates remove such establishment, as the case may be, from the register of establishment maintained by him and cancel the registration certificate within thirty days.

(6) If an employer of an establishment-

- (i) violates any provision of this Code applicable to such establishment; or
- (ii) has misrepresented or misrepresents any fact relating to registration to the registering officer,

the registering officer may after providing employer an opportunity of being heard, revoke the registration of the establishment.

(7) No employer of an establishment-

- (i) who has not registered the establishment under this section; or
- (ii) the registration of such establishment has been cancelled under clause (5) or revoked under clause (6) and no appeal has been preferred against such revocation under section 4 or where such appeal has been preferred, such appeal has been dismissed,

shall employ in the establishment any employee.

4. Appeal- (1) Any person aggrieved by an order made under section 3 may, within thirty days from the date on which the order is communicated to him, prefer an appeal to an appellate officer who shall be a person notified in this behalf by the appropriate Government:

Provided that the appellate officer may entertain the appeal after the expiry of the said period of thirty days, if he is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

(2) On receipt of an appeal under sub-section (1), the appellate officer shall, after giving the appellant an opportunity of being heard, dispose of the appeal within a period of thirty days from the date of receipt of the appeal.

5. **Notice by employer of commencement and cessation of operation:-** No employer of an establishment being factory or mine or relating to contract labour or building or construction work shall use such establishment to commence the operation of any industry, trade, business, manufacture or occupation thereon without sending notice of such purpose in such form and manner and to such authority as may be prescribed by the appropriate Government and shall also intimate in the prescribed manner to such authority the cessation of such operation.

### Chapter III Duties of Employer and Employees, etc.

#### 6. Duties of employer:

- (1) Every employer shall ensure to his employees that work place is free from hazards that cause or are likely to cause injury or occupational disease to the employees, and shall comply with the Occupational Safety and Health standards made under this Code and of the regulations, rules, bye-laws and orders made there under.
- (2) Every employer shall provide and maintain, as far as is reasonably practicable, a working environment that is safe and without risk to the health of the employees.
- (3) Every employer or manager of an establishment shall furnish to every worker on his appointment in the establishment, a letter of appointment in the prescribed form and where a worker appointed on or before the commencement of this Code does not have an appointment letter furnished by his employer or manager, such worker shall, within three months of such commencement, be furnished with appointment letter in the form so prescribed.
- (4) No employer shall levy or permit to be levied on any employee, any charge in respect of anything done or provided for maintenance of safety and health at work place including conduct of medical examination and investigation for the purpose of detecting occupational diseases.
- (5) Without prejudice to the generality of the provisions of sub-section (1), (2), (3), (4) the duties of an employer shall particularly in respect of factory, mines, dock, building and other construction work or plantation include-
  - (a) the provision and maintenance of plant and systems of work in the workplace that are safe and without risks to health;
  - (b) the arrangements in the workplace for ensuring safety and absence of risks to health in connection with the use, handling, storage and transport of articles and substances;
  - (c) the provision of such information, instruction, training and supervision as are necessary to ensure the health and safety of all workers at work;
  - (d) the maintenance of all places of work in the workplace in a condition that is safe and without risks to health and the provision and maintenance of such means of access to, and egress from, such places as are safe and without such risks;
  - (e) the provision, maintenance or monitoring of such working environment in the workplace for the employees that is safe, without risks to health and adequate as regards facilities and arrangements for their welfare at work.



(6) Every employer relating to factory, mine, dock work, building or other construction work or plantation shall ensure and be responsible for the safety and health of persons who are on the work premises of the employer, with or without his knowledge.

7. Duties and responsibilities of owner, agent and manager in relation to mine.—(1) The owner and agent of every mine shall jointly and severally be responsible for making financial and other provisions and for taking such other steps as may be necessary for compliance with the provisions of this Code and the regulations, rules, bye-laws and orders made there under.

(2) The responsibility in respect of matters provided for in the rules, made by the Central Government under this Code in respect of mines—

- (a) requiring the maintenance therein, wherein the women are employed or were employed on any day of the preceding twelve months, suitable rooms to be reserved for the use of children under the age of six years belonging to such women and for providing, either generally or with particular reference to the number of women employed in the mine, the number and standards of such rooms provided and the supervision to be exercised therein;
- (b) for requiring the maintenance at or near pitheads of bathing places equipped with shower baths and of locker rooms for the use of men employed in mines and of similar and separate places and rooms for the use of women employed therein, and for providing, either generally or with particular reference to the number of men and women ordinarily employed in a mine, the number and standards of such place and rooms;
- (c) for requiring the provision and maintenance in any mine specified in this behalf by the Chief Facilitator or Facilitator, wherein, more than two hundred and fifty persons are ordinarily employed, of a canteen or canteens for the use of such persons;

shall be exclusively complied with by the owner and agent of the mine and by such person (other than the mines manager) whom the owner or agent may appoint for securing compliance with the aforesaid provisions.

(3) If the compliance of any instructions given under sub-section (2) or given otherwise than through the manager under sub-section (3) of section 53, results in the contravention of the provisions of this Code or of the regulations, rules, bye-laws or orders made there under, every person giving such instructions shall also be liable for the contravention of the provisions concerned.

(4) Subject to the provisions of sub-sections (1), (2) and (3), the owner, agent and manager of every mine shall jointly or severally be responsible to see that all operations carried on in connection with the mine are conducted in accordance with the provisions of this Code and of the regulations, rules, bye-laws and orders made there under.

(5) In the event of any contravention by any person whatsoever of any of the provisions of this Code or of the regulations, rules, bye-laws or orders made there under, relating to mine, except those which specifically require any person to do any act or thing or prohibit any person from doing an act or thing, besides the person who contravenes, then, each of the following persons shall also be deemed to be guilty of such contravention unless he proves that he had used due diligence to secure compliance with the provisions and had taken reasonable means to prevent such contravention, namely:—

- (i) the official or officials appointed to perform duties of supervision in respect of the provisions contravened;
- (ii) the manager of the mine;
- (iii) the owner and agent of the mine;
- (iv) the person appointed, if any, to carry out the responsibility under sub-section (2).

(6) It shall not be a defence in any proceedings brought against the owner or agent of a mine under this section that the manager and other officials have been appointed in accordance with the provisions of this Code or that a person to carry the responsibility under sub-section (2) has been appointed.

8. Duties of manufacturers—(1) The Central Government shall make regulations after consultation with the National Occupational Safety and Health Advisory Board and such regulations shall be complied with by every person who designs, manufactures, imports or supplies any article for use in any factory.

(2) The regulations under sub-section (1) shall be made generally for governing the duties of manufacturers as regards articles and substances for use in factories and particularly to-

- (a) ensure so far as is reasonably practicable, that the article is so designed and constructed in the factories as to be safe and without risks to the health of the workers when properly used;
- (b) carry out or manage for the carrying out such tests and examination in the factories as may be considered necessary for the effective implementation of the provisions of clause (a);
- (c) take out steps as may be necessary to ensure that adequate information will be made available-
  - (i) in connection with the use of the article in any factory;
  - (ii) about the use for which such article is designed and tested; and
  - (iii) about any conditions necessary to ensure that the article, when put to such use, shall be safe, and without risks to the health of the workers;

Provided that where an article is designed or manufactured outside India, then such regulations shall contain provisions making obligatory on the part of the importer to see -

- (A) that the article conforms to the same standards of such article manufactured in India; or
- (B) if the standards adopted in the country outside India for the manufacture of such article is above the standards adopted in India, that article conforms to such standards in such country;
- (C) if there is no standard of such article in India, then, the article conforms to the standard adopted in the country from where it is imported at its national level;

9. Duties of architects, project engineers and designers.—(1) It shall be the duty of the architect, project engineer or designer responsible for any building or other construction work or the design of any project or part thereof relating to such building or other construction work to ensure that, at the planning stage, due consideration is given to the safety and health aspects of the building workers and employees who are employed in the erection, operation and execution of such projects and structures as the case may be.

(2) Adequate care shall be taken by the architect, project engineer and other professionals involved in the project referred to in sub-section (1), not to include anything in the design which would involve the use of dangerous structures or other processes or materials, hazardous to health or safety of building workers and employees during the course of erection, operation and execution as the case may be.

(3) It shall also be the duty of the professionals, involved in designing the buildings structures or other construction projects, to take into account the safety aspects associated with the maintenance and upkeep of the structures and buildings where maintenance and upkeep may involve special hazards.

10. Notice of certain accident.—(1) Where at any place in an establishment, an accident occurs which causes death, or which causes any bodily injury by reason of which the person injured is prevented from working for period of forty-eight hours or more immediately following the accident or which is of such nature as may be prescribed, then,

- (i) employer or owner of such establishment if it is mine or where an agent of such mine takes part in management of the place where such accident occurs in the mine, then, such agent; or
- (ii) employer in relation to such establishment if it is factory or relates to dock work; or
- (iii) the employer of such establishment if it is plantation; or
- (iv) employer of the establishment if it relates to building or other construction work; or
- (v) employer in relation to any other establishment,

as the case may be, shall send notice thereof to such authorities, in such manner and within such time, as may be prescribed.

(2) Where a notice given under sub-section (1) relates to an accident causing death in an establishment, the authority to whom the notice is sent shall make an inquiry into the occurrence within one month of the receipt of the notice or if there is no such authority, the Chief Facilitator shall cause the Facilitator to make an inquiry within the said period.

**11. Notice of certain dangerous occurrences-** Where in an establishment any dangerous occurrence of such nature as may be prescribed, occurs, whether causing any bodily injury or disability, or not, the employer shall send notice thereof to such authorities, and in such form and within such time, as may be prescribed.

**12. Notice of certain diseases.** -[1] Where any worker in an establishment contracts any disease specified in the Third Schedule the employer of the establishment shall send notice thereof to such authorities, and in such form and within such time, as may be prescribed.

(2) If any qualified medical practitioner attends on a person, who is or has been employed in an establishment, and who is, or is believed by the qualified medical practitioner, to be suffering from any disease specified in the Third Schedule, the medical practitioner shall without delay send a report in writing to the office of the Chief Facilitator in the form and manner and within such time as prescribed.

(3) If any qualified medical practitioner fails to comply with the provisions of sub-section (2), he shall be punishable with fine which may extend to ten thousand rupees.

(4) The Central Government may, by notification, add to or alter the Third Schedule and any such addition or alteration shall have effect as if it had been made by amendment of this Code.

**13. Duties of employees-** Every employee at work place shall –

- (a) take reasonable care for the health and safety of himself and of other persons who may be affected by his acts or omissions at the work place;
- (b) comply with the safety and health requirements specified in the Standards;
- (c) co-operate with the employer in meeting the statutory obligations of the employer under the Code;
- (d) if any situation which is unsafe or unhealthy comes to his attention, as soon as practicable, report such situation to his employer or to the health and safety representative for his workplace or section thereof, as the case may be, who shall report it to the employer;
- (e) willfully interfere with, or misuse, or neglect any appliance, convenience or other thing provided, work for the purpose of securing the health, safety and welfare of workers; and
- (f) not do, willfully and without reasonable cause, anything, likely to endanger himself or others.

**14. Rights of employee-** (1) Every employee in an establishment shall have the right to obtain from the employer information relating to safety and health at work; and represent to the employer directly or through a member of the Safety Committee, if constituted by the employer for such purpose, regarding inadequate provision for protection of his safety or health in connection with the work activity in the workplace, and if not satisfied, to the Facilitator.

(2) (i) Where the employees referred to in sub-section (1) in any work place have reasonable apprehension that there is a likelihood of imminent serious personal injury or death or imminent danger to health, they may bring the same to the notice of their employer directly or through a member of the Safety Committee referred to in sub-section (1) and simultaneously bring the same to the notice of the Facilitator.

(ii) The employer or any employee referred to in sub-section (1) shall take immediate remedial action if he is satisfied about the existence of such imminent danger and send a report forthwith of the action taken to the Facilitator.

(3) If the employer referred to in clause (ii) of sub-section (2) is not satisfied about the existence of any imminent danger as apprehended by his employees, he shall, nevertheless, refer the matter forthwith to the Facilitator whose decision on the question of the existence of such imminent danger shall be final.

**15. Duty not to interfere with or misuse things-** No person shall intentionally or recklessly interfere with, damage or misuse anything which is provided in the interest of health, safety or welfare under this Code.

**Chapter IV**  
**Occupational Safety and Health**

**16. National Occupational Safety and Health Advisory Board-**(1) The Central Government shall, by notification, constitute the National Occupational Safety and Health Advisory Board (hereinafter in this Code referred to as the National Board) to discharge the functions conferred on it by or under this Code and to advise to the Central Government on the matters relating to—

- (i) Standards, rules and regulations to be framed under this Code;
- (ii) implementation of the provisions of this Code and the rules and regulations relating thereto;
- (iii) the issues of policy relating to occupational safety and health referred to it, from time to time, by the Central Government; and
- (iv) any other matter relating to this code referred to, from time to time, by the Central Government.

(2) The National Board shall consist of—

- (i) Secretary, Ministry of Labour and Employment—Chairperson (ex-officio);
- (ii) Director General, Factory Advises Services and Labour Institutes, Mumbai—Member (ex-officio);
- (iii) Director General, Mines Safety, Dhanbad—Member (ex-officio);
- (iv) Chief Controller of Explosives, Nagpur—Member (ex-officio);
- (v) Chairman, Central Pollution Control Board, New Delhi—Member (ex-officio);
- (vi) Chief Labour Commissioner (Central), New Delhi—Member (ex-officio);
- (vii) Principal Secretaries dealing with labour matters of 4 States (by rotation as the Central Government may deem fit) —Member (ex-officio);
- (viii) Director General, Employee State Insurance Corporation, New Delhi—Member (ex-officio);
- (ix) Director General, Health Services, New Delhi—Member (ex-officio);
- (x) five representatives of employers —Member (ex-officio);
- (xi) five representatives of employees —Member (ex-officio);
- (xii) five eminent persons connected with the field of Occupational Safety and Health, or representatives from reputed research institutions or similar other discipline — Member;
- (xiii) Joint Secretary, Ministry of Labour and Employment—Member Secretary (ex-officio);

(3) The terms of office of the Members referred to in clause (vii), (x), (xi) and (xii) of sub-section (2) shall be of three years and the procedure of the National Board and the officers and staff thereof shall be such as may be prescribed.

(4) The Central Government may constitute as many technical Committees or advisory committees consisting of such number of members having such qualifications as may be prescribed, to assist the National Board in discharge of its function specified in sub-section (1).

**17. State Occupational Safety and Health Advisory Board-** (1) The State Government shall constitute a board to be called the State Occupational Safety and Health Advisory Board (herein after referred to as State Advisory Board) to advise the State Government on such matters arising out of the administration of this Code as may be referred to it.

(2) The constitution, procedure and other matters relating to such Advisory Board shall be such as may be prescribed by the State Government.

(3) The State Government may constitute as many technical Committees or advisory committee of such advisory Board including site appraisal committees, consisting of such number of members having such qualifications as may be prescribed, to assist the State Government or State Advisory Board in discharge of their functions relating to the area falling within their respective jurisdiction.

**18. Occupational Safety and Health Standards –** (1) The Central Government shall declare, by notification, standards on occupational safety and health for work places relating to factories, mines, dock work, building and other construction work and other establishments.

(2) In particular and without prejudice to the generality of the power to declare standards under sub-section (1), such standards shall relate to—

- (a) Physical, chemical, biological and any other hazards to ensure to the extent feasible on the basis of the best available evidence or functional capacity, that no employee will suffer material impairment of health or functional capacity even if such employee has regular exposure to hazard dealt with by such standard for the period of his working life;
- (b) the norms-
  - (i) appraising the hazards to employees and users to which they are exposed;
  - (ii) relevant symptoms and appropriate emergency treatment and proper conditions and precautions of safe use or exposure;
  - (iii) monitoring and measuring exposure of employees to hazards;
  - (iv) medical examination and other tests which shall be made available, by the employer or at his cost, to the employees exposed to hazards; and
  - (v) of hazard evaluation procedures like safety audit, hazard and operability study, fault free analysis, event free analysis and such other requirements;
- (c) norms for medical examination including criteria for detection and reporting of occupational diseases to be extended to the worker even after he ceases to be in employment, if he is suffering from an occupational disease which arises out of or in course of employment;
- (d) such aspects of occupational safety and health which the Central Government considers necessary on the report of the authority designated by such Government for such purpose relating to work places;
- (e) such safety and health measures which may be required having regard to the specific conditions prevailing at the workplaces relating to mine, factory, building and other construction work, beedi and cigar, dock work or any other establishment notified, as the case may be; and
- (f) matters specified in the Second Schedule to this Code.

(3) The Central Government, on the basis of the recommendation of National Occupational Safety and Health Advisory Board, after giving by notification, not less than forty five days previous notice of its intention so to do, may, by like notification, amend the Second Schedule to this Code.

(4) Every standard made under sub-section (1) and sub-section (2) and every notification issued under sub-section (3) shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the standard or notification or both Houses agree that the standard or notification should not be made, the standard or notification shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that standard or notification.

(5) The State Government, for the purposes to which it is the appropriate Government, may, after prior approval of the Central Government, amend the standards made under sub-section (1) and sub-section (2) for their applicability in that state.

(6) Every amendment of the standards made by State Government under sub-section (4) shall be laid before the state legislature.

19. **Research related activities** - It shall be the duty of institutions in the field of occupational safety and health as notified by the Central Government to cause to conduct research, experiments and demonstrations relating to occupational safety and health and thereafter submit their recommendation to the appropriate government.

20. **Safety and occupational health surveys.**— At any time during the normal working hours of an establishment or at any other time as is found by him to be necessary, -

- (a) the Chief Facilitator in the case of factory or mine; or
- (b) the Director General of Factory Advice Service and Labour Institute in the case of factory; or
- (c) the Director General of Mines Safety in the case of mine; or
- (d) the Director General of Health Services in the case of factory or mine; or
- (e) such other officer as may be authorised by the appropriate Government in the case of any other establishment or class of establishment;

after giving notice in writing to the occupier or manager of the factory or, as the case may be, to the manager of the mine or to any other person who for the time being purports to undertake safety and occupational health survey of such factory or mine or in the case of any other establishment or class of establishment to such person who is for the time being responsible for the safety and the occupational health of such other establishment or an establishment of such class of establishment, as the case may be, conduct survey of the factory or as the case may be of the mine or such other establishment or such an establishment of the class of establishment and such occupier or manager or such responsible person shall afford all facilities for such survey, including facilities for the examination and testing of plant and machinery and collection of samples and other data relevant to the survey.

(2) For the purpose of facilitating surveys under sub-section (1) every worker shall, if so required by the person conducting the survey, present himself to undergo such medical examination as may be considered necessary by such person and furnish all information in his possession and relevant to the survey.

(3) Any time spent by a worker for undergoing medical examination or furnishing information under sub-section (2) shall, for the purpose of calculating wages and extra wages for overtime work, be deemed to be time during which such worker worked in the establishment.

Explanation.—For the purposes of this section, the report, if any, submitted to the appropriate Government by the person conducting the survey under sub-section (1) shall be deemed to be a report submitted by a Facilitator under this Code.

**21. Statistics.**—(1) In order to further the purposes of this Code, the Central Government and the State Government shall develop and maintain an effective programme of collection, compilation and analysis of occupational safety and health statistics.

(2) To carry out the functions, the appropriate Government may promote, encourage or directly engage in programme of studies, information and communication concerning occupational safety and health statistics.

**22. Safety Committee and Safety Officers.**—(1) In every factory and establishment relating to building and other construction work wherein each five hundred workers or more, or in a mine wherein one hundred workers or more, are ordinarily employed, the employer shall constitute a Safety Committee consisting of such number of representatives of the employer and the workers as may be prescribed by the appropriate Government;

Provided that the number of persons representing the workers shall, in no case, be less than the persons representing the employer.

Provided further that the appropriate Government may, if it considers appropriate, also direct other establishments to set up Safety Committee or appoint Safety Officers.

(2) In every establishment referred to in sub-section (1), wherein such number of workers are employed as may be prescribed, the employer shall also appoint such number of safety officers, who shall possess such qualifications and perform such duties, as may be prescribed.

## Chapter V Health and Working Conditions

**23. Responsibility of employer for maintaining health and working conditions**—(1) The employer shall be responsible to maintain in his establishment the health and working conditions for the workers to provide them such standard of working atmosphere as may be prescribed by the Central Government.

(2) Without prejudice to the generality of the power conferred under sub-section (1), the Central Government may prescribe for providing all or any of the following matters in the establishment or class of establishment, as the case may be, namely:—

- (i) cleanliness and hygiene;
- (ii) ventilation, temperature and humidity;
- (iii) environment free from dust, noxious gas, fumes and other impurities;
- (iv) the adequate standard of humidification, artificially increasing the humidity of the air, ventilation and cooling of the air in work rooms;
- (v) potable drinking water;

- (vi) the adequate standards to prevent overcrowding and to provide sufficient space to workers or persons, as the case may be, employed therein;
- (vii) adequate lighting;
- (viii) sufficient arrangement for latrine and urinal accommodation to male, female and transgender separately for workers maintaining hygiene therein;
- (ix) effective arrangements for treatment of wastes and effluents; and
- (x) any other arrangement which the Central Government considers appropriate for providing decent working conditions to the workers employed in an establishment.

#### Chapter VI Welfare Provisions

24. Welfare facilities in the establishment, etc. - (1) The employer shall be responsible to provide and maintain in his establishment welfare facilities for the workers of such standard as may be prescribed by the Central Government.

(2) Without prejudice to the generality of the power conferred under sub-section (1), the Central Government may prescribe for providing all or any of the following matters in the establishment or class of establishment, as the case may be, namely:

- (i) adequate and suitable facilities for washing to workers for both male and female separately;
- (ii) bathing places and locker rooms for both male and female employees separately;
- (iii) place of keeping clothing not worn during working hours and for the drying of wet clothing;
- (iv) sitting arrangements for all workers obliged to work in a standing position;
- (v) adequate standard of canteen or canteens and medical examination of workers thereof in an establishment employing one hundred or more workers including contract labour ordinarily employed;
- (vi) creche having suitable room or rooms for the use of children under the age of six years at suitable location in every establishment wherein more than fifty workers are ordinarily employed;
- (vii) readily accessible during all working hours adequate first-aid boxes or cupboards with contents; and
- (viii) any other welfare measures which the Central Government considers, under the set of circumstances, as required for decent life of the workers.

(3) Without prejudice to the generality of the powers conferred under sub-section (1) and sub-section (2), the Central Government may also prescribe for the following matters, namely:-

- (i) ambulance room in every factory, mine and other construction work wherein more than five hundred workers are ordinarily employed;
- (ii) medical facilities at the operating centres and halting stations, uniforms, raincoats and other like amenities for protection from rain or cold for motor transport workers;
- (iii) adequate, suitable and separate shelters or rest-rooms for male and female workers and lunch-room in every factory and mine wherein more than seventy five workers are ordinarily employed and in motor transport undertaking wherein worker is required to halt at night;
- (iv) the employment of welfare officer in every factory, mine or plantation wherein two hundred fifty or more workers are ordinarily employed and the qualification, conditions of service and duties of such welfare officer;
- (v) the provision for providing by the employer temporary living accommodation, free of charges and within the work site or as near to it as may be possible, to all building workers employed by him and for causing removal or demolition of such temporary living accommodation and for returning by the employer the possession of any land obtained by him for such purpose from Municipal Board or any other local authority;
- (vi) for payment by the principal employer the expenses incurred on providing the accommodation to the contractor, where the building and other construction work is done through the contractor.

(4) Without prejudice to the generality of the powers conferred under sub-section (1) and sub-section (2), the State Government may also prescribe the manner in which the employer of the plantation shall provide for drinking water, housing facility, education facility for the children of workers, health facilities for the worker and his family and other amenities required for the protection of the plantation worker from rain or cold.

## Chapter VII

## Hours of Work and Annual Leave with Wages

25. Weekly and daily working hours, etc. – (1) No worker shall be required or allowed to work in an establishment for more than –

- (i) forty-eight hours in a week;
- (ii) nine hours in a day subject to hours of work specified in clause (i); and
- (iii) the periods of work in each day shall be so fixed that no period shall exceed five hours and there shall be half an hour of interval after each such period.

Provided that the period of work of a worker shall be so arranged that inclusive of his intervals for rest under this sub-section, it shall not spread over more than ten and half hours in any day;

Provided further that in the case of mines:-

- (i) the persons employed below ground in a mine shall not be allowed to work for more than eight hours in any day;
- (ii) no work shall be carried on below ground in any mine except by a system of shifts so arranged that the period of work for each shift is not spread over more than the daily maximum stipulated in clause (i);
- (iii) no person employed in a mine shall be allowed to be present in any part of a mine below ground except during the periods of work shown in respect of him in the register maintained under sub-section (1) of section 33.

(2) In case of overtime work to be performed by a worker in any establishment, total number of hours of overtime shall not exceed one hundred for any one quarter;

Provided that:-

- (i) the total number of hours of work in any day, including overtime shall not exceed ten;
- (ii) the spread over, inclusive of intervals of rest, shall not exceed twelve hours in any one day;
- (iii) the total number of hours of work in a week, including overtime, shall not exceed sixty.

Explanation.- For the purposes of this section, the expression "quarter" means a period of three consecutive months beginning on the 1<sup>st</sup> January, the 1<sup>st</sup> of April, the 1<sup>st</sup> of July or 1<sup>st</sup> October.

(3) Notwithstanding anything contained in sub-section (1) and sub-section (2), the hours of work in case of motor transport shall be such as may be prescribed taking into account that -

- (i) the time during which a motor transport worker is at the disposal of the employer or of any other person, he shall be entitled to claim his services;
- (ii) the running time of the transport vehicle during which the work will be done by him, the time spent during the subsidiary work and the mere attendance at terminals of less than fifteen minutes shall be included in the said hours of work.

Explanation.—For the purposes of this sub-section—

- (a) "running time" in relation to a working day means the time from the moment a transport vehicle starts functioning at the beginning of the working day until the moment when the transport vehicle ceases to function at the end of the working day, excluding any time during which the running of the transport vehicle is interrupted for a period exceeding such duration as may be prescribed during which period the persons who drive, or perform any other work in connection with the transport vehicle are free to dispose of their time as they please or are engaged in subsidiary work;
- (b) "subsidiary work" means work in connection with a transport vehicle, its passengers or its load which is done outside the running time of the transport vehicle, including in particular—
  - (i) work in connection with accounts, the paying in of cash, the signing of registers, the handing in of service sheets, the checking of tickets and other similar work;
  - (ii) the taking over and garaging of the transport vehicles;
  - (iii) travelling from the place where a person signs on to the place where he takes over the transport vehicle and from the place where he leaves the transport vehicle to the place where he signs off;
  - (iv) work in connection with the upkeep and repair of the transport vehicle; and
  - (v) the loading and unloading of the transport vehicle;



- (c) "period of mere attendance" means the period during which a person remains at his post solely in order to reply to possible calls or to resume action at the time fixed in the duty schedule.

(4) Notwithstanding anything contained in sub-section (1) and sub-section (2), the hours of work for working journalist shall, subject to a maximum of one hundred and forty-four hours work during any period of four consecutive weeks and a period of not less than twenty-four consecutive hours rest during any period of seven consecutive days, be as may be prescribed.

(5) Notwithstanding anything contained in sub-section (1) and sub-section (2), in case of a sales promotion employee—

(i) in addition to such holidays, casual leave or other kinds of leave as may be prescribed, every sales promotion employee shall be granted, if requested for—

- (a) earned leave on full wages for not less than one-eleventh of the period spent on duty;
- (b) leave on medical certificate on one-half of the wages for not less than one-eighteenth of the period of service;

(ii) the maximum limit up to which he may accumulate earned leave shall be such as may be prescribed;

(iii) the limit up to which the earned leave may be availed of at a time by him and the reasons for which such limit may be exceeded shall be such as may be prescribed;

(iv) he shall,—

- (a) when he voluntarily relinquishes his post or retires from service, or
- (b) when his services are terminated for any reason whatsoever (not being termination as punishment),

be entitled to cash compensation, subject to such conditions and restrictions as may be prescribed (including conditions by way of specifying the maximum period for which such cash compensation shall be payable), in respect of the earned leave earned by him and not availed of;

(v) where he dies while in service, his heirs shall be entitled to cash compensation for the earned leave earned by him and not availed of;

(vi) the cash compensation which will be payable to him or, as the case may be, his heirs in respect of any period of earned leave for which he or his heirs, as the case may be, is or are entitled to cash compensation under clause (iv) or clause (v), as the case may be, shall be an amount equal to the wages due to the sales promotion employee for such period.

(6) Notwithstanding anything contained in this section,—

- (i) the appropriate Government may, taking into consideration the nature of work or other circumstances, relax total number of overtime hours in a quarter subject to a maximum of one hundred and twenty five hours in a quarter in any establishment or class or description of establishment;

(ii) the chief facilitator may,—

- (a) approve that the maximum hours specified in clause (ii) of the proviso to sub-section (1) may be exceeded in order to facilitate the change of shifts; and
- (b) for the reasons to be recorded in writing and subject to such conditions as he may deem fit to impose, permit the spread-over to extend over a period not exceeding fourteen hours in any day.

(7) Notwithstanding anything contained in the section the working hours of an adolescent worker shall be regulated in accordance with the provisions of the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986 (51 of 1986)

26. Weekly and compensatory holidays— (1) No worker shall be allowed to work in an establishment on more than six days in any one week—

Provided that in any motor transport undertaking, an employer may, in order to prevent any dislocation of a motor transport service, require a worker to work on any day of rest which is not a holiday so arranged that the worker does not work for more than ten days consecutively without a holiday for a whole day intervening.

(2) The appropriate Government may, by notification, exempt such workers as it thinks reasonable from the provisions of sub-section (1), subject to such conditions as may be prescribed.

(3) Where, as a result of the passing of an order or the making of a rule under the provisions of this Code exempting an establishment or the workers therein from the provisions of sub-section (2), a worker is deprived of any of the weekly holidays, the worker shall be allowed, within the month in which the holidays were due or within the two months immediately following that month, compensatory holidays of equal number to the holidays so deprived.

**27. Extra wages for overtime.**— There shall be paid wage at the rate of twice the ordinary rate of wages in respect of overtime work, where,—

- (i) a worker works in an establishment for more than nine hours in any day or for more than forty-eight hours in any week;
- (ii) in a mine a person works above ground for more than nine hours in any day, or works below ground for more than eight hours in any day or works for more than forty-eight hours in any week whether above ground or below ground;

and the period of overtime shall be calculated on a daily basis or weekly basis, whichever is more favourable to such person or, as the case may be, to such worker.

Explanation — For the purposes of this section, —

“ordinary rate of wage” means the basic wages plus dearness allowance or any other allowances which is considered as a part of wage.

**28. Night shifts** - Where a worker in a factory works on a shift which extends beyond midnight,—

- (a) for the purposes of sections 26, a holiday for a whole day shall mean in his case a period of twenty-four consecutive hours beginning when his shift ends;
- (b) the following day for him shall be deemed to be the period of twenty-four hours beginning when such shift ends, and the hours he has worked after midnight shall be counted in the previous day.

**29. Prohibition of overlapping shifts** - (1) The work shall not be carried on in any establishment by means of a system of shifts so arranged that more than one relay of workers is engaged in work of the same kind at the same time.

(2) The appropriate Government or subject to the control of the appropriate Government, the Chief Facilitator, may, by written order and for the reasons specified therein, exempt on such conditions as may be deemed expedient, any establishment or class or description of establishment or any department or section of an establishment or any category or description of workers therein from the provisions of sub-section (1).

Provided that no such exemption shall be given in case of mines or any department or section thereof or any category or description of workers therein.

**30. Restriction on double-employment in factory and mine**- No worker shall be required or allowed to work in a mine or factory if he has already been working in any other such similar establishment within the preceding twelve hours, save in such circumstances as may be prescribed.

**31. Notice of periods of work -** (1) There shall be displayed and correctly maintained in every establishment a notice of periods of work, showing clearly for every day the periods during which workers may be required to work in accordance with the provisions as may be prescribed.

(2) The form of notice required by sub-section (1), the manner of maintaining such notice and the manner in which such notice shall be sent to the Facilitator shall be such as may be prescribed.

(3) Any proposed change in the system of work in any establishment which will necessitate a change in the notice referred to in sub-section (1) shall be intimated to the Facilitator before the change is made, and except with the previous sanction of the Facilitator, no such change shall be made until one week has elapsed since that last change.

**32. Annual leave with wages, etc. -** (1) Every person employed in an establishment shall be entitled for such leave with wages in such manner during a calendar year as may be prescribed subject to the condition that -

- (i) he has worked ninety days or more in such calendar year;
- (ii) he shall be entitled for one day leave for every twenty days of his work, and in the case of adolescent worker for fifteen days of his work, in such calendar year;
- (iii) any period of layoff, maternity leave or annual leave availed by such person in such calendar year shall be counted for calculating the period of ninety days or more under clause (i), but he shall not earn leave for the period so counted;
- (iv) any holidays falling between the leave availed by such person in a calendar year or prefixed or suffered holiday shall be excluded from the period of leave so availed;
- (v) in case of such person whose service commences otherwise than on the first day of January shall be entitled to leave with wages at the rate specified in clause (ii), if he was worked for one-fourth of the total number of days in the remainder of the calendar year;
- (vi) in case such person is discharged or dismissed from service or quits employment or is superannuated or dies while in service, during the course of the calendar year, such person or heir or nominee, as the case may be, shall be entitled to wages in lieu of the quantum of leave to which such person was entitled immediately before his discharge, dismissal, quitting of employment, superannuation or death, calculated as specified in preceding clause, even such person has not worked for the required period under this sub-section making such person eligible to avail such leave, and such payment shall be made -
  - (a) where such person is discharged or dismissed or quits employment before the expiry of the second working day from the date of such discharge, dismissal or quitting; and
  - (b) where such person is superannuated or dies while in service, before the expiry of two months from the date of such superannuation or death;
- (vii) if such person does not in any one calendar year take the whole of the leave allowed to him under this sub-section and the rules made there under, then, any leave not taken by him shall be added to the leave to be allowed to him in the succeeding calendar year so that -
  - (a) the total number of days of leave that may be carried forward to a succeeding year shall not exceed thirty days; and
  - (b) such person, who has applied for leave with wages but has not been given such leave in accordance with this sub-section and the rules made there under shall be entitled to carry forward the leave refused without any limit.

(2) The appropriate Government may, by notification, extend the provisions of sub-section (1) to any other establishment except railway establishment.

#### Chapter VIII

#### Maintenance of Registers, Records and Returns etc.

**33. Maintenance of registers and records and filing of returns -** (1) An employer shall -

- (a) maintain prescribed register, electronically or otherwise, containing prescribed particulars of workers employed by him including in respect of such workers, -
  - (i) work performed by them;
  - (ii) number of hours of work constituting normal working hours in a day;

- (iii) day of rest allowed in every period of seven days;
- (iv) wage paid and receipts given there for;
- (v) leave, leave wages, overtime work, attendance and dangerous occurrences;
- (vi) employment of adolescent; and
- (vii) any other matter prescribed by the Central Government;

- such workers;
- (b) display notices at the working place of the workers in the manner and form as may be prescribed;
  - (c) issue wage slips to the workers, in electronic forms or otherwise; and
  - (d) file such return electronically or otherwise to the Facilitator in such manner as may be prescribed.
- (2) The provisions of sub-section (1) shall not apply in respect of the employer to the extent he employs not more than five persons for agriculture or domestic purpose; but such employer, when demanded shall produce before the Facilitator, the reasonable proof towards the payment of wages to the persons so employed.
- (3) The appropriate Government may prescribe the forms of returns which shall be filed by the establishments or the class of establishment in the prescribed manner.
- (4) In this section, the expression "domestic purpose" means the purpose exclusively relating to the home or family affairs of the employer and does not include any affair relating to any establishment, industry, trade, business, manufacture or occupation.

#### CHAPTER IX Facilitators and other Authority

**34. Appointment of Facilitators –** (1) The appropriate Government may, by notification, appoint such persons who possess the prescribed qualifications to be Facilitators for such purposes of such establishments or class or description of establishment and for such local or other limits of jurisdiction as may be specified in the notification.

(2) The Facilitators appointed under sub-section (1) shall, apart from other duties to be discharged by them under this Code, conduct such inspections including web based inspection in such manner as may be prescribed.

(3) The appropriate Government may, by notification, appoint any person or persons possessing the prescribed qualifications and experience to be Chief Facilitator for the purposes of such establishments or class or description of establishment and for such local limits of jurisdiction as may be specified in the notification and the Chief Facilitator may within the local limits of his jurisdiction exercise the powers of any Facilitator: Provided that a Chief Facilitator may be appointed for the purposes of a state or more than one state or, as the case may be, or for the purposes of the whole of the Country.

(4) The appropriate Government may, by notification, appoint for the purposes of such establishments, as many Additional Chief Facilitators, Joint Chief Facilitators and Deputy Chief Facilitators or any other officer of any designation as it thinks appropriate, to exercise such powers of the Chief Facilitator within his jurisdiction as may be specified in the notification.

(5) Every Additional Chief Facilitator, Joint Chief Facilitator, Deputy Chief Facilitator and every other officer appointed under sub-section(3) shall, in addition to the powers of a Chief Facilitator specified in the notification by which the officer is appointed, exercise the powers of a Facilitator within such local limits as may be specified in the notification.

(6) No person shall be appointed under sub-section (1), sub-section (3), sub-section (4) or sub-section (8), or having been so appointed, shall continue to hold office, who is, or who becomes, directly or indirectly interested in a workplace or work activity or in any process or business carried on in any work place or in any plant or machinery connected therewith.

(7) The District Magistrate may exercise the powers and perform the duties of a Facilitator in case of a mine subject to the general or special orders of the Central Government: Provided that nothing in this sub-section shall be deemed to empower a district magistrate to exercise the powers conferred by sub-section (2) of section 36 and section 127.

(8) The appropriate Government may also, by notification, appoint such public officers as it thinks fit to be additional Facilitators for exercising the powers and discharging the duties of Facilitator for all or any of the purposes of this Code within such local limits as it may assign to them respectively.

(9) Without prejudice to the other functions of the Facilitator under the Code, a Facilitator may in respect of any establishment, class or description of establishment, where the Chief Facilitator with the approval of the appropriate Government and subject to such restrictions or conditions as he may think fit to impose, by order in writing authorise the Facilitator to exercise such of the powers of the Chief Facilitator as may be specified in such order.

(10) Every Chief Facilitator, Additional Chief Facilitator, Joint Chief Facilitator, Deputy Chief Facilitator, Facilitator and every other officer appointed under this section shall be deemed to be a public servant within the meaning of the Indian Penal Code (XLV of 1860), and shall be officially subordinate to such authority as the appropriate Government may specify in this behalf.

35. Powers of Facilitators – (1) Subject to any rules made in this behalf, a Facilitator may, within the local limits for which he is appointed,—

- (i) enter, with such assistance, being persons in the service of the Government, or any local or other public authority, or with an expert, as he thinks fit, any place which is used, or which he has reason to believe is used, as a work place;
- (ii) make examination of the premises, plant, machinery, article, or any other relevant material;
- (iii) inquire into any accident or dangerous occurrence, whether resulting in bodily injury, disability or death or not and take on the spot or otherwise statements of any person which he may consider necessary for such inquiry;
- (iv) in respect of a plantation and subject to any rules made by the State Government in this behalf, within his jurisdiction, examine the crops grown in any plantation or any worker employed therein or require the production of any register or other document maintained in pursuance of this Code, and take on the spot or otherwise statement of any person which he may consider necessary for carrying out the purposes of this Code relating to plantation;
- (v) require the production of any prescribed register or any other document relating to the work place or work activity;
- (vi) search or seize, or take copies of, any register, record or other document or any portion thereof, as he may consider necessary in respect of any offence under this Code, which he has reason to believe, has been committed;
- (vii) direct the concerned occupier or employer that any premises or any part thereof, or anything lying therein, shall be left undisturbed (whether generally or in particular respects) for so long as is necessary for the purpose of any inspection or inquiry;
- (viii) take measurements, photographs and video graphs and make such recordings as he considers necessary for the purpose of any examination or inquiry, taking with him any necessary instruments or equipment;
- (ix) take samples of any articles or substances found in any premises into which he has power to enter and of the air of the atmosphere in or in the vicinity of any such premises in the manner as may be prescribed;
- (x) in case of any article or substance found in any premises, being an article or substance which appears to him as having caused or is likely to cause danger to the health and safety of the employees, direct it to be dismantled or subject it to any process or test (but not so as to damage or destroy it unless the same is, in the circumstances necessary, for carrying out the purposes of any provision of this Code) and take possession of any such article or substance or a part thereof, and detain it for so long as is necessary for such examination;
- (xi) issue show cause notice relating to safety, health and welfare provisions arising under this Code, rules and regulation made there under;
- (xii) prosecute, conduct or defend before any court any complaint or other proceeding arising under this Code, the rules and regulations made there under; and
- (xiii) exercise such other powers as may be prescribed.

(2) Any person required to produce any document or to give any information required by a Facilitator under sub-section (1) shall be deemed to be legally bound to do so within the meaning of section 175 and section 176 of the Indian Penal Code (45 of 1860).

(3) The provisions of the Code of Criminal Procedure, 1973 (2 of 1974), shall, so far as may be, apply to such search or seizure under sub-section (1) as they apply to any search or seizure made under the authority of a warrant issued under section 94 of that Code.

36. Special powers of Facilitator in respect of factory, mines and dock work and building and other construction work.— (1) Without prejudice to the other powers of a Facilitator in this Code, a Facilitator in respect of a factory shall have the following special powers, namely:—

- (a) where it appears to the Facilitator that conditions in a factory or part thereof are such that they may cause serious hazard by way of injury or death to the persons employed therein or to the general public in the vicinity, he may, by order in writing to the occupier of the factory, state the particulars in respect of which he considers the factory or part thereof to be the cause of such serious hazard and prohibit such occupier from employing any person in the factory or any part thereof other than the minimum number of persons necessary to attend to the minimum tasks till the hazard is removed;
- (b) any order issued by the Facilitator under sub-clause (a) shall have effect for a period of three days until extended by the Chief Facilitator by a subsequent order;
- (c) any person aggrieved by an order of the Facilitator under sub-clause (a), and the Chief Facilitator under sub-clause (b), shall have the right to appeal to the High Court;
- (d) any person whose employment has been affected by an order issued under sub-clause (a), shall be entitled to wages and other benefits and it shall be the duty of the occupier to provide alternative employment to him wherever possible and in the manner prescribed;
- (e) the provisions of sub-clause (d) shall be without prejudice to the rights of the parties under the Industrial Disputes Act, 1947 (14 of 1947);

(2) Without prejudice to the other powers of a Facilitator in this Code, a Facilitator in respect of mines shall have the following special powers, namely:—

- (a) if, in respect of an, matter for which no express provision is made by or under this Code, it appears to the Chief Facilitator or a Facilitator that any mine or part thereof or any matter, thing or practice in or connected with the mine, or with the control, supervision, management or direction thereof, is dangerous to human life or safety or defective so as to threaten or tend to, the bodily injury of any person, he may give notice in writing thereof to the owner, agent or manager of the mine and shall state in the notice the particulars in respect of which he considers the mine or part thereof or the matter, thing or practice to be dangerous or defective and require the same to be remedied within such time and in such manner as he may specify in the notice;
- (b) where the owner, agent or manager of a mine fails to comply with the terms of a notice given under sub-clause (a) within the period specified therein, the Chief Facilitator or the Facilitator, as the case may be, may, by order in writing, prohibit the employment in or about the mine or any part thereof of any person whose employment is not in his opinion reasonably necessary for securing compliance with the terms of the notice;
- (c) without prejudice to the provisions contained in sub-clause (a), the Chief Facilitator or the Facilitator, as the case may be, may, by order in writing addressed to the owner, agent or manager of a mine, prohibit the extraction or reduction of pillars or blocks of minerals in any mine or part thereof, if, in his opinion, such operation is likely to cause the crushing of pillars or blocks of minerals or the premature collapse of any part of the workings or otherwise endanger the mine or the life or safety of persons employed therein or if, in his opinion, adequate provision against the outbreak of fire or flooding has not been made by providing for the sealing off and isolation of the part of the mine in which such operation is contemplated and for restricting the area that might be affected by fire or flooding;
- (d) if the Chief Facilitator, or a Facilitator authorised in this behalf by general or special order in writing by the Chief Facilitator, is of opinion that there is urgent and immediate danger to the life or safety of any

- person employed in any mine or part thereof, he may, by order in writing containing a statement of the grounds of his opinion, prohibit until he is satisfied that the danger is removed, the employment in or about the mine or any part thereof of any person whose employment is not in his opinion reasonably necessary for the purpose of removing the danger;
- (e) every person whose employment is prohibited under sub-clause (b) or sub-clause (d) shall be entitled to payment of full wages for the period for which he would have been, but for the prohibition in employment and the owner, agent or manager shall be liable for payment of such full wages of that person;
- Provided that the owner, agent or manager may instead of paying such full wages provide such person with an alternative employment at the same wages which such person was receiving in the employment which was prohibited;
- (f) where a notice has been given under sub-clause (a) or an order made under sub-clause (b), sub-clause (c) or sub-clause (d) by a Facilitator, the owner, agent or manager of the mine may, within ten days after the receipt of the notice or order, as the case may be, appeal against the same to the Chief Facilitator who may confirm, modify or cancel the notice or order;
- (g) the Chief Facilitator or the Facilitator sending a notice under sub-clause (a) or making an order under sub-clause (b), sub-clause (c) or sub-clause (d) and the Chief Facilitator making an order (other than an order of cancellation in appeal under sub-clause (f)) shall forthwith report the same to the Central Government;
- (h) if the owner, agent or manager of the mine objects to a notice sent under sub-clause (a) by the Chief Facilitator or to an order made by the Chief Facilitator under sub-clause (b) or sub-clause (c) or sub-clause (d) or sub-clause (f), he may, within twenty days after the receipt of the notice containing the requisition or of the order or after the date of the decision on appeal, as the case may be, send his objection in writing stating the grounds thereof to the Central Government which shall, ordinarily within a period of two months from the date of receipt of the objection decide the matter;
- (i) every notice under sub-clause (a), or order under sub-clause (b), sub-clause (c), sub-clause (d) or sub-clause (f), to which objection is made under sub-clause (h), shall be complied with, pending the receipt at the mine of the decision of the Central Government;
- Provided that the Central Government may, on the application of the owner, agent or manager, suspend the operation of a notice under sub-clause (a), pending its decision on the objection after hearing;
- (j) nothing in this section shall affect the powers of a magistrate under section 144 of the Code of Criminal Procedure, 1973 [1 of 1974].
- (k) where in respect of any matter relating to safety of mine for which express provision is made by or under this Code, the owner, agent or manager of a mine fails to comply with such provisions, the Chief Facilitator may give notice in writing requiring the same to be complied with within such time as he may specify in the notice or within such extended period of time as he may, from time to time, specify thereafter;
- (l) where the owner, agent or manager fails to comply with the terms of a notice given under sub-clause (k) within the period specified in such notice or, as the case may be, within the extended period of time specified under that sub-clause, the Chief Facilitator may, by order in writing, prohibit the employment in or about the mine or any part thereof of any person whose employment is not, in his opinion, reasonably necessary for securing compliance with the terms of the notice;
- (m) every person whose employment is prohibited under sub-clause (l), shall be entitled to payment of full wages for the period for which he would have been, but for the prohibition, in employment, and the owner, agent or manager shall be liable for payment of such full wages of that person;
- Provided that the owner, agent or manager may, instead of paying such full wages, provide such person with an alternative employment at the same wages which such person was receiving in the employment which was prohibited under sub-clause (l);
- (n) the provisions of sub-clauses (g), (h) and (i) shall apply in relation to a notice issued under sub-clause (k) or an order made under sub-clause (l) as they apply in relation to a notice under sub-clause (a) or an order under sub-clause (b);

- (o) Chief Facilitator may, for reasons to be recorded in writing, reverse or modify any order passed by him under this Code or under any regulation, rule or bye-law made there under in relation to mine;
- (p) no order prejudicial to the owner, agent or manager of a mine shall be made under this section unless such owner, agent or manager has been given a reasonable opportunity of making representation;
- (q) the Central Government may reverse or modify any order passed under this Code in relation to mine.

(6) Without prejudice to the powers of a Facilitator elsewhere in this Code, a Facilitator in respect of dock work shall have the following special powers, namely:-

- (a) if it appears to a facilitator that any place where any dock work is being carried on is in such a condition which is dangerous to life, safety or health, of dock workers, he may, in writing, serve on the owner or on the person in charge of such place an order prohibiting any dock work in such place until measures have been taken to remove the cause of the danger to his satisfaction;
- (b) a Facilitator after serving an order under clause (a) shall endorse a copy thereof to the Chief Facilitator who may modify or cancel the order without waiting for an appeal;
- (c) any person aggrieved by an order under clause (a) or clause (b) may, within fifteen days from the date on which the order is communicated to him, prefer an appeal to the Chief Facilitator or where such order is by the Chief Facilitator, to the Central Government and the Chief Facilitator or Central Government shall, after giving the appellant an opportunity of being heard, dispose of the appeal as expeditiously as possible.

Provided that the Chief facilitator or the Central Government may entertain the appeal after the expiry of the said period of fifteen days, if it is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

Provided further that an order under clause (a) shall be complied with, pending the decision of the Chief facilitator or such authority.

(7) Without prejudice to the other powers of a Facilitator elsewhere in this Code,-

- (a) if it appears to the Facilitator that any site or place at which any building or other construction work is being carried on, is in such condition that it is dangerous to life, safety or health of building workers or the general public, he may, in writing serve on the employer of building workers or on the employer of the establishment or on the person in charge of such site or place an order prohibiting any building or other construction work at such site or place until measures have been taken to remove the cause of the danger to his satisfaction;
- (b) a Facilitator serving an order under clause (a) shall endorse a copy to the Chief Facilitator;
- (c) such prohibition order shall be complied with by the employer forthwith.

(8) Any person aggrieved by an order under clause (a) of sub-section (7), may, within fifteen days from the date on which the order is communicated to him, may prefer an appeal to the Chief Facilitator or where such order is by the Chief Facilitator, to the appropriate Government and the Chief Facilitator or the appropriate Government, as the case may be, shall, after giving the appellant an opportunity of being heard, dispose of the appeal as expeditiously as possible.

Provided that the Chief Facilitator or the appropriate Government, as the case may be, may entertain the appeal after the expiry of the said period of fifteen days if he or it, as the case may be, is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

Provided further that the prohibition, shall be complied with, subject to the decision of the Chief Facilitator or the appropriate Government.

**37. Secrecy of information by Chief Facilitator or Facilitator, etc.-(1)** No Chief Facilitator or Facilitator shall while in service or after leaving the service, disclose otherwise than in connection with the execution, or for the purposes, of this Code any information relating to any manufacturing or commercial business or any working process which may come to his knowledge in the course of his official duties.

Provided that no such prohibition of disclosure shall apply to any disclosure of information made with the previous consent in writing of the owner of such business or process or for the purposes of any legal proceedings pursuant to this Code or of any criminal proceeding which may be taken, whether pursuant to this Code or otherwise, or for the purposes of any report of such proceedings as aforesaid.



(2) All copies of, and extracts from, registers or other records appertaining to any mine and all other information acquired by the Chief Facilitator or a Facilitator of a mine or by any one assisting him, in the course of the inspection or survey of any mine under this Code or acquired by any person authorized under section 20 or section 39 in the exercise of his duties there under, shall be regarded as confidential and shall not be disclosed to any person or authority unless the Chief Facilitator or the Facilitator considers disclosure necessary to ensure the health, safety or welfare of any person employed in the mine or in any other mine adjacent thereto.

(3) Nothing in sub-section (2) shall apply to the disclosure of any such information (if so required) to—

- (a) any court;
- (b) any Committee or Board constituted under the Code;
- (c) an official superior or the owner, agent or manager of the mine concerned;
- (d) a Commissioner for employees' compensation appointed under the Employees' Compensation Act, 1923;
- (e) the Controller, Indian Bureau of Mines;
- (f) any registered or recognised trade union;
- (g) any such officer, authority or organisation as may be specified in this behalf by the Central Government.

(4) No Chief Facilitator or Facilitator shall disclose the source of any complaint made to him regarding the contravention of the provisions of this Code and shall also not while making an inspection under this Code in pursuance of such complaint, disclose to the employer or contractor, agent, owner-occupier, manager concerned or any of his representative that the inspection is being made in pursuance of such complaint:

Provided that nothing in this sub-section shall apply to any case in which the person who has made the complaint has consented to disclose his name.

38. Facilities to be afforded to the Facilitator.—Every employer, owner, agent or manager, as the case may be, in respect of an establishment shall afford the Chief Facilitator and every Facilitator having jurisdiction or every person prescribed all reasonable facilities for making any entry, inspection, survey, measurement, examination or inquiry under this Code.

39. Powers of Special Officer to enter, measure, etc. in relation to mine.—Any person in the service of the Government duly authorised in this behalf by a special order in writing of the Chief Facilitator or of a Facilitator of mine may, for the purpose of surveying, leveling or measuring any mine or any output there from, after giving not less than three days' notice to the manager of such mine, enter the mine and may survey, level or measure the mine or any part thereof or any output there from at any time by day or night:

Provided that, where in the opinion of the Chief Facilitator or of a Facilitator an emergency exists, he may, by order in writing, authorise any such person to enter the mine for any of the aforesaid purposes without giving any such notice.

40. Medical Officer.—(1) The appropriate Government may appoint qualified medical practitioners to be medical officers for the purposes of this Code in relation to factory, mines, plantation motor transport undertakings and any other establishment as may be prescribed to exercise such jurisdiction as may be prescribed.

Provided that the medical officers so appointed shall before entering into their office shall disclose to the appropriate government their interest in the concerned establishment.

(2) The medical officer shall perform such duties in connection with the matters specified in sub-section (3) as may be prescribed.

(3) The matters referred to in sub-section (2) shall be—

- (a) the examination and certification of workers engaged in a mine or factory and any other establishment as may be prescribed in such dangerous occupations or processes as may be prescribed;
- (b) the exercise of such medical supervision as may be prescribed where adolescents are or are to be employed in any work in relations to workers employed in factory, mines, plantation and motor transport undertaking and any other establishment as may be prescribed;

- (c) in respect of the illness of workers employed in factory and mines which are due to the effect of any process carried on or other conditions of work performed in the mines, factory and any other establishment as may be prescribed;
- (d) the examination and certification of young persons employed in factory, mine, plantation, motor transport undertakings and any other establishment as may be prescribed; and
- (e) in respect of young persons who are or are about to be employed in any factory, plantation, motor transport undertakings and any other establishment as may be prescribed in any work which is likely to cause injury to their health.

#### Chapter X

##### Special Provision relating to Employment of Women

41. **Applicability of the chapter.**— Notwithstanding anything contained in this Code, this chapter shall apply to employment of women in an establishment relating to factories, mines, plantation, beedi or cigar or both and building and other construction work.
42. **Restriction on employment of women.**— Without prejudice to any prohibition in any other law for the time being in force in this behalf and subject to the safety, holiday and working hours beyond 6 A.M to 7 P.M as may be prescribed by the appropriate Government, the women workers may be employed in an establishment.
43. **Prohibition of employment of women in dangerous operation.**— Where the appropriate Government considers that the employment of women is dangerous for their health and safety, in an establishment or class or any description of establishments, due to the operation carried out therein, such Government may in the prescribed manner, prohibit the employment of women for such operation.

#### Chapter XI – Special Provisions for Contract Labour and Inter State Migrant Worker, etc.

##### PART - I

##### Contract Labour and Inter-State Migrant Worker

44. **Applicability of this Part.**—(1) This Part shall apply to—
- (i) every establishment in which twenty or more contract labour are employed or were employed on any day of the preceding twelve months through contractor;
  - (ii) every manpower supply contractor who employed on any day of the preceding twelve months twenty or more contract labour;

Provided that the appropriate Government may, after giving not less than two months' notice of its intention so to do, by notification, apply the provisions of this Part to any establishment or manpower supply contractor employing such number of workmen less than twenty as may be specified in the notification.

(2) (a) This Part shall not apply to the establishment in which work only of an Intermittent or casual nature is performed.

(b) If a question arises whether work performed in an establishment is of an Intermittent or casual nature, the appropriate Government shall decide that question after consultation with the National Board or, as the case may be, a State Advisory Board, and its decision shall be final.

**Explanation.**—For the purpose of this sub-section, work performed in an establishment shall not be deemed to be of an Intermittent nature—

- (i) if it was performed for more than one hundred and twenty days in the preceding twelve months, or
- (ii) if it is of a seasonal character and is performed for more than sixty days in a year.

45. **Appointment of licensing officers.**—The appropriate Government may, by an order, herein after referred to as the licensing officers, appoint such persons, being Gazetted officers of the Government, as it thinks fit to be licensing officers and define the limits, within which the licensing officer shall exercise the powers conferred on him by or under this Part of the Code.

46. Licensing of contractors:-(1) No contractor to whom this Part applies shall –

- (a) supply or engage contract labour in any establishment; or
- (b) undertake or execute the work through contract labour;

except under and in accordance with a licence issued to him by a licensing officer after satisfying that the contractor fulfils such requisite qualifications or criteria as may be prescribed by the Central Government and such licence shall in addition to the prescribed particulars also specify the number of such contract labour who can be engaged and the amount of security deposited by the contractor.

(2) Where the contractor does not fulfil the requisite qualifications or criteria referred to in sub-section (1), the licensing officer may issue him the licence to supply or engage the contract labour, or execute the work through contract labour, under the concerned work order as specified in the licence for that work order and subject to the conditions as may be specified in the licence and such licence shall be renewable within the such period as may be prescribed.

(3) Subject to the provisions of this Part,-

(a) a licence under sub-section (1) may contain such conditions including, in particular, conditions as to hours of work, fixation of wages and other essential amenities in respect of contract labour as the appropriate Government may deem fit to impose in accordance with the rules, if any, made under section 121 and shall be issued on payment of such fees and on the deposit of bank guarantee as security for the due performance of the conditions, as may be prescribed:

Provided that the conditions under this clause shall not include any limitation for doing the work of a particular nature in an establishment;

(b) every contractor who provides or intends to provide contract labour for the purposes under clause (a) or clause (b) of sub-section (1) or sub-section (2) of this section in an establishment, shall obtain the licence, if for such establishment -

- (i) the appropriate Government is the Central Government, from the licensing officer appointed by the Central Government; and
- (ii) the appropriate Government is the state Government, from the licensing officer appointed by the state Government;

Provided that in case the contractor supplies or engages contract labour or undertakes or executes the work under sub-section (1) in more than one establishment situated in different states, then, he shall obtain the licence,-

- (i) where for such establishments, Central Government is the appropriate Government from the licensing officer appointed by the Central Government having jurisdiction over the place where the head office of the contractor is situated; or
- (ii) where for such establishments, state Government is the appropriate Government from the licensing officer appointed by the state Government having jurisdiction over the place where the head office of the contractor is situated.

47. Grant of licence:-(1) Every application for issuing a licence under sub-section (1) or sub-section (2) of section 46 shall be made in the prescribed form and manner and shall contain the particulars regarding the number of contract labour, nature of work for which contract labour is to be employed and such other particulars as may be prescribed.

(2) The licensing officer may make such investigation in respect of the application received under sub-section (1) and in making any such investigation the licensing officer shall follow such procedure as may be prescribed.

(3) The licence issued under sub-section (1) of section 46 shall be valid for a period of three years in respect of the number of contract labour specified therein and in case the contractor wants to increase the number of the contract labour, then, he shall apply in the prescribed manner for the renewal of the licence for such purpose to the licensing officer and if the licence is renewed by the licensing officer in the prescribed manner, the contract labour shall be increased to such extent by depositing such security deposit as specified in the renewed licence for the balance period.

48. No fees or Commission or any cost to workers.-The contractor shall not charge directly or indirectly, in

whole or in part, any fee or commission from the contract labour.

**49. Information regarding work order to be given to the appropriate Government.**— When a contractor receives work order from an establishment —

- (i) for supply or engagement of contract labour in the establishment; or
- (ii) by which he undertakes or executes work through contract labour in the establishment;

he shall, within such time and in such manner as may be prescribed, intimate the appropriate Government and if he fails to give such intimation within the time and manner so prescribed, then, the licensing officer may, after giving the holder of the licence an opportunity of showing cause, suspend or cancel the licence in the prescribed manner.

**50. Revocation, suspension and amendment of licence.**—(1) If the licensing officer is satisfied, either on a reference made to him in this behalf or otherwise, that—

- (a) a licence granted under this Part has been obtained by misrepresentation or suppression of any material fact, or
- (b) that the contractor has violated the provision of this Part or the rules made there under or any of the conditions of the licence, or
- (c) the holder of a licence has, failed to comply with the conditions subject to which the licence has been granted or has contravened any of the provisions of this part, or the rules made there under, without prejudice to any other penalty to which the contractor may be liable under this Part, the licensing officer may, after giving the contractor an opportunity of showing cause, revoke or suspend the licence.

(2) Subject to any rules that may be made in this behalf, the licensing officer may amend a licence granted under this Part.

**51. Appeal.**—(1) Any person aggrieved by an order made under section 46, section 47 or section 50 may, within thirty days from the date on which the order is communicated to him, prefer an appeal to an appellate authority who shall be a person notified in this behalf by the appropriate Government:

Provided that the appellate authority may entertain the appeal after the expiry of the said period of thirty days, if he is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

(2) On receipt of an appeal under sub-section (1), the appellate authority shall, after giving the appellant an opportunity of being heard dispose of the appeal within thirty days from the date on which the appeal is preferred.

**52. Liability of Principal Employer for welfare facilities.**— Welfare facilities relating to providing of canteens, rest rooms, drinking water and first aid as referred and prescribed under section 23 and section 24 shall be provided by the principal employer of the establishment to the contract labour who are employed in the establishment.

**53. Effect of employing contract labour from a non-licensed contractor.**—If the establishment is employing contract labour through the contractor who is required to obtain a licence, but he does not obtain licence, the contract labour so engaged through the contractor, shall be deemed to be employed by the principal employer and will be liable to discharge all responsibilities of a contractor.

**54. Responsibility for payment of wages.** —(1) A contractor shall be responsible for payment of wages to each contract labour employed by him and such wages shall be paid before the expiry of such period as may be prescribed.

(2) Every contractor shall, make the disbursement of wages referred to in sub-section (1) through bank transfer or electronic mode and inform the principal employer electronically the amounts so paid by such mode:

Provided that where it is not practicable to disburse such payment otherwise than in cash, then, it shall be disbursed in the presence of a representative duly authorised by the principal employer and it shall be the duty of such representative to certify the amounts so paid as wages in such manner as may be prescribed.

(3) In case the contractor fails to make payment of wages referred to in sub-section (1) within the prescribed period or makes short payment, then, the principal employer shall be liable to make payment of the wages in full or the unpaid balance due, as the case may be, to the concerned contract labour employed by the contractor and recover the amount so paid from the contractor either by deduction from any amount payable to the contractor under any contract or as a debt payable by the contractor.

(4) The appropriate Government, in the event the contractor does not pay the wages to the contract labour employed by him, shall pass the orders of making payment of such wages from the amount deposited by such contractor as security deposit under the licence issued by the licensing officer to the contractor, in the manner as prescribed.

55. **Experience Certificate.**— Every establishment concerned shall issue experience certificate to the contract labour annually, or at any other time demanded by the contract labour giving details of the work performed by the contract labour in the prescribed format.

56. **Prohibition of employment of contract labour.**— (1) Notwithstanding anything contained in this part, the appropriate Government may, after consultation with the National Board or, as the case may be, a State Board, prohibit, by notification, employment of contract labour in any process, operation or other work in any establishment.

(2) Before issuing any notification under sub-section (1) in relation to an establishment, the appropriate Government shall have regard to the conditions of work and benefits provided for the contract labour in that establishment and other relevant factors, such as—

- (a) whether process, operation or other work is incidental to, or necessary for the industry, trade, business, manufacture or occupation that is carried on in the establishment;
- (b) whether it is of perennial nature, that is to say, it is of sufficient duration having regard to the nature of industry, trade, business, manufacture or occupation carried on in that establishment;
- (c) whether it is done ordinarily through regular workers in that establishment or an establishment similar thereto;
- (d) whether it is sufficient to employ considerable number of whole-time workmen.

*Explanation.*—if a question arises whether any process or operation or other work is of perennial nature, the decision of the appropriate Government thereon shall be final.

57. **Power to exempt in special cases.**— The appropriate Government may, in the case of an emergency, direct, by notification, that subject to such conditions and restrictions, if any, and for such period or periods, as may be specified in the notification, all or any of the provisions of this Code or the rules made thereunder shall not apply to any establishment or class of establishments or any class of contractors.

58. **Facilities to Inter-State Migrant Workers.**— It shall be the duty of every establishment employing inter-State migrant worker in connection with the work of that establishment to which this part applies,—

- (i) to ensure suitable conditions of work to such worker having regard to the fact that they are required to work in a State different from their own State;
- (ii) in case of fatal accident or serious bodily injury to any such worker, to report to the specified authorities of both the States and also the next of kin of the worker;

- (iii) to provide and maintain suitable residential accommodation to such workmen during the period of their employment;
- (iv) to provide the prescribed medical facilities and periodical medical examination to the such workmen, free of charge; and

59. **Displacement allowance.** - (1) There shall be paid by the contractor to every inter-State migrant worker at the time of recruitment, a displacement allowance equal to fifty percent of the monthly wages payable to him.

(2) The amount paid to a worker as displacement allowance under sub-section (1) shall not be refundable and shall be in addition to the wages or other amount payable to him.

60. **Journey allowance etc.** - A journey allowance of a sum not less than the fare from the place of residence of the inter-State migrant workers in his State to the place of work in the other State shall be payable by the contractor to the workers both for the outward and return journeys at the time of recruitment only and such worker shall be entitled to payment of wages during the period of such journeys as if he were on duty.

61. **Past liabilities.** - No suit or other proceeding shall lie in any court or before any authority for the recovery of debt or any part thereof relating to an inter-state migrant worker after the completion of his employment where it remains unsettled obligation to the contractor or the principal employer and such debt or part thereof shall, on the completion of the period of employment of such worker, be deemed to have been extinguished.

#### PART - II Audio-Visual Workers

62. **Prohibition of employment of audio-visual worker without agreement.** - (1) No person shall be employed as an audio-visual worker in connection with production of any audio-visual programme unless,

- (a) an agreement in writing is entered into -
  - (i) with such person by the producer of such audio-visual programme; or
  - (ii) by the producer of such audio-visual programme with the contractor, where such person is employed through such contractor; and
- (b) such agreement is registered with the competent authority by the producer of such audio-visual programme.

(2) Every agreement, referred to in sub-section (1) shall,-

- (a) be in the prescribed form;
- (b) specify the name and such other particulars as may be prescribed particulars with respect to, the person whose employment the agreement relates (hereafter in this section referred to as the employee);
- (c) include, where such employee is employed through a contractor, a specific condition to the effect that in the event of the contractor failing to discharge his obligations under the agreement to the employee with respect to payment of wages or any other matter, the producer of the audio-visual programme shall also be liable to discharge such obligations and shall be entitled to be reimbursed with respect thereto by the contractor.

(3) A copy of the agreement referred to in sub-section (1) with respect to the employment of the employee shall, if such employee is entitled to the benefits of provident fund, also be forwarded by the producer of the audio-visual programme to the authority as prescribed.

(4) The agreement referred to in sub-section (1) shall include,-

- (i) nature of assignment;
- (ii) wages and other benefits (including provident fund, if any);
- (iii) health and working condition;
- (iv) safety;
- (v) hours of work; and
- (vi) welfare facilities;

and it shall be responsibility of the producer to provide the facilities specified in the agreement to the employee. The mode of payment of wages shall be through electronic mode.

#### PART - III Mines

63. Managers.—(1) Save as may be otherwise prescribed, every mine shall be under a sole manager who shall have the prescribed qualifications and the owner or agent of every mine shall appoint a person having such qualifications to be the manager:

Provided that the owner or agent may appoint himself as manager if he possesses the prescribed qualifications.

(2) Subject to any instructions given to him by or on behalf of the owner or agent of the mine, the manager shall be responsible for the overall management, control, supervision and direction of the mine and all such instructions when given by the owner or agent shall be confirmed in writing forthwith.

(3) Except in case of an emergency, the owner or agent of a mine or anyone on his behalf shall not give, otherwise than through the manager, instructions affecting the fulfilment of his statutory duties, to a person, employed in a mine, who is responsible to the manager.

64. Code not to apply in certain cases.—(1) The provisions of this Code, except those contained in sections 35, 36, 38, 39, 42 and 43 shall not apply to—

- (a) any mine or part thereof in which excavation is being made for prospecting purposes only and not for the purpose of obtaining minerals for use or sale;

Provided that—

- (i) not more than twenty persons are employed on any one day in connection with any such excavation;
- (ii) the depth of the excavation measured from its highest to its lowest point nowhere exceeds six metres or, in the case of an excavation for coal, fifteen metres; and
- (iii) no part of such excavation extends below superjacent ground; or
- (b) any mine engaged in the extraction of kankar, mirrum, laterite, boulder, gravel, shingle, ordinary sand (excluding mouldings and glass sand and other mineral sands), ordinary clay (excluding kaolin, china clay, white clay or fire clay), building stone, slate, road metal, earth, fullers earth (merl, chalk) and lime stone.

Provided that—

- (i) the workings do not extend below superjacent ground; or
  - (ii) where it is an open cast working—
    - (a) the depth of the excavation measured from its highest to its lowest point nowhere exceeds six metres;
    - (b) the number of persons employed on any one day does not exceed fifty; and
    - (c) explosives are not used in connection with the excavation.
- (2) Notwithstanding anything contained in sub-section (1), the Central Government may, if it is satisfied that, having regard to the circumstances obtaining in relation to a mine or part thereof or group or class of mines, it is necessary or desirable so to do, by notification in the Official Gazette, declare that any of the provisions of this Code, not set out in sub-section (1), shall apply to any such mine or part thereof or group or class of mines or any class of persons employed therein.
- (3) Without prejudice to the provisions contained in sub-section (2), if at any time any of the conditions specified in the proviso to clause (a) or clause (b) of sub-section (1) is not fulfilled in relation to any mine referred to in that sub-section, the provisions of this Code not set out in sub-section (1), shall become

Immediately applicable, and it shall be the duty of the owner, agent or manager of the mine to inform the prescribed authority in the prescribed manner and within the prescribed time about the non-fulfillment.

65. **Exemption from provision regarding employment.**—(1) In case of an emergency involving serious risk to the safety of the mine or of persons employed therein, or in case of an accident, whether actual or apprehended, or in case of any act of God or in case of any urgent work to be done to machinery, plant or equipment of the mine as the result of breakdown of such machinery plant or equipment, the manager may, subject to the provisions of sub-section (2) of section 36 and in accordance with the rules under section 87 relating to exemption from weekly day of rest, hours of work above ground, hours of work below ground and notices regarding hours of work relating to mines, permit persons to be employed in contravention of section 22, section 25, section 30 and sub-section (1) of section 31 on such work as may be necessary to protect the safety of the mine or of the persons employed therein:

Provided that, in case of any urgent work to be done to machinery, plant or equipment under this section, the manager may take the action permitted by this section, although the production of mineral would thereby be incidentally affected, but any action so taken shall not exceed the limits necessary for the purpose of avoiding serious interference with the ordinary working of the mine.

(2) Every case in which action has been taken by the manager under sub-section (1), shall be recorded together with the circumstances relating thereto and a report thereof shall also be made to the Chief Facilitator or the Facilitator.

66. **Decision of question whether a mine is under this Code.**—If any question arises as to whether any excavation or working (or premises in or adjacent to and belonging to a mine, on which any process ancillary to the getting, dressing or preparation for sale of minerals or of coke is being carried on) is a mine within the meaning of this Code, the Central Government may decide the question, and a certificate signed by a Secretary to the Central Government shall be conclusive on the point.

#### PART -IV Beedi and Cigar Workers

67. **Licence to industrial premises and person.**—(1) Save as otherwise provided in this Part, no employer shall use or allow to be used any place or premises as an industrial premises unless he holds a valid licence issued under this Part and no such premises shall be used except in accordance with the terms and conditions of such licence.

(2) Any person who intends to use or allows to be used any place or premises specified in sub-section (1) shall make an application in writing to the competent authority, in such form on payment of such fees as may be prescribed, for a licence to use, or allow to be used, such premises as an industrial premises.

(3) The application shall specify the maximum number of employees proposed to be employed at any time of the day in the place or premises and shall be accompanied by a plan of the place or premises prepared in such manner as may be prescribed.

(4) The competent authority shall, in deciding whether to grant or refuse a licence, have regard to the following matters:—

- (a) the suitability of the place or premises which is proposed to be used for the manufacture of beedi or cigar or both;
- (b) previous experience of the applicant or he has employed experienced person or has entered into agreement with the experience person for employment for the period of licence;
- (c) the financial resources of the applicant including his financial capacity to meet the demands arising out of the provisions of the laws for the time being in force relating to welfare of labour;
- (d) whether the application is made bona fide on behalf of the applicant himself or in benami of any other person;
- (e) welfare of the labour in the locality, the interest of the public generally and such other matters as may be prescribed.

(5) (a) A licence granted under this section shall be valid for three years and may be renewed thereafter.



(b) An application for the renewal of a licence granted under this Code shall be made at least thirty days before the expiry of the period thereof, on payment of such fees as may be prescribed, and where such an application has been made, the licence shall be deemed to continue, notwithstanding the expiry of the period thereof, until the renewal of the licence, or, as the case may be, the rejection of the application for the renewal thereof.

(c) The competent authority shall, in deciding whether to renew a licence or to refuse a renewal thereof, have regard to the matters specified in sub-section (3).

(6) The competent authority shall not grant or renew a licence unless it is satisfied that the provisions of this Code and the rules made thereunder have been complied with.

(7) The competent authority may, after giving the holder of a licence an opportunity of being heard, cancel or suspend any licence granted or renewed under this Code if it appears to it that such licence has been obtained by misrepresentation or fraud or that the licensee has contravened or failed to comply with any of the provisions of this Code or the rules made thereunder or any of the terms or conditions of the licence.

(8) The State Government may issue in writing to a competent authority such directions of a general character as that Government may consider necessary in respect of any matter relating to the grant or renewal of licences under this section.

(9) Subject to the foregoing provisions of this section, the competent authority may grant or renew licences under this Part on such terms and conditions as it may determine and where the competent authority refuses to grant or renew any licence, it shall do so by an order communicated to the applicant, giving the reasons in writing for such refusal.

66. Appeals.—Any person aggrieved by the decision of the competent authority refusing to grant or renew a licence or cancelling or suspending a licence may, within such time and on payment of such fees as may be prescribed, appeal to such authority as the State Government may, by notification, specify in this behalf, and such authority may by order confirm, modify or reverse any order refusing to grant or renew a licence or cancelling or suspending a licence.

69. Permission to work by employees outside industrial premises- (1) The State Government may permit the wetting or cutting of beedi or tobacco leaves by employees outside the industrial premises on an application made to it by the employer on behalf of such employees.

(2) The employer shall maintain in the prescribed form a record of the work permitted under sub-section (1) to be carried on outside the industrial premises.

(3) Save as otherwise provided in this section, no employer shall require or allow any manufacturing process connected with the making of beedi or cigar or both to be carried on outside the industrial premises:

Provided that nothing in this sub-section shall apply to any labour who is given raw material by an employer or a contractor for being made into beedi or cigar or both at home.

70. Part not to apply to self-employed persons in private dwelling houses.- Nothing contained in this Part shall apply to the owner or occupier of a private dwelling house who carries on any manufacturing processes in such private dwelling house with the assistance of the members of his family living with him in such dwelling house and dependent on him:

Provided that the owner or occupier thereof is not an employee of an employer to whom this Part applies.

Explanation.— For the purposes of this section,

- (i) "family" does not include child, as defined in the Child and Adolescent (Prohibition and Regulation) Act, 1986 [61 of 1986], for this section.
- (ii) "private dwelling house" means a house in which persons engaged in the manufacture of beedi or cigar or both reside;

## Part -V

## Building and other Construction Workers

71. Prohibition of employment of certain persons in certain building or other construction work: No person about whom the employer knows or has reason to believe that he is a deaf or he has a defective vision or he has a tendency to giddiness shall be required or allowed to work in any such operation of building or other construction work which is likely to involve a risk of any accident either to the building worker himself or to any other person.

## Part -VI

## Factories

72. Approval, licensing and registration of factories.—(1) The State Government may make rules—

- (a) requiring, for the purposes of this Part, the submission of plans of any class or description of factories to the Chief Facilitator or the State Government;
- (b) requiring the previous permission in writing of the State Government or the Chief Facilitator to be obtained for the site on which the factory is to be situated and for the construction or extension of any factory or class or description of factories;
- (c) requiring for the purpose of considering applications for such permission the submission of plans and specifications;
- (d) prescribing the nature of such plans and specifications and by whom they shall be certified;
- (e) requiring the registration and licensing of factories or any class or description of factories, and prescribing the fees payable for such registration and licensing and for the renewal of licences;
- (f) requiring that no licence shall be granted or renewed unless the notice specified in section 5 has been given.

(2) If on an application for permission referred to in clause (b) of sub-section (1) accompanied by the plans and specifications required by the rules made under clause (c) of that sub-section, sent to the State Government or Chief Facilitator in the mode prescribed including electronic mode, no order is communicated to the applicant within three months from the date on which it is so sent, the permission applied for in the said application shall be deemed to have been granted.

(3) Where a State Government or a Chief Facilitator refuses to grant permission to the site, construction or extension of a factory or to the registration and licensing of a factory, the applicant may within thirty days of the date of such refusal appeal to the Central Government if the decision appealed from was of the State Government and to the State Government in any other case.

Explanation.—A factory shall not be deemed to be extended within the meaning of this section by reason only of the replacement of any plant or machinery or within such limits as may be prescribed, of the addition of any plant or machinery if such replacement or addition does not reduce the minimum clear space required for safe working around the plant or machinery or adversely affect the environmental conditions from the evolution or emission of steam, heat or dust or fumes injurious to health.

73. Liability of owner of premises in certain circumstances.—(1) Where in any premises separate buildings are leased to different occupiers for use as separate factories, the owner of the premises shall be responsible for provision and maintenance of—

- (i) common facilities and services such as approach roads, drainage, water supply, lighting and sanitation;
- (ii) adequate staircases;
- (iii) precaution in case of fire;
- (iv) ensuring structural stability;
- (v) hoists and lifts; and
- (vi) any other common facilities as may be prescribed.

(2) Where in any premises, independent or self-contained, floors or flats, compartments, rooms, sheds are used as separate factories, the owner of the premises shall be responsible for the provision and maintenance of—

- (i) latrines, urinals and washing facilities;
- (ii) safety of machinery and plant installed in the common place or location of an occupier;
- (iii) safe means of access to floors or flats, compartments, rooms, galls, sheds and maintenance and cleanliness of staircases and common passages;
- (iv) precautions in case of fire;
- (v) hoists and lifts;
- (vi) prohibition of the common passages, balconies, verandas, access space, staircases and such other common spaces for use of any activity not intended in such spaces;
- (vii) ensuring structural stability; and (viii) any other common facilities provided in the premises.

(3) The owner of premises shall be responsible for provision, maintenance or arrangement for any other facility which may be required but not specified in sub-sections (1) and (2) above.

(4) The Chief Inspector shall have, subject to the control of the appropriate Government, the power to issue orders to the owner of the premises referred to in sub-sections (1) and (2) in respect of the carrying out of the provisions of canteens, shelter, rest rooms and creches.

(5) In respect of sub-section (3) while computing for the purposes of any of the provisions of this Code, the total number of workers employed in the whole of the premises shall be deemed to be in a single factory.

(6) The owner of the premises shall be liable for any contravention of any of the provisions of this section, as if he were the occupier or manager of a factory, and shall be punishable in accordance with the provisions of section 98.

Explanation.—For the purposes of this section, "owner" shall include promoter, co-operative society, trust, receiver, special officer, as the case may be.

74. Power to apply the Code to certain premises.—(1) The state Government may, by notification in the Official Gazette, declare that all or any of the provisions of this Part shall apply to any place wherein a manufacturing process is carried on with or without the aid of power or is so ordinarily carried on, notwithstanding that—

- (i) the number of persons employed therein is less than ten, if working with the aid of power and less than twenty if working without the aid of power, or
- (ii) the persons working therein are not employed by the owner thereof but are working with the permission of, or under agreement with, such owner.

Provided that the manufacturing process is not being carried on by the owner only with the aid of his family.

(2) After a place is so declared, it shall be deemed to be a factory for the purposes of this Code, and the owner shall be deemed to be the occupier, and any person working therein, a worker.

Explanation.—For the purposes of this section, "owner" shall include a lessee or mortgagee with possession of the premises.

75. Dangerous operations.—Where the State Government is of opinion that any manufacturing process or operation carried on in a factory exposes any persons employed in it to a serious risk of bodily injury, poisoning or disease, it may order or make rules applicable to any factory or class or description of factories in which manufacturing process or operation is carried on—

- (a) specifying the manufacturing process or operation and declaring it to be dangerous;
- (b) prohibiting or restricting the employment of women in the manufacturing process or operation;
- (c) providing for the periodical medical examination for persons employed or seeking to be employed, in the manufacturing process or operation, and prohibiting the employment of persons not certified as fit for such employment and requiring the payment by the occupier of the factory of fees for such medical examination;
- (d) providing for the protection of all persons employed in the manufacturing process or operation or in the vicinity of the places where it is carried on;

- (e) prohibiting, restricting or controlling the use of any specified materials or processes in connection with the manufacturing process or operation;
- (f) requiring the provision of additional welfare amenities and sanitary facilities and the supply of protective equipment and clothing, and laying down the standards thereof, having regard to the dangerous nature of the manufacturing process or operation.

**76. Constitution of Site Appraisal Committee.**—(1) The State Government may, for purposes of advising it to consider applications for grant of permission for the initial location of a factory involving a hazardous process or for the expansion of any such factory, appoint a Site Appraisal Committee consisting of—

- (a) the Chief Facilitator of the State who shall be its Chairman;
- (b) a representative of the Central Board for the Prevention and Control of Water Pollution appointed by the Central Government under section 3 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);
- (c) a representative of the Central Board for the Prevention and Control of Air Pollution referred to in section 3 of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981);
- (d) a representative of the State Advisory Board appointed under section 4 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);
- (e) a representative of the State Advisory Board for the Prevention and Control of Air Pollution referred to in section 5 of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981);
- (f) a representative of the Department of Environment in the State;
- (g) a representative of the Meteorological Department of the Government of India;
- (h) an expert in the field of occupational health; and
- (i) a representative of the Town Planning Department of the State Government, and not more than five other members who may be co-opted by the State Government who shall be—
  - (i) a scientist having specialized knowledge of the hazardous process which will be involved in the factory;
  - (ii) a representative of the local authority within whose jurisdiction the factory is to be established; and
  - (iii) not more than three other persons as deemed fit by the State Government.

(2) The Site Appraisal Committee shall examine an application for the establishment of a factory involving hazardous process and make its recommendation to the State Government within a period of ninety days of the receipt of such application in the prescribed form.

(3) Where any process relates to a factory owned or controlled by the Central Government or to a corporation or company owned or controlled by the Central Government, the State Government shall co-opt in the Site Appraisal Committee a representative nominated by the Central Government as a member of that Committee.

(4) The Site Appraisal Committee shall have power to call for any information from the person making an application for the establishment or expansion of a factory involving a hazardous process.

(5) Where the State Government has granted approval to an application for the establishment or expansion of a factory involving a hazardous process, it shall not be necessary for an applicant to obtain a further approval from the Central Board or the State Advisory Board established under the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) and the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981).

**77. Compulsory disclosure of information by the occupier.**—(1) The occupier of every factory involving a hazardous process shall disclose in the manner prescribed all information regarding dangers, including health hazards and the measures to overcome such hazards arising from the exposure to or handling of the materials or substances in the manufacture, transportation, storage and other processes, to the workers employed in the factory, the Chief Facilitator, the local authority within whose jurisdiction the factory is situate and the general public in the vicinity.

(2) The occupier shall, at the time of registering the factory involving a hazardous process, lay down a detailed policy with respect to the health and safety of the workers employed therein and intimate such policy to the

Chief Facilitator and the local authority and, thereafter, at such intervals as may be prescribed, inform the Chief Facilitator and the local authority of any change made in the said policy.

(3) The information furnished under sub-section (1) shall include accurate information as to the quantity, specifications and other characteristics of wastes and the manner of their disposal.

(4) Every occupier shall, with the approval of the Chief Facilitator, draw up an on-site emergency plan and detailed disaster control measures for his factory and make known to the workers employed therein and to the general public living in the vicinity of the factory the safety measures required to be taken in the event of an accident taking place.

(5) Every occupier of a factory shall, if such factory proposes to engage in a hazardous process at any time after such commencement, within a period of thirty days before the commencement of such process, inform the Chief Facilitator of the nature and details of the process in such form and in such manner as may be prescribed.

(6) Where any occupier of a factory contravenes the provisions of sub-section (5), the licence issued under section 72 to such factory shall, notwithstanding any penalty to which the occupier of factory shall be subjected to under the provisions of this Code, be liable for cancellation.

(7) The occupier of a factory involving a hazardous process shall, with the previous approval of the Chief Facilitator, lay down measures for the handling, usage, transportation and storage of hazardous substances inside the factory premises and the disposal of such substances outside the factory premises and publicise them in the manner prescribed among the workers and the general public living in the vicinity.

**78. Specific responsibility of the occupier in relation to hazardous processes.**—Every occupier of a factory involving any hazardous process shall—

(a) maintain accurate and up-to-date health records or, as the case may be, medical records, of the workers in the factory who are exposed to any chemical, toxic or any other harmful substances which are manufactured, stored, handled or transported and such records shall be accessible to the workers subject to such conditions as may be prescribed;

(b) appoint persons who possess qualifications and experience in handling hazardous substances and are competent to supervise such handling within the factory and to provide at the working place all the necessary facilities for protecting the workers in the manner prescribed;

Provided that where any question arises as to the qualifications and experience of a person so appointed, the decision of the Chief Facilitator shall be final;

(c) provide for medical examination of every worker—

(i) before such worker is assigned to a job involving the handling of, or working with, a hazardous substance, and

(ii) while continuing in such job, and after he has ceased to work in such job, at intervals not exceeding twelve months, in such manner as may be prescribed.

**79. Power of Central Government to appoint Inquiry Committee.**—(1) The Central Government may, in the event of the occurrence of an extraordinary situation involving a factory engaged in a hazardous process, appoint an Inquiry Committee to inquire into the standards of health and safety observed in the factory with a view to finding out the causes of any failure or neglect in the adoption of any measures or standards prescribed for the health and safety of the workers employed in the factory or the general public affected, or likely to be affected, due to such failure or neglect and for the prevention and recurrence of such extraordinary situations in future in such factory or elsewhere.

(2) The Committee appointed under sub-section (1) shall consist of a Chairman and two other members and the terms of reference of the Committee and the tenure of office of its members shall be such as may be determined by the Central Government according to the requirements of the situation.

(3) The recommendations of the Committee shall be advisory in the nature.

**80. Emergency standards.**- (1) Where the Central Government is satisfied that no standards of safety have been prescribed in respect of a hazardous process or class of hazardous processes, or where the standards so prescribed are inadequate, it may direct the Director-General of Factory Advice Service and Labour Institutes or any institution specialised in matters relating to standards of safety in hazardous processes, to lay down emergency standards for enforcement of suitable standards in respect of such hazardous processes.

(2) The emergency standards laid down under sub-section (1) shall, until they are incorporated in the rules made under this Code, be enforceable and have the same effect as if they had been incorporated in the rules made under this Code.

**81. Permissible limits of exposure of chemicals and toxic substances.**- The maximum permissible limits of exposure of chemical and toxic substances in manufacturing process in any factory shall be of the value as may be prescribed by the State Government.

**82. Workers' participation in safety management.**- (1) The occupier shall, in every factory where a hazardous process takes place, or where hazardous substances are used or handled, set up a Safety Committee consisting of equal number of representatives of workers and management to promote co-operation between the workers and the management in maintaining proper safety and health at work and to review periodically the measures taken in that behalf.

Provided that the State Government may, by order in writing and for reasons to be recorded, exempt the occupier of any factory or class of factories from setting up such Committee.

(2) The composition of the Safety Committee, the tenure of office of its members and their rights and duties shall be such as may be prescribed.

**83. Right of workers to warn about imminent danger.**- (1) Where the workers employed in any factory engaged in a hazardous process have reasonable apprehension that there is a likelihood of imminent danger to their lives or health due to any accident, they may, bring the same to the notice of the occupier, agent, manager or any other person who is in-charge of the factory or the process concerned directly or through their representatives in the Safety Committee and simultaneously bring the same to the notice of the Facilitator.

(2) It shall be the duty of such occupier, agent, manager or the person in-charge of the factory or process to take immediate remedial action if he is satisfied about the existence of such imminent danger and send a report forth-with of the action taken to the nearest Facilitator.

(3) If the occupier, agent, manager or the person in-charge referred to in sub-section (2) is not satisfied about the existence of any imminent danger as apprehended by the workers, he shall, nevertheless, refer the matter forth-with to the nearest Facilitator whose decision on the question of the existence of such imminent danger shall be final.

**84. Power to direct inquiry into cases of accident or disease in a factory.**-(1) The appropriate Government may, if it considers it expedient so to do, appoint a competent person to inquire into the causes of any accident occurring in a factory or into any case where a disease specified in the Third Schedule has been, or is suspected to have been, contracted in a factory, and may also appoint one or more persons possessing legal or special knowledge to act as assessors in such inquiry.

(2) The person appointed to hold an inquiry under this section shall have all the powers of a Civil Court under the Code of Civil Procedure, 1908 (V of 1908), for the purposes of enforcing the attendance of witnesses and compelling the production of documents and material objects and may also, so far as may be necessary for the purposes of the inquiry, exercise any of the powers of an Facilitator under this Code; and every person required by the person making the inquiry to furnish any information, shall be deemed to be legally bound so to do within the meaning of section 176 of the Indian Penal Code (45 of 1860).

(3) The person holding an inquiry under this section shall make a report to the appropriate Government stating the cause of the accident, or as the case may be, disease, and any attendant circumstances, and adding any observations which he or any of the assessors may think fit to make.

(4) The appropriate Government may, if it thinks fit, cause to be published any report made under this section or any extracts there from.

(5) The appropriate Government may make rules for regulating the procedure of inquiries under this section.

**85. Appeal against the order of facilitator in case of factory -** (1) The employer of an establishment or the manager of a factory or the occupier of the factory on whom an order in writing by a Facilitator has been served under the provisions of this Code may, within thirty days of the service of the order, appeal against it to the prescribed authority, and such authority may, subject to rules made in this behalf by the appropriate Government, confirm, modify or reverse the order.

(2) Subject to rules made in this behalf by the appropriate Government (which may prescribe classes of appeals which shall not be heard with the aid of assessors), the appellate authority may, or if so required in the petition of appeal shall, hear the appeal with the aid of assessors, one of whom shall be appointed by the appellate authority and the other by such body representing the establishment or the factory concerned as may be prescribed:

Provided that if no assessor is appointed by such body before the time fixed for hearing the appeal, or if the assessor so appointed fails to attend the hearing at such time, the appellate authority may, unless satisfied that the failure to attend is due to sufficient cause, proceed to hear the appeal without the aid of such assessor or, if it thinks fit, without the aid of any assessor.

(3) Subject to such rules as the appropriate Government may make in this behalf and subject to such conditions as to partial compliance or the adoption of temporary measures as the appellate authority may in any case think fit to impose, the appellate authority may, if it thinks fit, suspend the order appealed against pending the decision of the appeal.

**86. Power to make exempting rules and order -** (1) The State Government may make rules defining the persons who hold positions of supervision or management or are employed in a confidential position in a factory or empowering the Chief Facilitator to declare any person, other than a person defined by such rules, as a person holding position of supervision or management or employed in a confidential position in a factory if, in the opinion of the Chief Facilitator, such person holds such position or is so employed, and the provisions of this Chapter, other than the provisions of section 42, shall not apply to any person so defined or declared.

(2) The State Government may make rules in respect of the such categories of workers in factories and specified in the rules providing for the exemption, to such extent and subject to such conditions as may be notified by the State Advisory Board.

(3) In making rules under this section, the State Government shall not exceed the following limits of work inclusive of overtime; namely:-

- (i) the total number of hours of work in any day shall not exceed ten;
- (ii) the spread over, inclusive of intervals for rest, shall not exceed twelve hours in any one day;
- (iii) the total number of hours of work in a week, including overtime, shall not exceed sixty;
- (iv) the total number of hours of overtime shall not exceed one hundred for any one quarter.

Explanation: "Quarter" means a period of three consecutive months beginning on the 1st of January, the 1st of April, the 1st of July or the 1st of October.

(4) The State Government or, subject to the control of the State Government, the Chief Facilitator may, by written order exempt, on such conditions as it or he may deem expedient, any or all of the adult workers in any factory or group or a class or description of factories from any or all of the provisions of section 25 and 36 on the ground that the exemption is required to enable the factory or factories to deal with an exceptional pressure of work.

(5) Any exemption granted under sub-section (4) shall be subject to the following conditions, namely:-

- (i) the total number of hours of work in any day shall not exceed twelve;

- (ii) the spread over, inclusive of intervals for rest, shall not exceed thirteen hours in any one day;
- (iii) the total number of hours of work in any week, including overtime, shall not exceed sixty;
- (iv) no worker shall be allowed to work overtime, for more than seven days at a stretch and the total number of hours of overtime work in any quarter shall not exceed one hundred and fifteen.

\*Provided that the State Government or the Chief Facilitator may, subject to the prior approval of the State Government, by order, further enhance the total number of hours of overtime work in any quarter to one hundred and twenty-five in the public interest.\*

### Chapter XIII Offences, Penalties and Procedure

**87. General penalty for offences:-** Save as is otherwise expressly provided in this Code, if in, or in respect of, any establishment, there is any contravention of the provisions of this Code and rules, or of any standards, made thereunder or of any order in writing given under the Code or such rules or standards, the occupier or manager or employer of the establishment, as the case may be, shall be guilty of an offence and be punishable with imprisonment for a term which may extend to three months or with fine which may extend to one lakh rupees, or with both, and if the contravention is continued after the conviction, then, with further fine which may extend to two thousand rupees for each day till the contravention is so continued.

**88. Causing obstruction to enter Chief Facilitator or Facilitator from duty, etc. - (1)** Any, who willfully prevents or causes obstruction-

- (i) to a Chief Facilitator or Facilitator or an officer of the appropriate Government or a person authorized to discharge, or entrusted with, any duty or to exercise any powers from discharging any duty or exercising any power under this Code or the rules made thereunder; or
- (ii) refuses entry to the Chief Facilitator or the Facilitator to any place where such Chief Facilitator or Facilitator is entitled to enter under this Code or the rules made thereunder; or
- (iii) fails to produce any document which he is required to produce under, or fails to comply with any requisition or order issued to him by or under, the provisions of this Code or the rules made thereunder,

then, he shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to one lakh rupees, or with both.

(2) If any person who has been convicted of any offence punishable under sub-section (1) is again convicted of an offence under that sub-section, then, he shall be punishable on a second or subsequent conviction with imprisonment for a term which may extend to six months, or with fine which shall not be less than one lakh rupees but which may extend to two lakh rupees, or with both.

**89. Non-maintenance of register, records and non-filing of returns, etc. - (1)** Any person, who is required under this Code or the rules or regulations or bye-laws made thereunder or of any order made under the Code or such rules or regulations or bye-laws,-

- (i) to maintain any register or other document or to file returns, omits or fails to maintain such register or document or to file such returns; or
- (ii) to produce any register or plan or record or report or any other document, omits or fails to produce such register or plan or record or report or such other document, then, he shall be punished with fine which may extend to one lakh rupees.

(2) Any, person, who is required under this Code or the rules or regulations or bye-laws made thereunder to maintain the register or record or any other document or to file return in a manner specified therein and fails to comply with such requirement or manner, as the case may be, then, he shall be punished with fine which may be extended to fifty thousand rupees.

(3) If any person, who has been convicted of any offence punishable under sub-section (1) or sub-section (2) is again convicted of an offence under the respective said sub-section, then, he shall be punished on a second or subsequent conviction, with fine which shall not be less than fifty thousand rupees but which may extend to two lakh rupees, or with both.



**90. Contravention of provisions regarding employment of worker including women, audio-visual worker and contract labour, etc.** - (1) Any person, who, save as permitted by or under this Code contravenes -

- (i) any provision of this Code or of any rule, regulation or bye-laws; or
- (ii) any order made under the provision referred to under clause (i) prohibiting, restricting or regulating the employment of workers including women, audio-visual worker and contract labour,

then, he shall be punishable with fine which may extend to one lakh rupees.

(2) If any person who has been convicted of any offence punishable under sub-section (1) is again found guilty of an offence under that sub-section, then, he shall be punishable on a second or subsequent conviction with imprisonment for a term which may extend to three months, or with fine which may extend to two lakh rupees, or with both.

**91. Falsification of records, etc.** - (1) Any person, who produces false records or counterfeits or knowingly makes a false statement regarding any document in connection with compliance of any of the provisions of this Code or any rules, regulations or bye-laws or of any order made there under, then, he shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to one lakh rupees, or with both.

(2) If any person who has been convicted of any offence punishable under sub-section (1) is again convicted of an offence under that sub-section, then, he shall be punishable on a second or subsequent conviction with imprisonment for a term which may extend to six months, or with fine which shall not be less than one lakh rupees but which may extend to two lakh rupees, or with both.

**92. Penalty on disclosure of information** - (1) If the Chief Facilitator or facilitator or any other person referred to in section 37 or section 112 discloses, contrary to the provisions of that section, any such information as is referred to in that section without the consent of the appropriate Government, he shall be punishable with imprisonment for a term which may extend to six months, or with fine which may extend to one lakh rupees, or with both.

(2) No court shall proceed to the trial of any offence under this section except with the previous sanction of the appropriate Government.

**93. Penalty for wrongfully disclosing results of analysis of a sample of substance used or intended to be used.** - Whoever, except in so far as it may be necessary for the purposes of a prosecution for any offence punishable under this Code, publishes or discloses to any person the results of an analysis of a sample of substance used or intended to be used shall be punishable with imprisonment for a term, which may extend to six months or with fine, which may extend to fifty thousand rupees or with both.

**94. Penalty for contravention of the provisions of duties relating to hazardous processes** - (1) If, a person, who fails to comply with or contravenes any of the duties under clauses (a) to (e) of sub-section (5) of section 6 or clause (d) of section 13 in so far as such duty relates to hazardous processes shall, in respect of such failure or contravention, be punishable with an imprisonment for a term which may extend to two years and with fine which may extend to five lakh rupees, and in case the failure or contravention continues, with additional fine which may extend to twenty five thousand rupees for every day during which such failure or contravention continues, after the conviction for the first such failure or contravention.

(2) If the failure or contravention referred to in sub-section (1) continues beyond a period of one year after the date of conviction, the offender shall be punishable with imprisonment for a term which may extend to three years, or with a fine of twenty lakh rupees, or with both.

**95. Penalty for contravention of the provisions of duties relating to safety provisions resulting in an accident.** - If a person fails to comply with or contravenes any duties under this Code or the rules made thereunder and such non-compliance or contravention has resulted in an accident causing death or serious bodily injury to any

person within the establishment, then, he shall be punishable with fine which shall not be less than five lakh rupees in the case of an accident causing death, and two lakh rupees in the case of an accident causing bodily injury;

Provided that while imposing the fine under this section, the court may direct that a portion of the fine, which shall not be less than fifty percent thereof, shall be given to the victim or the legal heirs of the victim, in the case of his death (in accordance with their rights which the court deems fit), as the case may be, as compensation.

Explanation.-In this section "serious bodily injury" means an injury which involves, or in all probability will involve, the permanent loss of the use of, or permanent injury to, any limb or the permanent loss of, or injury to sight or hearing, or the fracture of any bone, but shall not include, the fracture of bone or joint (not being fracture of more than one bone or joint) of and phalanges of the hand or foot.

96. Failure to appoint manager in a mine.- Any person, who in contravention of the provisions of section 53, fails to appoint a manager, then, he shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to one lakh rupees, or with both.

97. Offences by employees.- (1) Subject to the provisions of section 13, except clause (d) thereof, if any employee employed in a workplace contravenes any provision of this Code or any rules or orders made thereunder, imposing any duty or liability on employee, he shall be punishable with fine which may extend to ten thousand rupees.

(2) Where an employee is convicted of an offence punishable under sub-section (1) the employer of the establishment shall not be deemed to be guilty of an offence in respect of that contravention, unless it is proved that he failed to take all reasonable measures for its prevention.

98. Prosecution of owner, agent or manager of a mine.- No prosecution shall be instituted against any owner, agent or manager of a mine for any offence under this Code except at the instance of the Chief Facilitator or of the district magistrate or of Facilitator authorised in this behalf by general or special order in writing by the Chief Facilitator :

Provided that the Chief Facilitator or the district magistrate or the Facilitator as so authorised shall before instituting such prosecution satisfy himself that the owner, agent or manager of a mine had failed to exercise due diligence to prevent the commission of such offence.

Provided further that in respect of an offence committed in the course of the technical direction and management of a mine, the district magistrate shall not institute any prosecution against an owner, agent or manager of a mine without the previous approval of the Chief Facilitator.

99. Exemption of owner, agent or manager of a mine or occupier of a factory from liability in certain cases.- Where the owner, agent or manager of the mine or employer or occupier of the factory is charged with an offence punishable under this Code he shall be entitled, upon complaint duly made by him and on giving to the prosecutor not less than three clear days' notice in writing of his intention so to do, to have any other person whom he charges as the actual offender brought before the Court at the time appointed for hearing the charge; and if, after the commission of the offence has been proved, the owner, agent or manager of the mine or occupier or manager of the factory, as the case may be, proves to the satisfaction of the Court -

- (a) that he has exercised due diligence to enforce the execution of this Code; and
- (b) that the said other person committed the offence in question without his knowledge, consent or connivance.

that other person shall be convicted of the offence and shall be liable to the like punishment as if he was the owner, agent or manager of the mine or occupier or manager of the factory, as the case may be, and the

owner, agent or manager of a mine or the occupier or the manager of the factory shall be, discharged from any liability under this Code in respect of such offence.

Provided that in seeking to prove as aforesaid the owner, agent or manager of a mine or the occupier or manager of the factory, as the case may be, may be examined on oath, and his evidence and that of any witness whom he calls in his support, shall be subject to cross-examination on behalf of the person he charges as the actual offender and by the prosecutor.

Provided further that, if the person charged as the actual offender by the owner, agent or manager of the mine or occupier or manager of the factory as the case may be, cannot be brought before the court at the time appointed for hearing the charge, the court shall adjourn the hearing from time to time for a period not exceeding three months and if by the end of the said period the person charged as the actual offender cannot still be brought before the court, the court shall proceed to hear the charge against the owner, agent or manager of the mine or occupier or manager of the factory, as the case may be, and shall, if the offence be proved, convict him.

**100. Offences by companies, etc.** - (1) Where an offence under this Code has been committed by a company, every person who, at the time the offence was committed, was in charge of, and was responsible to, the company for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly:

Provided that nothing contained in this sub-section shall render any such person liable to any punishment, if he proves that the offence was committed without his knowledge or that he had exercised all due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1) where any offence under this Code has been committed by a company and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of any director, manager, company secretary or other officer of the company, such director, manager, company secretary or other officer shall be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

*Explanation.* - For the purposes of this section, -

(a) "company" means any body corporate and includes a firm or other association of individuals; and

(b) "director", means,-

- (i) in relation to a firm a partner thereof; or
- (ii) the owner of a mine being a firm or other association of individuals or a company; or
- (iii) in case of association of individuals other than specified in sub-clause (ii), any of its members.

**101. Limitation of Prosecution and cognizance of offence** - (1) No court shall take cognizance of any offence punishable under this Code, unless a complaint in respect thereof is made within three months of the date on which the alleged commission of the offence came to the knowledge of the Facilitator and a complaint is filed in that regard thereby:

Provided that where the offence consists of disobeying a written order made by a Facilitator, complaint thereof may be made within six months from the date on which the offence is alleged to have been committed.

(2) No court inferior to that of a Metropolitan Magistrate or a Judicial Magistrate of the First Class shall try any offence punishable under this Code.

*Explanation.* - For the purposes of this section,-

- (a) in the case of a continuing offence, the period of limitation shall be computed with reference to every point of time during which the offence continues;
- (b) where for the performance of any act, time is granted or extended on an application made by the employer of an establishment, the period of limitation shall be computed from the date on which the time so granted or extended expired.

102. Jurisdiction of a court for entertaining proceedings, etc., for offence.-For the purposes of conferring jurisdiction on any court in relation to an offence under this Code or the rules, regulation or bye-laws made thereunder in connection with an establishment, the place where the establishment is for the time being situate, shall be deemed to be the place where such offence has been committed.

103. Power of Court to make orders. - (1) Where the owner, occupier, agent or manager of a mine or a factory, as the case may be, is convicted of an offence punishable under this Code, the Court may, in addition to awarding him any punishment, by order in writing, require him within a period specified in the order (which may be extended by the Court from time to time on application made in this behalf) to take such measures as may be so specified for remedying the matters in respect of which the offence was committed.

(2) Where an order is made under sub-section (1), the owner, occupier, agent or manager of the mine or the factory or a mine or factory, as the case may be, shall not be liable under this Code in respect of the continuance of the offence during the period or extended period, if any, but if on the expiry of such period or extended period the order of the Court has not been fully complied with, the owner, agent or manager, as the case may be, shall be deemed to have committed a further offence and shall be punishable with imprisonment for a term which may extend to six months, or with fine which may extend to one hundred rupees for every day after such expiry on which the order has not been complied with, or with both.

104. Compounding of offences. - (1) Notwithstanding anything contained in the Code of Criminal Procedure, 1973, any offence punishable under this Code, not being an offence punishable with imprisonment only, or with imprisonment and also with fine, may, on an application of the accused person, either before or after the institution of any prosecution, be compounded by a Gazetted officer, as the appropriate Government may, by notification, specify, for a sum of fifty percent of the maximum fine provided for such offence, in the manner as may be prescribed.

(2) Nothing contained in sub-section (1) shall apply to an offence committed by a person for the second time or thereafter within a period of five years from the date—

(a) of commission of a similar offence which was earlier compounded;

(b) of commission of similar offence for which such person was earlier convicted.

(3) Every officer referred to in sub-section (1) shall exercise the powers to compound an offence, subject to the direction, control and supervision of the appropriate Government.

(4) Every application for the compounding of an offence shall be made in such manner as may be prescribed.

(5) Where any offence is compounded before the institution of any prosecution, no prosecution shall be instituted in relation to such offence, against the offender in relation to whom the offence is so compounded.

(6) Where the composition of any offence is made after the institution of any prosecution, such composition shall be brought by the officer referred to in sub-section (1) in writing, to the notice of the Court in which the prosecution is pending and on such notice of the composition of the offence being given, the person against whom the offence is so compounded shall be discharged.

(7) Any person who fails to comply with an order made by the officer referred to in sub-section (1), shall be liable to pay a sum equivalent to twenty percent of the maximum fine provided for the offence, in addition to such fine.

#### Chapter XIII Miscellaneous

105. Delegation of powers- The Central Government may, by notification, direct that any power exercisable by it under this Code or rules made there under shall, in relation to such matters and subject to such conditions, if any, as may be specified in the notification, be exercisable also by the State Government or by such officer or authority subordinate to the State Government as may be specified in the notification.

106. Onus as to age.—(1) When any offence is committed under this Code involving an issue of a certain age of a person and such person is in the opinion of the court prima facie under such age, the burden shall be on the accused to prove that such person is not under such age.

(2) The prescribed medical authority shall, while examining a worker for issuing the certificate of age for the purposes of this Code, take into account the Aadhar card of the worker, and in the absence thereof, the date of birth certificate from school or the matriculation or equivalent certificate from the concerned examination Board of the worker, if available, and in the absence thereof, the birth certificate of the worker given by a corporation or a municipal authority or a Panchayat, and only in the absence of any of the methods specified in this sub-section, the age shall be determined by such medical authority through an ossification test or any other latest medical age determination test.

**107. Onus of proving limits of what is practicable, etc.** - In any proceeding for an offence for the contravention of any provision of this Code or rules made there under consisting of a failure to comply with a duty or requirement to do something, it shall be for the person who is alleged to have failed to comply with such duty or requirement, to prove that it was not reasonably practicable or as the case may be, all practicable measures were taken to satisfy the duty or requirement.

**108. Effect of law and agreements inconsistent with this Code.**—(1) The provisions of this Code shall have effect notwithstanding anything inconsistent therewith contained in any other law for the time being in force or in the terms of any award, agreement or contract of service whether made before or after the commencement of this Code.

Provided that where under any such award, agreement, contract of service or otherwise an employee is entitled to benefits in respect of any matters which are more favourable to him than those to which he will be entitled to under this Code, the employee shall continue to be entitled to the more favourable benefits in respect of that matter notwithstanding that he receives benefits in respect of other matters under this Code.

(2) Nothing contained in this Code shall be construed as precluding any employee from entering into an agreement with an employer for granting him rights or privileges in respect of any matter which are more favourable to him than those to which he would be entitled under this Code.

**109. Power of the appropriate Government to direct inquiry in certain cases -**

- (1) The appropriate Government may, in the event of the occurrence of an accident which has caused or had the potentiality to cause serious danger to employees and other persons within, and in the vicinity of the workplace or whether immediate or delayed, or any occupational disease as specified in the Standards, which has been or is suspected to have been contracted, in epidemic proportions, appoint one or more persons possessing legal or special knowledge to act as assessors in such inquiry in order to inquire into the causes of the accident and disease, fix responsibilities and suggest a plan of action for the future to prevent such accidents or diseases.
- (2) The appropriate Government may direct a Chief Facilitator or any other officer under the control of the Government concerned or appoint a committee to undertake a survey on the situation relating to safety or health at work at any workplace or class of workplaces or into the effect of work activity on the health of the employees and other persons within and in the vicinity of the workplace.
- (3) The officer or the committee referred to in sub-section (2) -
  - (a) may, at any time during the normal working hours of the workplace, or at any other time as found by him or the committee to be necessary, after giving notice in writing, undertake such survey and the employer shall make available all records and afford all facilities for such survey including facilities for the examination and testing of plant and collection of samples and other data relevant to the survey;
  - (b) for the purpose of facilitating a survey under this sub-section, every employee shall, if so required by the officer or the committee conducting the survey present himself to undergo such medical examination as may be considered necessary by such officer and furnish all such information in his possession or the employee and relevant to the survey as may be considered necessary by the officer or the committee conducting the survey.
  - (c) Any time spent by an employee for undergoing medical examination or furnishing information under clause (b) shall, for the purpose of calculating wages and extra wages for overtime work, be deemed to be time during which such employee worked.

- (4) The officer directed or committee appointed under sub-section (2) to hold an inquiry, shall have the powers of a Civil Court under the code of Civil Procedure, 1908 (V of 1908), for the purposes of enforcing the attendance of witnesses and compelling the production of documents and material objects, and may also so far as may be necessary for the purposes of the inquiry, exercise such powers of a Facilitator under this Code as may be necessary; and every person required by the officer or committee to furnish any information shall be deemed to be legally bound so to do within the meaning of section 176 of the Indian Penal Code (45 of 1860)
- (5) The officer or committee holding an inquiry under this section shall make a report to the Government concerned.
- (6) The Central Government may make rules for regulating the procedure of inquiries and other related matters under this section.

**110. Publication of reports.**—The appropriate Government, if it thinks fit, may cause to be published any report submitted to it by the National Board or State Advisory Board, as the case may, or any extracts from any report submitted to it under this Code.

**111. Powers of Central Government to give directions.**—The Central Government may give directions to a State Government as to the carrying into execution of the provisions of this Code.

**112. General restriction on disclosure of information.**—(1) No person shall in respect of the factory or the mine, as the case may be, disclose otherwise than in connection with enforcement or for the purposes of any of the relevant statutory provisions, any information relating to any manufacturing or commercial business or any working process which may come to his knowledge in the course of his official duties under any of the relevant statutory provisions or which has been disclosed to him in connection with, or for the purposes of any of the relevant statutory provisions.

(2) Nothing in sub-section (1) shall apply to any disclosure of information made with the previous consent in writing of the owner of the business or process or for the purposes of any legal proceeding (including adjudication or arbitration), pursuant to any of the relevant statutory provisions or of any criminal proceeding or proceeding before a tribunal under this Code which may be taken, whether pursuant to any of the relevant statutory provisions or otherwise, or for the purposes of any report of such proceedings as aforesaid.

**113. Jurisdiction of civil courts barred.**—No civil court shall have jurisdiction in respect of any matter to which any provision of this Code applies and no injunction shall be granted by any civil court in respect of anything which is done or intended to be done by or under this Code.

**114. Protection of action taken in good faith.**—(1) No suit, prosecution or other legal proceeding shall lie against any person for anything which is in good faith done or intended to be done in pursuance of this Code or any rule or regulation or bye-law or order made there under.

(2) No prosecution or other legal proceeding shall lie against the Government, any Board or Committees constituted under this Code or any member of such Board or any officer or employee of the Government or the Board or any other person authorised by the Government or any Board or committee, for any damage caused or likely to be caused by anything which is in good faith done or intended to be done in pursuance of this Code or any rule or regulation or bye-law or order made or issued there under.

**115. Power to exempt in special cases.**—The appropriate Government may, by notification in the Official Gazette and subject to such conditions and restrictions, if any, and for such period or periods as may be specified in the notification, direct that all or any of the provisions of this Code or the rules or the regulations made thereunder shall not apply to or in relation to any establishment or class or description of establishments.

**116. Power to exempt during public emergency.**—In case of a public emergency, the appropriate Government may, by notification, exempt any work place or work activity or class or description thereof from all or any of the provisions of this Code for such period and subject to such conditions as it may think fit; Provided that no such notification shall be made for a period exceeding three months at a time.

**Explanation.**— For the purposes of this section 'public emergency' means a grave emergency whereby the security of India or any part of the territory thereof is threatened, whether by war or external aggression or internal disturbance.

**117. Power to exempt public institution.**— The appropriate Government may exempt, subject to such conditions as it may consider necessary, any workshop or workplace where a manufacturing process is carried on and which is attached to a public institution maintained for the purposes of education, training, research or information, from all or any of the provisions of this Code.

Provided that no such exemption shall be granted from the provisions relating to hours of work and holidays unless the persons having the control of the institution submit, for the approval of the appropriate Government, a scheme of the regulation of the hours of employment, intervals for meals, and holidays of the persons employed in or attending the institution or who are inmates for the institution, and the appropriate Government is satisfied that the provisions of the scheme are not less favourable than the corresponding provisions of this Code.

**118. Persons required to give notice, etc., legally bound to do so.**— Every person required to give any notice or to furnish any information to any authority in relation to the provisions of this Code shall be legally bound to do so within the meaning of section 176 of the Indian Penal Code (45 of 1860).

**119. Power to remove difficulties.**— (1) If any difficulty arises in giving effect to the provisions of this Code, the Central Government may, by order published in the Official Gazette, make such provisions not inconsistent with the provisions of this Code, as appears to it to be necessary or expedient for removing the difficulty.

Provided that no such order shall be made after the expiry of two years from the date on which this Code comes into force.

(2) Every order made under this section shall, as soon as may be after it is made, be laid before each House of Parliament.

**120. Power of the appropriate Government to make rules.**— (1) The appropriate Government may, subject to the condition of previous publication and by notification, make rules for carrying out the purposes of this Code.

(2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:

- (a) to prescribe the substance as hazardous substance under clause (z) of sub-section (1) of section 2;
- (b) the late fee under the proviso to sub-section (1) of section 3;
- (c) the manner of submitting application under sub-section (2) of section 3 and the form of such application and the particulars to be contained therein and the fees to be accompanied therewith;
- (d) the form and manner of sending the notice and the authority to whom the notice shall be sent and the manner of intimating the authority under section 5;
- (e) the form of letter of appointment under sub-section (3) of section 6;
- (f) the nature of bodily injury and the form of notice and the time within which the notice shall be sent under sub-section (1) of section 10;
- (g) nature of dangerous occurrence and the form of notice, the time within which and the authority to which notice shall be given under section 11;
- (h) the form of notice related to certain diseases and the time within which the notice shall be sent to the authority under sub-section (1) of section 12;
- (i) the form and manner of the report and the time within which such report shall be sent to the office of the Chief Facilitator under sub-section (2) of section 12;

- (j) the representatives of the employer and the workers in the Safety Committee under sub-section (1) of section 22;
- (k) the number of workers and the qualifications, duties and number of safety officers under sub-section (1) of section 22;
- (l) conditions under sub-section (2) of section 28;
- (m) circumstances under section 30;
- (n) provisions under sub-section (1) of section 31;
- (o) the form and manner of maintaining and the manner of sending the notice under sub-section (2) of section 31;
- (p) the leave with wages which the person employed shall be entitled and the manner in which the person shall be entitled during a calendar year under sub-section (1) of section 32;
- (q) the register and the particulars of workers under clause (a) of sub-section (1) of section 33;
- (r) the manner and form of displaying notices under clause (b) of sub-section (1) of section 33;
- (s) the manner of filing return to the Facilitator under clause (d) of sub-section (1) of section 33;
- (t) the forms of return and the manner of filing the returns under sub-section (3) of section 33;
- (u) the manner of inspection including web based inspection under sub-section (2) of section 34;
- (v) the qualification and experience of Chief Facilitator under sub-section (3) of section 34;
- (w) rules under sub-section (1) of section 35;
- (x) the register to be produced under clause (v) of sub-section (1) of section 35;
- (y) the manner of taking sample under clause (ix) of sub-section (1) of section 35;
- (z) the powers under clause (xi) of sub-section (1) of section 35;
- (aa) the manner of providing alternative employment under clause (d) of sub-section (1) of section 36;
- (bb) any other establishment and the jurisdiction under sub-section (1) of section 40;
- (cc) duties of medical officer under sub-section (2) of section 40;
- (cd) other establishment and the dangerous occupation or processes under clause (a) of sub-section (3) of section 40;
- (ce) medical supervision under clause (b) of sub-section (3) of section 40;
- (cf) any other establishment under clause (c) of sub-section (3) of section 40;
- (cg) any other establishment under clause (d) of sub-section (3) of section 40;
- (ch) any other establishment under clause (e) of sub-section (3) of section 40;
- (ci) safety, holiday and working hours beyond 6 A.M to 7 P.M under section 42;
- (cj) manner of prohibiting the employment of women under section 43;
- (ck) the particulars under sub-section (1) of section 46;
- (cl) the time within which the licence shall be renewed under sub-section (2) of section 46;
- (cm) fees under clause (a) of sub-section (3) of section 46;
- (cn) the form and manner of application and the other particulars which such application shall contain under sub-section (1) of section 47;
- (co) the procedure to be followed under sub-section (2) of section 47;
- (cp) manner of application for renewal of the licence and the manner of renewing licence under sub-section (3) of section 47;
- (cq) the time and manner of intimation and the manner of cancelling licence under clause (ii) of section 49;
- (cr) rules under sub-section (2) of section 50;
- (cs) the period before which the wages shall be paid under sub-section (1) of section 54;
- (ct) the manner of certifying the amounts paid as wages under proviso to sub-section (2) of section 54;
- (cu) the time of make payment under sub-section (3) of section 54;
- (cv) the manner of passing orders by the appropriate Government under sub-section (4) of section 54;
- (cw) the format of issuing experience certificate under section 55;
- (cx) the medical facilities under clause (iv) of section 58;
- (cy) the manner of compounding of offence under sub-section (1) of section 105;
- (cz) the manner of making application under sub-section (4) of section 105;
- (caa) any other matter which is required to be, or may be, prescribed under this Code.



**121. Power of the Central Government to make rules.**-(1) The Central Government may, subject to the conditions of previous publication and by notification, make rules for carrying out the purposes of this Code.  
(2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:-

- (a) form of certificate of registration, the time within which and the conditions subject to which such certificates shall be issued under sub-section (3) of section 3;
- (b) other particulars and form under sub-section (4) of section 3;
- (c) the manner of informing closing and certifying payment to the registering officer under sub-section (5) of section 3;
- (d) rules under sub-section (2) of section 7;
- (e) procedure of National Board and the officers and staff thereof under sub-section (3) of section 16;
- (f) the number of members and their qualifications under sub-section (4) of section 16;
- (g) standards of working atmosphere under sub-section (1) of section 23;
- (h) rule for the matters specified in sub-section (2) of section 23;
- (i) standard for welfare facilities for the workers under sub-section (1) of section 24;
- (j) rule for the matters specified in sub-section (2) of section 24;
- (k) the hours of work for working journalist under sub-section (4) of section 25;
- (l) other kinds of leave under clause (i) of sub-section (5) of section 25;
- (m) the maximum period of accumulating leave under clause (ii) sub-section (5) of section 25;
- (n) the limit upto which the earn leave may be availed of at a time and the reasons for which such leave may be exceeding under clause (iii) of sub-section (5) of section 25;
- (o) the conditions and restrictions under clause (v) of sub-section (5) of section 25;
- (p) other matter under sub-clause (vi) of clause (a) of sub-section (1) of section 33;
- (q) requisite qualifications or criteria under sub-section (1) section 46;
- (r) form of agreement under clause (a) of sub-section (2) section 62;
- (s) authority under sub-section (3) section 62;
- (t) the matter which may be save under sub-section (1) section 63;
- (u) the qualifications of sole manager under sub-section (1) of section 63;
- (v) the authority to be informed about the non-fulfillment and the manner in which and time within which such authority shall be so informed under sub-section (3) of section 64;
- (w) qualification under clause (g) of section 123;
- (x) any other matter under clause (bb) of section 123;
- (y) other language or languages under sub-section (5) of section 126;

**122. Power of the State Government to make rules.**-(1) The State Government may, subject to the condition of previous publication and by notification, make rules for the matters relating to the factories, plantation and any other matter for the carrying out the provision of this Code by the State Government.  
(2) In particular and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:-

- (a) the constitution, procedure and other matters relating to State Advisory Board under sub-section (2) of section 17;
- (b) the number of members and their qualifications under sub-section (3) of section 17;
- (c) the manner in which the employer of the plantation shall provide for drinking water, housing facility, education facility for the children of workers, health facility and other amenities required for the protection of the plantation worker from rain or cold under sub-section (4) of section 24;
- (d) the form of application and the payment of fees under sub-section (2) of section 67;
- (e) the manner of preparing the plan of the place of premises under sub-section (3) of section 67;
- (f) other matter under clause (e) of sub-section (4) of section 67;
- (g) fees under clause (b) of sub-section (5) of section 67;
- (h) the time of filing appeal and the fees under section 68;
- (i) the form of maintaining record sub-section (2) of section 69;
- (j) rules under sub-section (1) of section 72;
- (k) mode under sub-section (2) of section 72;
- (l) limit under explanation to section 72;
- (m) any other common facilities under clause (vi) of sub-section (1) of section 73;
- (n) form of application under sub-section (2) of section 76;

- (o) the manner of disclosing information under sub-section (1) of section 77;
- (p) the interval of informing Chief Facilitator and the local authority under sub-section (2) of section 77;
- (q) the form and manner of informing Chief Facilitator under sub-section (5) of section 77;
- (r) the manner of publicizing among the workers and the general public living in the vicinity under sub-section (7) of section 77;
- (s) conditions under clause (a) of section 78;
- (t) the manner of providing necessary facilities for protecting the workers under clause (b) of section 78;
- (u) the manner of medical examination of a worker under sub-clause (ii) of clause (c) of section 78;
- (v) the value of the maximum prescribed limit of exposure of chemical and toxic substances in manufacturing process in any factory under section 81;
- (w) the composition of safety committee, the tenure of office of its members and their rights and duties under sub-section (2) of section 81;
- (x) the authority under sub-section (1) of section 85;
- (y) the body representing the factory concerned under sub-section (2) of section 85;
- (z) rules under sub-section (1) of section 85;
- (aa) rules under sub-section (2) of section 85;
- (bb) any other matter which has to be or may be prescribed.

**123. Power of Central Government to make regulations in relation to mines and dock work -** The Central Government may, by notification in the Official Gazette, make regulations consistent with this Code for all or any of the following purposes, namely:-

- (a) for prescribing the qualifications required for appointment as Chief Facilitator or Facilitator;
- (b) for prescribing and regulating the duties and powers of the Chief Facilitator and of Facilitators in regard to the inspection of mines under this Code;
- (c) for prescribing the duties of owners, agents and managers of mines and of persons acting under them, and for prescribing the qualifications (including age) of agents and managers of mines and of persons acting under them;
- (d) for requiring facilities to be provided for enabling managers of mines and other persons acting under them to efficiently discharge their duties;
- (e) for regulating the manner of ascertaining, by examination or otherwise, the qualifications of managers of mines and persons acting under them, and the granting and renewal of certificates of competency;
- (f) for fixing the fees, if any, to be paid in respect of such examinations and of the grant and renewal of such certificates;
- (g) for determining the circumstances in which and the conditions subject to which it shall be lawful for more mines than one to be under a single manager, or for any or mines to be under a manager not having the prescribed qualifications;
- (h) for providing for inquiries to be made under this Code, including any inquiry relating to misconduct or incompetence on the part of any person holding a certificate under this Code and for the suspension or cancellation of any such certificate and for providing, wherever necessary, that the person appointed to hold an inquiry shall have all the powers of a civil court under the Code of Civil Procedure, 1908, for the purpose of enforcing the attendance of witnesses and compelling the production of documents and material objects;
- (i) for regulating, subject to the provisions of the Indian Explosives Act, 1884, and of any rules made there under, the storage, conveyance and use of explosives;
- (j) for prohibiting, restricting or regulating the employment of women in mines or in any class of mines or on particular kinds of labour which are attended by danger to the life, safety or health of such persons and for limiting the weight of any single load that may be carried by any such person;
- (k) for providing for the safety of the persons employed in a mine, their means of entrance there into and exit there from, the number of shafts or outlets to be furnished, and the fencing of shafts, pits, outlets, pathways and subsidences;
- (l) for prohibiting the employment in a mine either as manager or in any other specified capacity of any person except persons paid by the owner of the mine and directly answerable to the owner or manager of the mine;
- (m) for providing for the safety of the roads and working places in mines, including the siting, maintenance and extraction or reduction of pillars or blocks of minerals and the maintenance of

- sufficient barriers between mine and mine;
- (n) for the inspection of workings and sealed off fire- areas in a mine, and for the restriction of workings in the vicinity of the sea or any lake or river or any other body of surface water, whether natural or artificial, or of any public road or building, and for requiring due precaution to be taken against the irruption or influx of water or other liquid matter into, outbreak of fire in or premature collapse of, any workings;
  - (o) for providing for the ventilation of mines and the action to be taken in respect of dust, fire, and inflammable and noxious gases, including precautions against spontaneous combustion, underground fire and coal dust;
  - (p) for regulating, subject to the provisions of the Indian Electricity Act, 1910, (5 of 1910) and of any rules made thereunder, the generation, storage, transformation, transmission and use of electricity in mines and for providing for the care and the regulation of the use of all electrical apparatus and electrical cables in mines and of all other machinery and plant therein;
  - (q) for regulating the use of machinery in mines, for providing for the safety of persons employed on or near such machinery and on haulage roads and for restricting the use of certain classes of locomotives underground;
  - (r) for providing for proper lighting of mines and regulating the use of safety lamps therein and for the search of persons entering a mine in which safety lamps are in use;
  - (s) for providing against explosions or ignitions of inflammable gas or dust or irruptions of or accumulations of water in mines and against danger arising there from and for prohibiting, restricting or regulating the extraction of minerals in circumstances likely to result in the premature collapse of workings or to result in or to aggravate the collapse of workings or irruptions of water or ignitions in mines;
  - (t) for specifying type of accidents for the purposes of notice under section 10 and for specifying the notices of accidents and dangerous occurrences, and the notices, reports and returns of mineral output, persons employed and other matters provided for by regulations, to be furnished by owners, agents and managers of mines, and for prescribing the forms of such notices, returns and reports, the persons and authorities to whom they are to be furnished, the particulars to be contained in them, and the time within which they are to be submitted;
  - (u) for requiring owners, agents and managers of mines to have fixed boundaries for the mines, for prescribing the plans and sections and field notes connected therewith to be kept by them and the manner and places in which such plans, sections and field notes are to be kept for purposes of record and for the submission of copies thereof to the Chief Facilitator; and for requiring the making of fresh surveys and plans by them, and in the event of non-compliance, for having the survey made and plans prepared through any other agency and for the recovery of expenses thereof in the same manner as an arrear of land revenue;
  - (v) for regulating the procedure on the occurrence of accidents or accidental explosions or ignitions in or about, mines; for dealing effectively with the situation;
  - (w) for specifying the form of, and the particulars to be contained in, the notice to be given by the owner, agent or manager of a mine under section 5 ;
  - (x) for specifying the notice to be given by the owner, agent or manager of a mine before mining operations are commenced at or extended to any point within forty five meters of any railway subject to the provisions of the Indian Railways Act, 1890 (9 of 1890) or of any public roads or other works as the case may be, which are maintained by the Government or any local authority;
  - (y) for the protection from injury, in respect of any mine when the workings are discontinued, of property vested in the Government or any local authority or railway company as defined in the Indian Railways Act, 1890 (9 of 1890);
  - (z) for requiring protective works to be constructed by the owner, agent or manager of a mine before the mine is closed, and in the event of non-compliance, for getting such works executed by any other agency and for recovering the expenses thereof from such owner in the same manner as an arrear of land revenue;
  - (aa) for requiring the fencing of any mine or part of a mine or any quarry, incline, shaft, pit or outlet, whether the same is being worked or not, or any dangerous or prohibited area, subsidence, haulage, tramline or pathway, where such fencing is necessary for the protection of the public; and
  - (bb) any other matter which has to be or may be prescribed.

**124. Prior publication of regulations and rules in relation to mine and dock work -** (1) The power to make rules and regulations conferred by sections 121 and 123 relating to mine and dock work is subject to the condition of the regulations and rules being made after previous publication in the following manner, namely:-

- (a) the date to be specified after a draft of regulations or rules proposed to be made will be taken under consideration, shall not be less than three months from the date on which the draft of the proposed regulations or rules is published for general information.
- (b) no regulation or rule shall be made unless the draft thereof has been referred to the National Occupational Safety Health Advisory Board constituted under sub-section (1) of section 16 and unless that Committee has had a reasonable opportunity of reporting as to the expediency of making the same and as to the suitability of its provisions.
- (c) regulations and rules shall be published in the Official Gazette and, on such publication, shall have effect as if enacted in this Code.
- (d) the provisions of clause (a), (b) and (c) shall not apply to the first occasion on which rules referred to in clause (d) or clause (e) of section 121 are made.

**125. Power to make regulation without previous publication -** Notwithstanding anything contained in section 124, regulations under section 123 may be made without previous publication and without reference to the National Occupational Safety Health Advisory Board constituted under sub-section (1) of section 16 if the Central Government is satisfied that for the prevention of apprehended danger or the speedy remedy of conditions likely to cause danger it is necessary in making such regulations to dispense with the delay that would result from such publication and reference;

Provided that any regulations so made shall be sent to the said National Occupational Safety Health Advisory Board for information and shall not remain in force for more than one year from the making thereof.

**126. Bye-laws.** (1) The owner, agent or manager of a mine may, and shall, if called upon to do so by the Chief Facilitator or Facilitator, frame and submit to the Chief Facilitator or Facilitator a draft of such bye-laws, not being inconsistent with this Code or any regulations or rules for the time being in force, governing the use of any particular machinery or the adoption of a particular method of working in the mine as such owner, agent or manager may deem necessary to prevent accidents and provide for the safety, convenience and discipline of the persons employed in the mine.

(2) If any such owner, agent or manager-

(a) fails to submit within two months a draft of bye-laws after being called upon to do so by the Chief Facilitator or Facilitator, or

(b) submits a draft of bye-laws which is not in the opinion of the Chief Facilitator or Facilitator sufficient, the Chief Facilitator or Facilitator may-

- (i) propose a draft of such bye-laws as appear to him to be sufficient, or
- (ii) propose such amendments in any draft submitted to him by the owner, agent or manager as will, in his opinion, render it sufficient, and shall send such draft bye-laws or draft amendments to the owner, agent or manager as the case may be, for consideration.

(3) If within a period of two months from the date on which any draft bye-laws or draft amendments are sent by the Chief Facilitator or Facilitator to the owner, agent or manager under the provisions of sub-section (2), the Chief Facilitator or Facilitator and the owner, agent or manager are unable to agree as to the terms of the bye-laws to be made under sub-section (1), the Chief Facilitator or Facilitator shall refer the draft bye-laws for settlement to the technical Committee constituted under sub-section (4) of section 16 in respect of mines.

(4) (a) When such draft bye-laws have been agreed to by the owner, agent or manager and the Chief Facilitator or Facilitator, or, when they are unable to agree, have been settled by the Committee constituted under sub-section (4) of section 16 in respect of mines, a copy of the draft bye-laws shall be sent by the Chief Facilitator or Facilitator to the Central Government for approval.

(b) The Central Government may make such modification of the draft bye-laws as it thinks fit.

(c) Before the Central Government approves the draft bye-laws, whether with or without modifications, there

shall be published, in such manner as the Central Government may think best adapted for informing the persons affected, notice of the proposal to make the bye-laws and of the place where copies of the draft bye-laws may be obtained, and of the time (which shall not be less than thirty days) within which any objections with reference to the draft bylaws, made by or on behalf of persons affected should be sent to the Central Government.

(d) Every objection shall be in writing and shall state-

- (i) the specific grounds of objections, and
- (ii) the omissions, additions or modifications asked for.

(e) The Central Government shall consider any objection made within the required time by or on behalf of persons appearing to it to be affected, and may approve the bye-laws either in the form in which they were published or after making such amendments thereto as it thinks fit.

(5) The bye-laws, when so approved by the Central Government, shall have effect as if enacted in this Code, and the owner, agent or manager of the mine shall cause a copy of the bye-laws, in English and in such other language or languages as may be prescribed, to be posted up in some conspicuous place at or near the mine, where the bye-laws may be conveniently read or seen by the persons employed; and, as often as the same become defaced, obliterated or destroyed, shall cause them to be renewed with all reasonable dispatch.

(6) The Central Government may, by order in writing rescind, in whole or in part, any bye-law so made, and thereupon such bye-law shall cease to have effect accordingly.

**127. Laying regulations, rules and bye laws before parliament.** - Every rule, regulation and bye-laws made by the Central Government under this Code shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the regulation, rule or bye-law or both Houses agree that the regulation, rule or bye-law should not be made, the regulation, rule or bye-law shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that regulation, rule or bye-law, as the case may be.

**128. Laying of rules made by State Government.**- Every rule made by the State Government under this Code shall be laid, as soon as may be, after it is made, before the State Legislative

**129. Repeal and Savings-** (1) The following Acts are hereby repealed, namely:-

- (n) The Factories Act, 1948 (Act no. 63 of 1948)
- (o) The Mines Act, 1952 (Act no. 35 of 1952)
- (p) The Dock Workers (Safety, Health and Welfare) Act, 1966 (Act no. 54 of 1966)
- (q) The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 (Act No. 27 of 1996)
- (r) The Plantations Labour Act, 1951 (Act No. 69 of 1951)
- (s) The Contract Labour (Regulation and Abolition) Act, 1970
- (t) The Inter-State Migrant workmen (Regulation of Employment and Conditions of Service) Act, 1979
- (u) The Working Journalist and other News Paper Employees (Conditions of Service and Misc. Provision) Act, 1955
- (v) The Working Journalist (Fixation of rates of wages) Act, 1958
- (w) The Motor Transport Workers Act, 1961
- (x) Sales Promotion Employees (Condition of Service) Act, 1976
- (y) The Beedi and Cigar Workers (Conditions of Employment) Act, 1966
- (z) The Cine Workers and Cinema Theatre Workers Act, 1981

(2) Every Chief Inspector, Additional Chief Inspector, Joint Chief Inspector, Deputy Chief Inspector, Inspector and every other officer appointed for the purposes under any of the provisions of the enactments repealed by this Code, shall be deemed to have been appointed under this Code for such purposes under this Code.

(3) Notwithstanding such repeal, anything done or any action taken under the enactments so repealed (including any rule, regulation, notification, nomination, appointment, order or direction made there under) shall be deemed to have been done or taken under the corresponding provisions of this Code and shall be in force to the extent they are not contrary to the provisions of this Code till they are repealed by the Central Government.

(4) Without prejudice to the provisions of sub-section (2), provisions of section 6 of the General Clauses Act, 1897 (10 of 1897) shall apply to the repeal of such enactment.

## FIRST SCHEDULE

[See Section 2(y)]

## List of Industries involving hazardous processes

1. Ferrous Metallurgical Industries
  - Integrated Iron and Steel
  - Ferro-alloys
  - Special Steels
2. Non-ferrous metallurgical Industries
  - Primary Metallurgical Industries, namely, zinc, lead, copper, manganese and aluminium
3. Foundries (ferrous and non-ferrous)
  - Castings and forgings including cleaning or smoothening/roughening by sand and shot blasting
4. Coal (including coke) Industries
  - Coal, Lignite, Coke, etc.
  - Fuel Gases (including Coal Gas, Producer Gas, Water Gas)
5. Power Generating Industries
6. Pulp and paper (including paper products) industries
7. Fertiliser Industries
  - Nitrogenous
  - Phosphatic
  - Mixed
8. Cement Industries
  - Portland Cement (including slag cement, pozzolana cement and their products)
9. Petroleum Industries
  - Oil Refining
  - Lubricating Oils and Greases
10. Petro-chemical Industries
11. Drugs and Pharmaceutical Industries
  - Narcotics, Drugs and Pharmaceuticals
12. Fermentation Industries (Distilleries and Breweries)
13. Rubber (Synthetic) Industries
14. Paints and Pigment Industries
15. Leather Tanning Industries
16. Electro-plating Industries
17. Chemical Industries
  - Coke Oven by-products and Coal-tar Distillation products
  - Industrial Gases (nitrogen, oxygen, acetylene, argon, carbon, dioxide, hydrogen, sulphur dioxide, nitrous oxide, halogenated hydrocarbon, ozone, etc.)
  - Industrial Carbon
  - Alkalies and Acids
  - Chromates and dichromates
  - Leads and its compounds
  - Electrochemicals (metallic sodium, potassium and magnesium, chlorates, perchlorates and peroxides)
  - Electrothermal produces (artificial abrasive, calcium carbide)
  - Nitrogenous compounds (cyanides, cyanamides and other nitrogenous compounds)
  - Phosphorous and its compounds
  - Halogens and Halogenated compounds (Chlorine, Fluorine, Bromine and Iodine)
  - Explosives (including industrial explosives and detonators and fuses)
18. Insecticides, Fungicides, Herbicides and other Pesticides industries
19. Synthetic Resin and plastics

20. Man made Fibre (Cellulosic and non-cellulosic) Industry
21. Manufacture and repair of electrical accumulators
22. Glass and Ceramics
23. Grinding or glazing of metals
24. Manufacture, handling and processing of asbestos and its products
25. Extraction of oils and fats from vegetable and animal sources
26. Manufacture, handling and use of benzene and substances containing benzene
27. Manufacturing processes and operations involving carbon disulphide
28. Dyes and Dyestuff including their intermediates
29. Highly flammable liquids and gases

#### THE SECOND SCHEDULE

[See Section 18(7)(f)]

#### List of matters:-

- (i) fencing of machinery;
- (ii) work on or near machinery in motion;
- (iii) employment of adolescents on dangerous machines;
- (iv) striking gear and devices for cutting off power;
- (v) self acting machines;
- (vi) casing of new machinery;
- (vii) prohibition of employment of women and children near cotton openers;
- (viii) hoists and lifts;
- (ix) lifting machines, chains, ropes and lifting tackles;
- (x) revolving machinery;
- (xi) pressure plant;
- (xii) floors, stairs and means of access;
- (xiii) pits, sumps, openings in floors and other similar indentation of area;
- (xiv) safety officers;
- (xv) protection of eyes;
- (xvi) precautions against dangerous fumes, gases, etc.;
- (xvii) precautions regarding the use of portable electric light;
- (xviii) explosive or inflammable dust, gas, etc.;
- (xix) safety committee;
- (xx) power to require specifications of defective parts or tests of stability;
- (xxi) safety of buildings and machinery;
- (xxii) maintenance of buildings;
- (xxiii) prohibition in certain cases of danger;
- (xxiv) notice in respect of accidents;
- (xxv) court of inquiry in case of accidents;
- (xxvi) safety management in plantation;
- (xxvii) the general requirement relating to the construction, equipments and maintenance for the safety of working places on shore, ship, dock, structure and other places at which any dock work is carried on;
- (xxviii) the safety of any regular approaches over a dock, wharf, quay or other places which dock workers have to use for going for work and for fencing of such places and projects;
- (xxix) the efficient lighting of all areas of dock, ship, any other vessel, dock structure or working places where any dock work is carried on and of all approaches to such places to which dock workers are required to go in the course of their employment;
- (xxx) adequate ventilation and suitable temperature in every building or an enclosure on ship where dock workers are employed;
- (xxxi) the fire and explosion preventions and protection;
- (xxxii) safe means of access to ships, holds, stagings, equipment, appliances and other working places;



- (xxiii) the construction, maintenance and use of lifting and other cargo handling appliances and services; such as, pallets containing or supporting loads and provision of safety appliances on them, if necessary;
- (xxiv) the safety of workers employed in freight container terminals or other terminals for handling unitized cargo;
- (xxv) the fencing of machinery, live electrical conductors, steam pipes and hazardous openings;
- (xxvi) the construction, maintenance and use of staging;
- (xxvii) the rigging and use of ship's derricks;
- (xxviii) the testing, examination, inspection and certification as appropriate of loose gears including chains and ropes and of slings and other lifting devices used in the dock work;
- (xxix) the precautions to be taken to facilitate escape of workers when employed in a hold, bin, hopper or the like or between decks of a hold while handling coal or other bulk cargo;
- (xi) the measures to be taken in order to prevent dangerous methods of working in the stacking, unstacking, stowing and unstowing of cargo or handling in connection therewith;
- (xii) the handling of dangerous substances and working in dangerous or harmful environments and the precautions to be taken in connection with such handling;
- (xiii) the work in connection with cleaning, chipping painting, operations and precautions to be taken in connection with such work;
- (xiv) the employment of persons for handling cargo, handling appliances, power operated batch covers or other power operated ship's equipment such as, door in the hull of a ship, ramp, retractable car deck or similar equipment or to give signals to the drivers of such machinery;
- (xv) the transport of dock workers;
- (xvi) the precautions to be taken to protect dock workers against harmful effects of excessive noise, vibration and air pollution at the work place;
- (xvii) protective equipment and protective clothing;
- (xviii) the sanitary, washing and welfare facilities;
- (xviii) the medical supervision;
- (xix) the ambulance rooms, first aid and rescue facilities and arrangements for the removal of dock workers to the nearest place of treatment;
- (i) the investigation of occupational accidents, dangerous occurrences and diseases, specifying such diseases and the forms of notices, the persons and authorities to whom they are to be furnished, the particulars to be contained in them and the time within which they are to be submitted; and
- (ii) the submission of statement of accidents, man-days lost, volume of cargo handled and particulars of dock workers;
- (iii) the safe means of access to, and the safety of, any working place, including the provision of suitable and sufficient scaffolding at various stages when work cannot be safely done from the ground or from any part of a building or from a ladder or such other means of support;
- (iiii) the precautions to be taken in connection with the demolition of the whole or any substantial part of a building or other structure under the supervision of a competent person child the avoidance of danger from collapse of any building or other structure while removing any part of the framed building or other structure by shoring or otherwise;
- (iv) the handling or use of explosive under the control of competent persons so that there is no exposure to the risk of injury from explosion or from flying material;
- (v) the erection installation, use and maintenance of transporting equipment, such as locomotives, trucks, wagons and other vehicles and trailers and appointment of competent persons to drive or operate such equipment;
- (vi) the erection, installation, use and maintenance of hoists, lifting appliances and lifting gear including periodical testing and examination and heat treatment where necessary, precautions to be taken while raising or lowering loads, restrictions on carriage of persons and appointment of competent persons on hoists or other lifting appliances;
- (vii) the adequate and suitable lighting of every workplace and approach thereto, of every place where raising or lowering operations with the use of hoists, lifting appliances or lifting gears are in progress and of all openings dangerous to building workers employed;

- (viii) the precautions to be taken to prevent inhalation of dust, fumes, gases or vapours during any grinding, cleaning, spraying or manipulation of any material and steps to be taken to secure and maintain adequate ventilation of every working place or confined space;
- (ix) the measures to be taken during stacking or unstacking, stowing or unstowing of materials or goods or handling in connection therewith;
- (x) the safeguarding of machinery including the fencing of every fly wheel and every moving part of prime mover and every part of transmission or other machinery, unless it is in such a position or of such construction as to be safe to every worker working only of the operations and as if it were securely fenced;
- (xi) the safe handling and use of plant, including tools and equipment operated by compressed air;
- (xii) the precaution to be taken in case of fire;
- (xiii) the limits of weight to be lifted or moved by workers;
- (xiv) the safe transport of workers to or from any workplace by water and provision of means for rescue from drowning;
- (xv) the steps to be taken to prevent danger to workers from live electric wires or apparatus including electrical machinery and tools and from overhead wires;
- (xvi) the keeping of safety nets, safety sheets and safety belts where the special nature or the circumstances of work render them necessary for the safety of the workers;
- (xvii) the standards to be complied with regard to scaffolding, ladders and stairs, lifting appliances, ropes, chains and accessories, earth moving equipment and floating operational equipments;
- (xviii) the precautions to be taken with regard to pile driving, concrete work, work with hot asphalt, tar or other similar things, insulation work, demolition operations, excavation, underground construction and handling materials;
- (xix) the safety policy, that is to say, a policy relating to steps to be taken to ensure the safety and health of the building workers, the administrative arrangements therefore and the matters connected therewith, to be framed by the employers and contractors for the operations to be carried on in a building or other construction work;
- (xx) emergency standards for enforcement of suitable standards in respect of hazardous processes in a factory;
- (xxi) the maximum permissible threshold limits of exposure of chemical and toxic substances in manufacturing processes (whether hazardous or otherwise) in any factory;
- (xxii) lightning;
- (xxiii) any other matter which the Central Government considers under the circumstance for better working condition for safety at the work place.

### THE THIRD SCHEDULE

[See section 12]

#### List of Notifiable Diseases

1. Lead poisoning, including poisoning by any preparation or compound of lead or their sequelae.
2. Lead-tetra-ethylene poisoning.
3. Phosphorus poisoning or its sequelae.
4. Mercury poisoning or its sequelae.
5. Manganese poisoning or its sequelae.
6. Arsenic poisoning or its sequelae.
7. Poisoning by nitrous fumes.
8. Carbon bisulphide poisoning.
9. Benzene poisoning, including poisoning by any of its homologues, their nitro or amido derivatives or its sequelae.
10. Chrome ulceration or its sequelae.
11. Anthrax.
12. Silicosis.
13. Poisoning by halogens or halogen derivatives of the hydrocarbons of the aliphatic series.

14. Pathological manifestations due to—
  - (a) radium or other radio-active substances;
  - (b) X-rays.
15. Primary epitheliomatous cancer of the skin.
16. Toxic anaemia.
17. Toxic jaundice due to poisonous substances.
18. Oil acne or dermatitis due to mineral oils and compounds containing mineral oil base.
19. Ityssonosis.
20. Asbestosis.
21. Occupational or contact dermatitis caused by direct contact with chemicals and paints. These are of two types, that is, primary irritants and allergic sensitizers.
22. Noise induced hearing loss (exposure to high noise levels).
23. Beryllium poisoning.
24. Carbon monoxide poisoning.
25. Coal miners' pneumoconiosis.
26. Phosgene poisoning.
27. Occupational cancer.
28. Isocyanates poisoning.
29. Toxic nephritis.

  
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# भारत का राजपत्र The Gazette of India

सी.जी.डी.एल-अ-2909/2020-222112  
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असामान्य

EXTRAORDINARY

भाग II—खण्ड 1

PART II—Section 1

अधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

के 62] नई दिल्ली, संसदघर, सितम्बर 29, 2020 (शुक्रवादि 7, 1942 (शुक्र)  
No. 62] NEW DELHI, TI ESDA), SEPTEMBER 29, 2020/ASHVINA 7, 1942 (SHUKRA)

इस भाग में निम्न कुछ संख्या दी जाती है जिससे कि वह अलग संकलन के रूप में रखा जा सके।  
Separate paging is given in this Part in order that it may be filed as a separate compilation.

## MINISTRY OF LAW AND JUSTICE

(Legislative Department)

New Delhi, the 29th September, 2020/Ashvina 7, 1942 (Shukra)

The following Act of Parliament received the assent of the President on the 28th September, 2020 and is hereby published for general information:—

### THE OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS CODE, 2020

No. 37 of 2020

[28th September, 2020.]

An Act to consolidate and amend the laws regulating the occupational safety, health and working conditions of the persons employed in an establishment and for matters connected therewith or incidental thereto.

Be it enacted by Parliament in the Seventy-first year of the Republic of India as follows:—

#### CHAPTER I

##### PRELIMINARY

1. (1) This Act may be called the Occupational Safety, Health and Working Conditions Code, 2020.

Short title,  
commencement  
and  
application.

(2) It shall come into force on such date as the Central Government may, by notification appoint, and different dates may be appointed for different provisions of this Code and any reference in any such provision to the commencement of this Code shall be construed as a reference to the coming into force of that provision.

(3) It shall not apply to the offices of the Central Government, offices of the State Government and any ship of war of any nationality.

Provided that the Code shall apply in case of contract labour employed through contractor in the offices of the Central Government or in the offices of the State Government, where the Central Government or, as the case may be, the State Government is the principal employer.

## Definitions

2. (1) In this Code, unless the context otherwise requires,—

(a) "adolescent" shall have the same meaning as assigned to it in clause (f) of section 2 of the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986; 61 of 1986

(b) "adult" means a person who has completed his eighteenth year of age;

(c) "agent" when used in relation to a mine, means every person, whether appointed as such or not, who, acting or purporting to act on behalf of the owner, takes part in the management, control, supervision or direction of such mine or of any part thereof;

(d) "appropriate Government" means—

(i) in relation to, establishments (other than those specified in sub-clause (ii)) carried on by or under the authority of the Central Government or concerning any such controlled industry as may be specified in this behalf by the Central Government or the establishment of railways including metro railways, mines, oil field, major ports, air transport service or telecommunication service, banking company or any insurance company, (by whatever name called) established by a Central Act or a corporation or other authority established by a Central Act or a Central public sector undertaking or subsidiary companies set up by the Central public sector undertakings or autonomous bodies owned or controlled by the Central Government, including establishment of contractors for the purposes of such establishment, corporation or other authority, Central public sector undertakings, subsidiary companies or autonomous bodies, as the case may be, the Central Government;

Provided that in the case of Central Public Sector Undertakings the appropriate Government shall continue to be the Central Government even if the holding of the Central Government reduces to less than fifty per cent, equity of the Central Government in that Public Sector Undertakings after the commencement of this Code; and

(ii) in relation to a factory, motor transport undertaking, plantation, newspaper establishment and establishment relating to beedi and cigar including the establishments not specified in clause (i), the concerned State Government where it is situated.

*Explanation*—For the removal of doubts it is hereby clarified that State Government shall be the appropriate Government in respect of occupational safety, health and working conditions in a factory situated in that State.

(e) "audio-visual production" means audio-visual produced wholly or partly in India and includes—

(i) animation, cartoon depiction, audio-visual advertisement;

(ii) digital production or any of the activities in respect of making thereof; and

(iii) feature films, non-feature films, television, web-based serials, talk shows, reality shows and sport shows;

(f) "audio-visual worker" means a person, who is employed, directly or through any contractor, in or in connection with the audio-visual production to work as an

artist including actor, musician, singer, anchor, news reader, dancer, dubbing artist or stunt person or to do any work, skilled, unskilled, manual, supervisory, technical, artistic or otherwise, and his remuneration with respect to such employment in or in connection with the production of audio-visual does not exceed, where remuneration is by way of monthly wages or where such remuneration is by way of lump sum, in each case, such amount as may be notified by the Central Government;

(g) "banking company" means a banking company as defined in clause (e) of section 5 of the Banking Regulation Act, 1949 and includes the Exports-Imports Bank of India, the Industrial Reconstruction Bank of India, the Small Industries Development Bank of India established under section 3 of the Small Industries Development Bank of India Act, 1989, the Reserve Bank of India, the State Bank of India, a corresponding new bank constituted under section 5 of the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970, a corresponding new bank constituted under section 3 of the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1980.

10 of 1949

39 of 1989

5 of 1970

40 of 1980

(h) "building or other construction work" means the construction, alteration, repairs, maintenance or demolition in relation to buildings, streets, roads, railways, tramways, airfields, irrigation, drainage, embankment and navigation works, flood control works (including storm water drainage works), generation, transmission and distribution of power, water works (including channels for distribution of water), oil and gas installations, electric lines, internet towers, wireless, radio, television, telephone, telegraph and overseas communications, dams, canals, reservoirs, watercourses, tunnels, bridges, viaducts, aqueducts, pipelines, towers, cooling towers, transmission towers and such other work as may be specified in this behalf by the Central Government, by notification, but does not include building or other construction work which is related to any factory or mine and the building or other construction work where such work is for own residential purposes of an individual or group of individuals for their own residence and the total cost of such work does not exceed rupees fifty lakhs or such higher amount and employing more than such number of workers as may be notified by the appropriate Government.

(i) "building worker" means a person who is employed to do any highly skilled, skilled, semi-skilled or unskilled, manual, technical or clerical work for hire or reward, whether the terms of such employment are express or implied, in connection with any building or other construction work, but does not include any such person who is employed mainly in a managerial or supervisory or administrative capacity.

(j) "cargo" includes anything carried or to be carried in a ship or other vessel, or vehicle.

(k) "Chief Inspector-cum-Facilitator" means a Chief Inspector-cum-Facilitator appointed under sub-section (3) of section 34;

(l) "competent person" means a person or an institution recognised as such by the Chief Inspector-cum-Facilitator for the purposes of carrying out tests, examinations and inspections required to be done in an establishment having regard to—

(i) the qualifications and experience of the person and facilities available at his disposal; or

(ii) the qualifications and experience of the persons employed in such institution and facilities available therein.

Provided that in case of mines the competent person includes such other person who is authorised by the manager referred to in section 67 to supervise or perform any work, or to supervise the operation of machinery, plant or equipment and is responsible for such duties assigned to him and also includes a shot firer or blaster.

(w) "contract labour" means a worker who shall be deemed to be employed in or in connection with the work of an establishment when he is hired in or in connection with such work by or through a contractor, with or without the knowledge of the principal employer and includes inter-State migrant worker but does not include a worker (other than part time employ ee) who is regularly employed by the contractor for any activity of his establishment and his employment is governed by mutually accepted standards of the conditions of employment (including engagement on permanent basis) and gets periodical increment in the pay, social security coverage and other welfare benefits in accordance with the law for the time being in force in such employment;

(x) "contractor", in relation to an establishment, means a person, who—

(i) undertakes to produce a given result for the establishment, other than a mere supply of goods or articles of manufacture to such establishment, through contract labour; or

(ii) supplies contract labour for any work of the establishment as mere human resource,

and includes a sub-contractor.

(y) "controlled industry" means any industry the control of which by the Central Government has been declared under any Central Act in the public interest;

(z) "core activity of an establishment" means any activity for which the establishment is set up and includes any activity which is essential or necessary to such activity;

Provided that the following shall not be considered as essential or necessary activity, if the establishment is not set up for such activity, namely:—

(i) sanitation works, including sweeping, cleaning, dusting and collection and disposal of all kinds of waste;

(ii) watch and ward services including security services;

(iii) canteen and catering services;

(iv) loading and unloading operations;

(v) running of hospitals, educational and training institutions, guest-houses, clubs and the like where they are in the nature of support services of an establishment;

(vi) courier services which are in nature of support services of an establishment;

(vii) civil and other constructional works, including maintenance;

(viii) gardening and maintenance of lawns and other like activities;

(ix) house-keeping and laundry services, and other like activities, where these are in nature of support services of an establishment;

(x) transport services including ambulance services;

(xi) any activity of interment nature even if that constitutes a core activity of an establishment;

(g) "day" means a period of twenty-four hours beginning at mid-night;

(r) "District Magistrate", in relation to any mine, means the District Magistrate or the Deputy Commissioner, as the case may be, who is vested with the executive powers of maintaining law and order in the revenue district in which the mine is situated;

Provided that in case of a mine, which is situated partly in one district and partly in another, the District Magistrate for the purpose shall be the District Magistrate authorised in this behalf by the Central Government:

(s) "dock work" means any work in or within the vicinity of any port in connection with, or required for or incidental to, the loading, unloading, movement or storage of cargoes into or from ship or other vessel, port, dock, storage place or landing place, and includes—

(i) work in connection with the preparation of ships or other vessels for receipt or discharge of cargoes or leaving port;

(ii) all repairing and maintenance processes connected with any hold, tank structure or lifting machinery or any other storage area on board the ship or in the docks; and

(iii) chipping, painting or cleaning of any hold, tank, structure or lifting machinery, or any other storage area on board the ship or in the docks;

(t) "employee" means,—

(i) in respect of an establishment, a person (other than an apprentice engaged under the Apprentices Act, 1961) employed on wages by an establishment to do any skilled, semi-skilled, unskilled, manual, operational, supervisory, managerial, administrative, technical, clerical or any other work, whether the terms of employment be express or implied; and

(ii) a person declared to be an employee by the appropriate Government,

but does not include any member of the Armed Forces of the Union;

Provided that notwithstanding anything contained in this clause, in case of a mine a person is said to be "employed" in a mine who works as the manager or who works under appointment by the owner, agent or manager of the mine or with the knowledge of the manager, whether for wages or not—

(a) in any mining operation (including the concomitant operations of handling and transport of minerals up to the point of dispatch and of gathering sand and transport thereof to the mine);

(b) in operations or services relating to the development of the mine (including construction of plant therein but excluding construction of buildings, roads, wells and any building work not directly connected with any existing or future mining operations);

(c) in operating, servicing, maintaining or repairing any part of any machinery used in or about the mine;

(d) in operations, within the premises of the mine, of loading for dispatch or minerals;

(e) in any office of mine;

(f) in any welfare, health, sanitary or conservancy services required to be provided under this Code relating to mine, or watch and ward within the premises of the mine excluding residential areas; or

(g) in any kind of work, whatsoever, which is preparatory or incidental to, or connected with, mining operations;

(u) "employer" means a person who employs, whether directly or through any person, or on his behalf, or on behalf of any person, one or more employees in his establishment and where the establishment is carried on by any Department of the Central Government or the State Government, the authority specified, by the head of



such Department, in this behalf or where no authority is so specified, the head of the Department and in relation to an establishment carried on by a (local) authority, the Chief Executive of that authority, and includes—

(i) in relation to an establishment which is a factory, the occupier of the factory;

(ii) in relation to mine, the owner of the mine, agent or manager referred to in section 67;

(iii) in relation to any other establishment, the person who, or the authority which has ultimate control over the affairs of the establishment and where said affairs are entrusted to a manager or managing director, such manager or managing director,

(iv) contractor; and

(v) legal representative of a deceased employer;

(w) "establishment" means—

(i) a place where any industry, trade, business, manufacturing or occupation is carried on in which ten or more workers are employed; or

(ii) motor transport undertaking, newspaper establishments, audio-visual production, building and other construction work or plantation, in which ten or more workers are employed; or

(iii) factory, for the purpose of Chapter II, in which ten or more workers are employed notwithstanding the threshold of workers provided in clause (v); or

(iv) a mine or port or vicinity of port where dock work is carried out;

Provided that in sub-clauses (i) and (ii), the threshold of worker specified therein shall not be applicable in case of such establishment or class of establishments, in which such hazardous or life threatening activity is being carried on, as may be notified by the Central Government.

Provided further that notwithstanding any threshold provided in the definition of factory in clause (w), for the purposes of Chapter II, the establishment specified in sub-clause (i) or sub-clause (ii) or sub-clause (iii) shall be deemed to be the establishment within the meaning of this clause though the number of employees employed are ten or more.

(w) "factory" means any premises including the precincts thereof—

(i) whereon twenty or more workers are working, or were working on any day of the preceding twelve months, and in any part of which a manufacturing process is being carried on with the aid of power, or is ordinarily so carried on; or

(ii) whereon forty or more workers are working, or were working on any day of the preceding twelve months, and in any part of which a manufacturing process is being carried on without the aid of power, or is ordinarily so carried on;

but does not include a mobile unit belonging to the armed forces of the Union, railway running shed or a hotel, restaurant or eating place;

Provided that where under any law for the time being in force in a State immediately before the commencement of this Code, the number of workers specified is more or less than the number specified in clause (i) or clause (ii), then, the number specified under the law of the State shall prevail in that State till it is amended by the competent Legislature.

*Explanation 1.*—For computing the number of workers for the purposes of this clause all the workers (in different groups and relays) in a day shall be taken into account.

*Explanation 2.*—For the purposes of this clause, the mere fact that an Electronic Data Processing Unit or a Computer Unit is installed in any premises or part thereof, shall not be construed as factory if no manufacturing process is being carried on in such premises or part thereof.

(a) "family", when used in relation to a worker, means—

(i) spouse;

(ii) children including adopted children of the worker who are dependent upon him and have not completed the age of eighteen years; and

(iii) parents, grand-parents, widowed daughter and widowed sister dependent upon such worker.

*Explanation.*—For the purposes of this clause, such dependents shall not be included who are, for the time being, getting such income from web sources, as may be prescribed by the appropriate Government.

(y) "godown" means any warehouse or other place, by whatever name called, used for the storage of any article or substance required for any manufacturing process which means any process for, or incidental to, making, finishing or packing or otherwise treating any article or substance with a view to its use, sale, transport, delivery or disposal as finished products;

(z) "hazardous" means involving danger or potential danger;

(aa) "hazardous process" means any process or activity in relation to an industry or plantation specified in the First Schedule where, unless special care is taken, raw materials used therein or the intermediate or finished products, bye-products, hazardous substances, wastes or effluents thereof or spraying of any pesticides, insecticides or chemicals used therein, as the case may be, would—

(i) cause material impairment to the health of the persons engaged in or connected therewith; or

(ii) result in the pollution of the general environment;

(ab) "hazardous substance" means any substance or such quantity of the substance as may be prescribed by the appropriate Government or preparation of which by reason of its chemical or physico-chemical properties or handling is liable to cause physical or health hazards to human being or may cause harm to other living creatures, plants, micro-organisms, property or the environment;

(ac) "industrial premises" means any place or premises (not being a private dwelling house), including the precincts thereof, in which or in any part of which any industry, trade, business, occupation or manufacturing is being ordinarily carried on with or without the aid of power and includes a godown attached thereto;

(ad) "industry" means any systematic activity, carried on by co-operation between an employer and worker (whether such worker is employed by such employer directly or by or through any agency, including a contractor) for the production, supply or distribution of goods or services with a view to satisfy human wants or wishes (not being wants or wishes which are merely spiritual or religious in nature), whether or not—

(i) any capital has been invested for the purpose of carrying on such activity; or

(ii) such activity is carried on with a motive to make any gain or profit;

but does not include—

(a) institutions owned or managed by organisations wholly or substantially engaged in any charitable, social or philanthropic services; or

(b) any activity of the appropriate Government relating to the sovereign functions of the appropriate Government including all the activities carried on by the Departments of the Central Government dealing with defence, research, atomic energy and space; or

(c) any domestic service; or

(d) any other activity as may be notified by the Central Government;

(ze) "Inspector-cum-Facilitator" means an Inspector-cum-Facilitator appointed under sub-section (1) of section 34;

(zf) "inter-State migrant worker" means a person who is employed in an establishment and who—

(i) has been recruited directly by the employer or indirectly through a contractor in one State for employment in such establishment situated in another State; or

(ii) has come on his own from one State and obtained employment in an establishment of another State (hereinafter called destination State) or has subsequently changed the establishment within the destination State

under an agreement or other arrangement for such employment and draws wages not exceeding the amount of rupees eighteen thousand per month or such higher amount as may be notified by the Central Government from time to time;

(zg) "machinery" means any article or combination of articles assembled, arranged or connected and which is used or intended to be used for converting any form of energy to perform work, or which is used or intended to be used, whether incidental thereto or not, for developing, receiving, storing, containing, confining, transforming, transmitting, transferring or controlling any form of energy;

(zh) "major port" means a major port as defined in clause (8) of section 3 of the Indian Ports Act, 1908;

15 of 1908

(zi) "manufacturing process" means any process for—

(i) making, altering, repairing, ornamenting, finishing, packing, oiling, washing, cleaning, breaking up, demolishing, or otherwise treating or adapting any article or substance with a view to its use, sale, transport, delivery or disposal; or

(ii) pumping oil, water, sewage or any other substance; or

(iii) generating, transforming or transmitting power; or

(iv) composing, printing, printing by letter press, lithography, offset, photogravure, screen printing, three-dimensional or four-dimensional printing, prototyping, flexography or other types of printing process or book binding; or

(v) constructing, reconstructing, repairing, refitting, finishing or breaking up ships or vessels; or

(vi) preserving or storing any article in cold storage; or

(vii) such other processes as the Central Government may notify;

(z) "medical officer" means the medical officer appointed under sub-section (1) of section 42;

66 of 2002

(zz) "metro railway" means the metro railway as defined in sub-clause (1) of clause (1) of section 2 of the Metro Railways (Operation and Maintenance) Act, 2002;

(i) "mine" means any excavation where any operation for the purpose of searching for or obtaining minerals has been or is being carried on and includes—

(i) all borings, bore holes, oil wells and accessory crude conditioning plants, including the pipe conveying mineral oil within the oilfield;

(ii) all shafts, in or adjacent to and belonging to a mine, whether in the course of being sunk or not;

(iii) all levels and inclined planes in the course of being driven;

(iv) all open cast workings;

(v) all conveyors or aerial ropeways provided for bringing into or removal from a mine of minerals or other articles or for the removal of refuse therefrom;

(vi) all adits, levels, planes, machinery, works, railways, tramways and sidings in or adjacent to and belonging to a mine;

(vii) all protective works being carried out in or adjacent to a mine;

(viii) all workshops and stores situated within the premises of a mine and under the same management and used primarily for the purposes connected with that mine or a number of mines under the same management;

(ix) all power stations, transformer sub-stations, converter stations, rectifier stations and accumulator storage stations for supplying electricity solely or mainly for the purpose of working the mine or a number of mines under the same management;

(x) any premises for the time being used for depositing sand or other material for use in a mine or for depositing refuse from a mine or in which any operations in connection with such sand refuse or other material is being carried on, being premises exclusively occupied by the owner of the mine;

(xi) any premises in or adjacent to and belonging to a mine on which any process ancillary to the getting, dressing or preparation for sale of minerals or coke is being carried on;

(ii) a mine owned by the Government;

(ka) "minerals" means all substances which can be obtained from the earth by mining, digging, drilling, dredging, hydraulicking, quarrying or by any other operation and includes mineral oils (such as natural gas) and petroleum;

(kb) "motor transport undertaking" means a motor transport undertaking employing motor transport worker and engaged in carrying passengers or goods or both by road for hire or reward, and includes a private carrier;

(kc) "motor transport worker" means a person who is employed in a motor transport undertaking directly or through an agency, whether for wages or not, to work in a professional capacity on a transport vehicle or to attend the duties in connection with the arrival, departure, loading or unloading of such transport vehicle and includes a driver, conductor, cleaner, station staff, line checking staff, booking clerk, cash clerk, depot clerk, time-keeper, watchman or attendant, but does not include any such person—

(i) who is employed in a factory;

(ii) to whom the provisions of any other law for the time being in force regulating the conditions of service of persons employed in shops or commercial establishments apply;

(xx) "newspaper" means any printed periodical work, containing public news or comments on public news and includes such other class of printed periodical work as may, from time to time, be notified in this behalf by the Central Government;

(xxi) "newspaper establishment" means an establishment under the control of any person or body of persons, whether incorporated or not, for the production or publication of one or more newspapers or for conducting any news agency or syndicate and includes following newspaper establishments which shall be deemed to be one establishment, namely:—

(i) two or more newspaper establishments under common control;

(ii) two or more newspaper establishments owned by an individual and his or her spouse unless it is shown that such spouse is a sole proprietor or partner or a shareholder of a corporate body on the basis of his or her own individual funds;

(iii) two or more newspaper establishments publishing newspapers bearing the same or similar title and in the same language in any place in India or bearing the same or similar title but in different languages in the same State or Union territory.

*Explanation 1.*—For the purposes of sub-clause (i) two or more establishments shall be deemed to be under common control where—

(a) (i) the newspaper establishments are owned by a common individual or individuals;

(ii) the newspaper establishments are owned by firms, if such firms have a substantial number of common partners;

(iii) the newspaper establishments are owned by bodies corporate, if one body corporate is a subsidiary of the other body corporate, or both are subsidiaries of a common holding company or a substantial number of their equity shares are owned by the same person or group of persons, whether incorporated or not;

(iv) one establishment is owned by a body corporate and the other is owned by a firm, if a substantial number of partners of the firm together hold a substantial number of equity shares of the body corporate;

(v) one is owned by a body corporate and the other is owned by a firm having bodies corporate as its partners if a substantial number of equity shares of such bodies corporate are owned, directly or indirectly, by the same person or group of persons, whether incorporated or not, or

(b) there is functional integrity between concerned newspaper establishments.

*Explanation 2.*—For the purposes of this clause,—

(i) different departments, branches and centres of newspaper establishments shall be treated as parts thereof;

(ii) a printing press shall be deemed to be a newspaper establishment if the principal business thereof is to print newspapers;

(xxii) "notification" means a notification published in the Gazette of India or the Official Gazette of a State, as the case may be, and the expression "notify" with its grammatical variations and cognate expressions shall be construed accordingly.

(r) "occupier" of a factory means the person who has ultimate control over the affairs of the factory;

Provided that—

(i) in the case of a firm or other association of individuals, any one of the individual partners or members thereof;

(ii) in the case of a company, any one of the directors, except any independent director within the meaning of sub-section (6) of section 149 of the Companies Act, 2013;

18 of 2013

(iii) in the case of a factory owned or controlled by the Central Government or any State Government, or any local authority, the person or persons appointed to manage the affairs of the factory by the Central Government, the State Government or the local authority, or such other authority as may be prescribed by the Central Government;

shall be deemed to be the occupier;

Provided further that in the case of a ship which is being repaired, or on which maintenance work is being carried out, in a dry dock which is available for hire, the owner of the dock shall be deemed to be the occupier for all purposes except the matters as may be prescribed by the Central Government which are directly related to the condition of ship for which the owner of ship shall be deemed to be the occupier;

(r) "office of the mine" means an office at the surface of the mine concerned;

(s) "open cast working" means a quarry, that is to say, an excavation where any operation for the purpose of searching for or obtaining minerals has been or is being carried on, not being a shaft or an excavation which extends below superjacent ground;

(t) "ordinarily employed" with reference to any establishment or part thereof, means the average number of persons employed per day in the establishment or part thereof during the preceding calendar year obtained by dividing the number of man days worked by the number of working days excluding rest days and other non-working days;

(u) "owner" in relation to a mine, means any person who is the immediate proprietor or lessee or occupier of the mine or of any part thereof and in case of a mine the business whereof is being carried on by a liquidator or receiver, such liquidator or receiver; but does not include a person who merely receives a royalty, rent or fine from the mine, or is merely the proprietor of the mine, subject to any lease grant or licence for the working thereof, or is merely the owner of the soil and not interested in the minerals of the mine; but any contractor or sub-lessee for the working of a mine or any part thereof shall be subject to this Code in like manner as if he were an owner but not so as to exempt the former from any liability;

(v) "plantation" means—

(a) any land used or intended to be used for—

(i) growing tea, coffee, rubber, cinchona or cardamom which admeasures five hectares or more;

(ii) growing any other plant, which admeasures five hectares or more and in which persons are employed or were employed on any day of the preceding twelve months, if, after obtaining the approval of the Central Government, the State Government, by notification, so directs;

*Explanation.*—Where any piece of land used for growing any plant referred to in this sub-clause admeasures less than five hectares and is

contiguous to any other piece of land not being so used, but capable of being so used, and both such pieces of land are under the management of the same employer, then, for the purposes of this sub-clause, the former piece of land shall be deemed to be a plantation, if the total area of both such pieces of land admeasures five hectares or more; and

(b) any land which the State Government may, by notification, declare and which is used or intended to be used for growing any plant referred to in sub-clause (a), notwithstanding that it admeasures less than five hectares;

Provided that no such declaration shall be made in respect of such land which admeasures less than five hectares immediately before the commencement of this Code; and

(c) offices, hospitals, dispensaries, schools and any other premises used for any purpose connected with any plantation within the meaning of sub-clause (a) and sub-clause (b), but does not include factory on the premises;

(d) "prescribed" means prescribed by rules made by the appropriate Government under this Code;

(e) "principal employer", where the contract labour is employed or engaged, means—

(i) in relation to any office or Department of the Government or a local authority, the head of that office or Department or such other officer as the Government or the local authority, may specify in this behalf;

(ii) in a factory, the owner or occupier of the factory and where a person has been named as the manager of the factory, the person so named;

(iii) in a mine, the owner or agent of the mine;

(iv) in relation to any other establishment, any person responsible for the supervision and control of the establishment;

(f) "producer", in relation to audio-visual production, means the company, firm or other person by whom the arrangements necessary for producing such audio-visual (including the raising of finance and engaging audio-visual workers for producing audio-visual) are undertaken.

*Explanation*—For the purposes of this clause, the expressions "company" and "firm" have the same meaning as respectively assigned to them in the Companies Act, 2013 and the Indian Partnership Act, 1932;

18 of 2013  
9 of 1932

(g) "qualified medical practitioner" means a medical practitioner who possesses any recognised medical qualification as defined in clause (f) of section 2 of the Indian Medical Council Act, 1956 and who is enrolled on a Indian Medical Register as defined in clause (v) and on a State Medical Register as defined in clause (z) of the said section;

102 of 1956

(h) "railway" means the railway as defined in clause (j) of section 2 of the Railways Act, 1989;

24 of 1989

(i) "relay" means a set of two or more persons carrying out the same kind of work during different periods of the day, and each such period is called a "shift";

(j) "sales promotion employees" means any person by whatever name called employed or engaged in any establishment for hire or reward to do any work relating to promotion of sales or business, or both, but does not include any such person who—

(i) being employed or engaged in a supervisory capacity, draws wages exceeding eighteen thousand rupees per mensem or an amount as may be notified by the Central Government from time to time; or

(ii) is employed or engaged mainly in a managerial or administrative capacity;

(zzf) "Schedule" means the Schedule appended to this Code;

(zzg) "serious bodily injury" means any injury which involves or in all probability will involve the permanent loss of any part or section of a body or the use of any part or section of a body, or the permanent loss of or injury to the sight or hearing or any permanent physical incapacity, or the fracture of any bone or one or more joints or bones of any phalanges of hand or foot;

(zzh) "standards", "regulations", "rules", "bye-laws" and "orders" respectively means standards, regulations, rules, bye-laws and orders made or declared, as the case may be, under this Code;

(zzi) "telecommunication service" means the telecommunication service as defined in clause (b) of sub-section (j) of section 2 of the Telecom Regulatory Authority of India Act, 1997;

(zzj) "wages" means all remuneration whether by way of salaries, allowances or otherwise, expressed in terms of money, or capable of being so expressed which would, if the terms of employment, express or implied, were fulfilled, be payable to a person employed in respect of his employment or of work done in such employment, and includes—

(i) basic pay;

(ii) dearness allowance; and

(iii) retaining allowance, if any;

but does not include—

(a) any bonus payable under any law for the time being in force, which does not form part of the remuneration payable under the terms of employment;

(b) the value of any house-accommodation, or of the supply of light, water, medical attendance or other amenities, or of any service excluded from the computation of wages by a general or special order of the appropriate Government;

(c) any contribution paid by the employer to any pension or provident fund, and the interest which may have accrued thereon;

(d) any gratuity allowance or the value of any travelling concession;

(e) any sum paid to the employed person to defray special expenses entailed on him by the nature of his employment;

(f) house rent allowance;

(g) remuneration payable under any award or settlement between the parties or order of a court or Tribunal;

(h) any overtime allowance;

(i) any commission payable to the employee;

(j) any gratuity payable on the termination of employment;

(k) any retrenchment compensation or other retirement benefit payable to the employee or any *ex gratia* payment made to him on the termination of employment;

Provided that, for calculating the wages under this clause, if payments made by the employer to the employee under sub-clauses (a) to (j) exceeds



one-half, or such other per cent. as may be notified by the Central Government, of the full remuneration calculated under this clause, the amount which exceeds such one-half, or the per cent. so notified, shall be deemed as remuneration and shall be accordingly added in wages under this clause:

Provided further that for the purpose of equal wages to all genders and for the purpose of payment of wages, the emoluments specified in sub-clauses (e), (f), (g) and (h) shall be taken for comparison of wages.

*Explanation*—Where an employee is given in lieu of the whole or part of the wages payable to him, any remuneration in kind by his employer, the value of such remuneration in kind which does not exceed fifteen per cent. of the total wages payable to him, shall be deemed to form part of the wages of such employee.

(2A) "week" means a period of seven days beginning at midnight on Saturday night or such other night as may be approved in writing for a particular area by the Chief Inspector-cum-Facilitator;

(2B) "woker" means any person employed in any establishment to do any manual, unskilled, skilled, technical, operational, clerical or supervisory work for hire or reward, whether the terms of employment be express or implied, and includes working journalists and sales promotion employees, but does not include any such person—

(i) who is subject to the Air Force Act, 1950, or the Army Act, 1950, or the Navy Act, 1957; or

45 of 1950  
46 of 1950  
62 of 1957

(ii) who is employed in the police service or as an officer or other employee of a prison; or

(iii) who is employed mainly in a managerial or administrative capacity; or

(iv) who is employed in a supervisory capacity drawing wage exceeding eighteen thousand rupees per month or an amount as may be notified by the Central Government from time to time.

(2C) "Working Journalist" means a person whose principal avocation is that of a journalist and who is employed as such, either whole-time or part-time, in, or in relation to, one or more newspaper establishments, or other establishments relating to any electronic media or digital media such as newspaper or radio or other like media and includes an editor, a leader-writer, news editor, sub-editor, feature-writer, copy-tester, reporter, correspondent, cartoonist, news-photographer and proof-reader, but does not include any such person who is employed mainly in a managerial, supervisory or administrative capacity.

(2) For the purposes of this Code, a person working or employed in or in connection with mine is said to be working or employed—

(a) "below ground" if he is working or employed—

(i) in a shaft which has been or is in the course being sunk; or

(ii) in any excavation which extends below superjacent ground; and

(b) "above ground" if he is working in an open-cut working or in any other manner not specified in clause (a).

## CHAPTER II

## REGISTRATION

3. (1) Every employer of any establishment—

- (a) which comes into existence after the commencement of this Code, and
- (b) to which this Code shall apply.

Registration  
of certain  
establishments

shall, within sixty days from the date of such applicability of this Code, make an application electronically to the registering officer appointed by the appropriate Government (hereinafter referred to as the registering officer) for the registration of such establishment.

Provided that the registering officer may entertain any such application for registration after the expiry of such period on payment of such late fees as may be prescribed by the appropriate Government.

(2) Every application under sub-section (1) shall be submitted to the registering officer in such manner, in such form, containing such particulars including the information relating to the employment of Inter-State migrant workers and shall be accompanied by such fees as may be prescribed by the appropriate Government.

(3) After the receipt of an application under sub-section (1), the registering officer shall register the establishment and issue a certificate of registration electronically to the employer thereof in such form and within such time and subject to such conditions as may be prescribed by the Central Government.

Provided that if the registering officer fails to register an establishment under the application so made or to entertain the application within the prescribed period, then, such establishment shall be deemed to have been registered under this Code immediately on the expiration of such period and the electronic certificate of registration shall be auto generated and the responsibility of such failure shall be on the registering officer.

(4) Any change in the ownership or management or in any particulars referred to in sub-section (2) which occurs after the registration of an establishment under this Code, shall be intimated by the employer electronically to the registering officer within thirty days of such change in such form as may be prescribed by the Central Government and thereafter the registering officer shall make amendment in the certificate of registration electronically in such manner as may be prescribed by the Central Government.

(5) The employer of an establishment shall, within thirty days of the closing of the establishment—

- (a) inform the closing of such establishment; and

(b) certify payment of all dues to the workers employed in such establishment, to the registering officer in such manner as may be prescribed by the Central Government and the registering officer shall, on receiving such information and certificate remove such establishment from the register of establishments maintained by him and cancel the registration certificate of the establishment within sixty days from the receipt of such information.

Provided that if the registering officer fails to cancel the registration certificate of the establishment under this sub-section within such sixty days, then, the registration certificate of such establishment shall be deemed to have been cancelled under this Code immediately on the expiration of such period of sixty days and the cancellation of registration certificate shall be auto generated and the responsibility of such failure shall be on the registering officer.

(6) If an employer of an establishment—

- (a) has obtained the registration of his establishment by misrepresentation or suppression of any material fact, or

(b) has obtained the registration of his establishment so fraudulently or otherwise that the registration has become useless or ineffective to run the establishment.

then, in case of clause (a) such misrepresentation or suppression of any material fact shall be deemed to be the commission of the provisions of this Code for prosecution of the employer under section 94 without affecting the registration and running of the establishment and in case of clause (b) the registering officer may, after giving an opportunity to the employer of the establishment to be heard, re-make the registration by an order and such process for revocation shall be completed by the registering officer within sixty days from coming into his notice the facts specified in clause (b).

(7) No employer of an establishment who—

(a) has not registered the establishment under this section; or

(b) has not preferred appeal under section 4 against the cancellation of the registration certificate of the establishment under sub-section (3) or revocation of the registration of the establishment under sub-section (6) or the appeal so preferred has been dismissed,

shall employ any employee in the establishment.

(8) Notwithstanding anything contained in this Code, where any establishment, to which this Code applies, has already been registered under any—

(a) Central Labour law; or

(b) any other law which may be notified by the Central Government and which applies to the establishment which is in existence at the time of the commencement of this Code,

shall be deemed to have been registered under the provisions of this Code, subject to the condition that the registration holder provides the details of registration to the concerned registering officer within such time and in such form as may be prescribed.

Appeal.

4. (1) Any person aggrieved by an order made under section 3 may, within thirty days from the date on which the order is communicated to him, prefer an appeal to an appellate officer who shall be a person notified in this behalf by the appropriate Government;

Provided that the appellate officer may entertain the appeal after the expiry of the said period of thirty days, if he is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

(2) On receipt of an appeal under sub-section (1), the appellate officer shall, after giving the appellant an opportunity of being heard, dispose of the appeal within a period of thirty days from the date of receipt of such appeal.

Notice by employer of commencement and cessation of operation.

5. (1) No employer of an establishment being factory or mine or relating to contract labour or building or other construction work, shall use such establishment to commence the operation of any industry, trade, business, manufacturing or occupation thereon without sending notice of such purpose in such form and manner and to such authority and within such time as may be prescribed and shall also intimate the cessation thereof to the said authority in such manner as may be prescribed by the appropriate Government.

(2) The notice or intimation under sub-section (1) shall be given electronically.

### CHAPTER III

#### DUTIES OF EMPLOYER AND EMPLOYEES, ETC.

Duties of employer.

6. (1) Every employer shall—

(a) ensure that work place is free from hazards which cause or are likely to cause injury or occupational disease to the employees;

(b) comply with the occupational safety and health standards declared under section 118 or the rules, regulations, bye-laws or orders made under this Code;

(c) provide such annual health examination or test free of costs to such employees of such age or such class of employees of establishments or such class of establishments, as may be prescribed by the appropriate Government;

(d) provide and maintain, as far as is reasonably practicable, a working environment that is safe and without risk to the health of the employees;

(e) ensure the disposal of hazardous and toxic waste including disposal of e-waste;

(f) issue a letter of appointment to every employee on his appointment in the establishment, with such information and in such form as may be prescribed by the appropriate Government and where an employer has not been issued such appointment letter on or before the commencement of this Code, he shall, within three months of such commencement, be issued such appointment letter;

(g) ensure that no charge is levied on any employee, in respect of anything done or provided for maintenance of safety and health at workplace including conduct of medical examination and investigation for the purpose of detecting occupational diseases;

(h) relating to factory, mine, dock, work, building or other construction work or plantation, ensure and be responsible for the safety and health of employees, workers and other persons who are on the work premises of the employer, with or without his knowledge, as the case may be.

(2) Without prejudice to the generality of the provisions of sub-section (1), the duties of an employer shall particularly in respect of factory, mines, docks, building or other construction work or plantation include—

(a) the provision and maintenance of plant and systems of work in the workplace that are safe and without risk to health;

(b) the arrangements in the workplace for ensuring safety and absence of risk to health in connection with the use, handling, storage and transport of articles and substances;

(c) the provision of such information, instruction, training and supervision as are necessary to ensure the health and safety of all employees at work;

(d) the maintenance of all places of work in the workplace in a condition that is safe and without risk to health and the provision and maintenance of such means of access to, and egress from, such places as are safe and without such risk;

(e) the provision, maintenance or monitoring of such working environment in the workplace for the employees that is safe, without risk to health as regards facilities and arrangements for their welfare at work.

7. (1) The owner and agent of every mine shall jointly and severally be responsible for making financial and other provisions and for taking such other steps as may be necessary for compliance with the provisions of this Code and the rules, regulations, bye-laws and orders made thereunder, relating to mine.

Duties and responsibilities of owner, agent and manager in relation to mine.

(2) In the event of any contravention by any person whatsoever of any of the provisions of this Code or of the rules, regulations, bye-laws or orders made thereunder, relating to mine, except those which specifically require any person to do any act or thing, he prohibits any person from doing an act or thing, besides the person who contravenes them, each of the following persons shall also be deemed to be guilty of such contravention unless he

proves that he had used due diligence to secure compliance with the provisions and had taken reasonable means to prevent such contravention, namely—

(a) the official or officials appointed to perform duties of supervision in respect of the provisions contravened;

(b) the manager of the mine;

(c) the owner and agent of the mine;

(d) the person appointed, if any, to carry out the responsibility under section 24.

(f) It shall not be a defence in any proceedings brought against the owner or agent of a mine under this section that the manager and other officials have been appointed in accordance with the provisions of this Code or that a person to carry the responsibility under section 24 has been appointed.

Duties of  
designers,  
manufacturers,  
importers or  
suppliers

8. (1) Every person who designs, manufactures, imports or supplies any article for use in any establishment shall—

(a) ensure so far as is reasonably practicable, that the article is so designed and constructed in the establishment as to be safe and without risk to the health of the worker when properly used;

(b) carry out or arrange for the carrying out of such tests and examination in the establishment as may be considered necessary for the effective implementation of the provisions of clause (a);

(c) take steps as may be necessary to ensure that adequate information will be available—

(i) in connection with the use of the article in any establishment;

(ii) about the use for which such article is designed and tested; and

(iii) about any conditions necessary to ensure that the article, when put to such use, shall be safe, and without risk to the health of the workers;

Provided that where an article is designed or manufactured outside India, then it shall be obligatory on the part of the importer to see—

(A) that the article conforms to the same standards of such article manufactured in India; or

(B) if the standards adopted in the country outside India for the manufacture of such article is above the standards adopted in India, that the article conforms to such standards in such country;

(C) if there is no standard of such article in India, then, the article conforms to the standard adopted in the country from where it is imported at its national level.

(2) The designer, manufacturer, importer or supplier shall also comply with such duties as the Central Government may, in consultation with the National Occupational Safety and Health Advisory Board referred to in sub-section (1) of section 16, by regulations specify.

(3) Every person, who undertakes to design or manufacture any article and substance for use in any factory, may carry out or arrange for the carrying out of necessary research with a view to the discovery and, so far as is reasonably practicable, the elimination or minimisation of any risks to the health or safety of the workers to which the design or manufacture of article and substance may give rise to such risk.

(4) Nothing contained in sub-sections (1) and (2) shall be construed to require a person to repeat the testing, examination or research which has been carried out otherwise than by him or at his instance in so far as it is reasonable for him to rely on the results thereof for the purposes of the said sub-sections.

(5) Any duty imposed on any person by sub-sections (1) and (2) shall extend only to things done in the course of business carried on by him and to matters within his control.

(6) Every person—

(a) who erects or installs any article for use in a factory, shall ensure, so far as practicable, that such article so erected or installed does not make it unsafe or a risk to health when that article is used by the persons in such factory;

(b) who manufactures, imports or supplies any substance for use in any factory shall—

(i) ensure, so far as practicable, that such substance when used in the factory does not make it unsafe or a risk to health of persons working in such factory;

(ii) carry out or arrange for carrying out of such tests and examination in relation to such substance as may be necessary;

(iii) take such steps as are necessary to secure that the information about the results of tests carried out in connection with the use of the substance as referred to in sub-clause (ii) is available in a factory along with conditions necessary to ensure its safe use and no risks to health;

(c) who undertakes the manufacture of any substance for use in any factory shall carry out or arrange for carrying out of any necessary research with a view to discover and, so far as practicable, to ensure the elimination or minimisation of any risks to health or safety to which the substance may give rise out of such manufacture or research.

(7) For the purposes of this section, an article and substance is not to be regarded as properly used, if they are used without regard to any information or advice relating to their use which has been made available by the person who has designed, manufactured, imported or supplied the article and substance.

*Explanation.—* For the purpose of this section—

(a) "article" shall include plant and machinery;

(b) "substance" means any natural or artificial substance whether in a solid or liquid form or in the form of a gas or vapour; and

(c) "substance for use in any factory" means such substance, whether or not intended for use by persons working in a factory.

9. (1) It shall be the duty of the architect, project engineer or designer responsible for any building or other construction work or the design of any project or part thereof relating to such building or other construction work to ensure that, at the planning stage, due consideration is given to the safety and health aspects of the building workers and employees who are employed in the erection, operation and execution of such projects and structures as the case may be.

Duties of  
architect,  
project  
engineer and  
designer.

(2) Adequate care shall be taken by the architect, project engineer and other professionals involved in the project referred to in sub-section (1), not to include anything in the design which would involve the use of dangerous structures or other processes or materials, hazardous to health or safety of building workers and employees during the course of erection, operation and execution as the case may be.

(3) It shall also be the duty of the professionals involved in designing the buildings structures or other construction projects, to take into account the safety aspects associated with the maintenance and upkeep of the structures and buildings where maintenance and upkeep may involve such hazards as may be notified by the appropriate Government.

Notice of certain accidents

10. (1) Where at any place in an establishment, an accident occurs which causes death, or which causes any bodily injury by reason of which the person injured is prevented from working for a period of forty-eight hours or more immediately following the accident or which is of such nature as may be prescribed by the appropriate Government, then,—

(a) employer or owner or agent or manager referred to in section 67 of such establishment if it is mine; or

(b) employer or manager in relation to such establishment if it is factory or relates to dockwork; or

(c) the employer of a plantation or an establishment relating to building or other construction or any other establishment,

shall send notice thereof to such authorities, in such manner and within such time, as may be prescribed by the appropriate Government.

(2) Where a notice given under sub-section (1) relates to an accident causing death in a plantation or an establishment relating to building or other construction work, or any other establishment, the authority to whom the notice is sent shall make an inquiry into the occurrence within two months of the receipt of the notice or if there is no such authority, the Chief Inspector-cum-Facilitator shall cause the Inspector-cum-Facilitator to make an inquiry within the said period.

Notice of certain dangerous occurrences

11. Where in an establishment there is any dangerous occurrence of such nature, (whether causing any bodily injury or disability, or not) the employer shall send notice thereof to such authorities, and in such form and within such time, as may be prescribed by the appropriate Government.

Notice of certain diseases

12. (1) Where any worker in an establishment contracts any disease specified in the Third Schedule, the employer of the establishment shall send notice thereof to such authorities, and in such form and within such time, as may be prescribed by the appropriate Government.

(2) If any qualified medical practitioner attends on a person, who is or has been employed in an establishment, and who is, or is believed by the qualified medical practitioner, to be suffering from any disease specified in the Third Schedule, the medical practitioner shall without delay send a report in writing to the office of the Chief Inspector-cum-Facilitator in such form and manner and within such time as may be prescribed by the appropriate Government.

(3) If any qualified medical practitioner fails to comply with the provisions of sub-section (2), he shall be punishable with penalty which may extend to ten thousand rupees.

Duties of employer

13. Every employer at workplace shall,—

(a) take reasonable care for the health and safety of himself and of other persons who may be affected by his acts or omissions at the workplace;

(b) comply with the safety and health requirements specified in the standards;

(c) co-operate with the employer in meeting the statutory obligations of the employer under this Code;

(d) if any situation which is unsafe or unhealthy comes to his attention, as soon as practicable, report such situation to his employer or to the health and safety representative and in case of mine, agent or manager referred to in section 57, safety officer or an official for his workplace or section thereof, as the case may be, who

shall report it to the employer in the manner as may be prescribed by the appropriate Government;

(e) not wilfully interfere with or misuse or neglect any appliance, convenient or otherwise provided at workplace for the purpose of securing the health, safety and welfare of workers;

(f) not do wilfully and without reasonable cause, anything likely to endanger himself or others; and

(g) perform such other duties as may be prescribed by the appropriate Government.

14. (1) Every employee in an establishment shall have the right to obtain from the employer information relating to employee's health and safety at work and represent to the employer directly or through a member of the Safety Committee as constituted under section 22, if constituted by the employer for such purpose, regarding inadequate provision for protection of his safety or health in connection with the work activity in the workplace, and if not satisfied, to the Inspector-cum-Facilitator.

Rights of employee

(2) Where the employee referred to in sub-section (1) in any workplace has reasonable apprehension that there is a likelihood of imminent serious personal injury or death or imminent danger to health, he may bring the same to the notice of his employer directly or through a member of the Safety Committee referred to in sub-section (1) and simultaneously bring the same to the notice of the Inspector-cum-Facilitator.

(3) The employer or any employee referred to in sub-section (1) shall take immediate remedial action if he is satisfied about the existence of such imminent danger and send a report forthwith of the action taken to the Inspector-cum-Facilitator in such manner as may be prescribed by the appropriate Government.

(4) If the employer referred to in sub-section (3) is not satisfied about the existence of any imminent danger as apprehended by his employees, he shall, nevertheless, refer the matter forthwith to the Inspector-cum-Facilitator whose decision on the question of the existence of such imminent danger shall be final.

15. No person shall intentionally or recklessly interfere with, damage or misuse anything which is provided in the interest of health, safety, or welfare under this Code.

Duty not to interfere with or misuse things

## CHAPTER IV

### OCCUPATIONAL SAFETY AND HEALTH

16. (1) The Central Government shall, by notification, constitute the National Occupational Safety and Health Advisory Board (hereinafter in this Code referred to as the National Board) to discharge the functions conferred on it by or under this Code and to advise the Central Government on the matters relating to—

National Occupational Safety and Health Advisory Board

(a) standards, rules and regulations to be declared or framed under this Code;

(b) implementation of the provisions of this Code and the standards, rules and regulations relating thereto;

(c) the issues of policy and programme relating to occupational safety and health referred to it from time to time, by the Central Government; and

(d) any other matter in respect of this Code referred to it from time to time, by the Central Government.

(2) The National Board shall consist of—

(a) Secretary, Ministry of Labour and Employment—Chairperson *ex officio*;



(b) Director General, Factory Advice Service and Labour Institutes, Mumbai—Member *ex officio*;

(c) Director General, Mines Safety, Dhanbad—Member *ex officio*;

(d) Chief Controller of Explosives, Nagpur—Member *ex officio*;

(e) Chairman, Central Pollution Control Board, New Delhi—Member *ex officio*;

(f) Chief Labour Commissioner (Central), New Delhi—Member *ex officio*;

(g) Principal Secretaries dealing with labour matters of four States (by rotation at the Central Government may deem fit)—Member *ex officio*;

(h) Director General, Employer's State Insurance Corporation, New Delhi—Member *ex officio*;

(i) Director General, Health Services, New Delhi—Member *ex officio*;

(j) five representatives of employers—Member *ex officio*;

(k) five representatives of employees—Member *ex officio*;

(l) a representative of professional body associated with the matter for which standards, rules, policies being framed—Member;

(m) five eminent persons connected with the field of Occupational Safety and Health, or representatives from reputed research institutions or similar other discipline—Member;

(n) special invitees from the State Government or the Government of Union territory for seeking inputs in specific matters of industry or sector which is predominant in that State or Union territory—Member;

(o) Joint Secretary, Ministry of Labour and Employment—Member Secretary *ex officio*.

(3) The terms of office of the Members referred to in clauses (g), (j), (k), (l) and (m) of sub-section (2) shall be of three years and the procedure for their nomination, and discharge of their functions shall be such as may be prescribed by the Central Government.

(4) The Central Government may, in consultation with the National Board, determine the number, nature and categories of other officers and employees required to assist the National Board in the efficient discharge of its functions and terms and conditions of service of such officers and employees of the National Board shall be such as may be prescribed by the Central Government.

(5) The Central Government may constitute as many technical committees or advisory committees consisting of such number of members having such qualifications as may be prescribed by the Central Government, to assist the National Board in discharge of its function specified in sub-section (2).

(6) The National Board shall consult the State Governments whose Principal Secretaries are the Members of the National Board as required under clause (g) of sub-section (2) of section 16 and in case of specific issues relating to plantation, factories and like other issues, the State Government concerned may be invited by the National Board as special invitee for obtaining their inputs on such issues.

17. (1) The State Government shall constitute a Board to be called the State Occupational Safety and Health Advisory Board (hereinafter referred to as "State Advisory Board") to advise the State Government on such matters arising out of the administration of this Code as may be referred to it by the State Government.

(2) The constitution, procedure and other matters relating to State Advisory Board shall be such as may be prescribed by the State Government.

State  
Occupational  
Safety and  
Health  
Advisory  
Board.

(3) The State Government may constitute as many technical committees or advisory committees of the State Advisory Board including site appraisal committees, consisting of such number of members and having such qualifications as may be prescribed, to assist the State Government or State Advisory Board in discharge of their functions relating to the area falling within their respective jurisdictions.

18. (1) The Central Government shall declare, by notification, standards on occupational safety and health for workplaces relating to factory, mine, dock work, *bardi* and cigar, building and other construction work and other establishments.

Occupational  
safety and  
health  
standards

(2) In particular and without prejudice to the generality of the power to declare standards to be followed under sub-section (1), such standards shall relate to—

(a) physical, chemical, biological and any other hazards to be dealt with for the working life of employee to ensure to the extent feasible on the basis of the best available evidence or functional capacity, that no employee will suffer material impairment of health or functional capacity, even if such employee has regular exposure to such hazards;

(b) the norms—

(i) appraising the hazards to employees and users to whom such hazards are exposed;

(ii) relating to relevant symptoms and appropriate emergency treatment and proper conditions and precautions of safe use or exposure;

(iii) for monitoring and measuring exposure of employees to hazards;

(iv) for medical examination and other tests which shall be made available, by the employer or at his cost, to the employees exposed to hazards; and

(v) for hazard evaluation procedures like safety audit, hazard and operability study, fault tree analysis, event tree analysis and such other requirements;

(c) medical examination including criteria for detection and reporting of occupational diseases to be extended to the employees even after he ceases to be in employment, if he is suffering from an occupational disease which arises out of or in the course of employment;

(d) such aspects of occupational safety and health relating to workplaces which the Central Government considers necessary on the report of the authority designated by such Government for such purpose;

(e) such safety and health measures as may be required having regard to the specific conditions prevailing at the workplaces relating to mine, factory, building and other construction work, *bardi* and cigar, dock work or any other establishments notified; and

(f) matters specified in the Second Schedule to this Code.

(3) Notwithstanding anything contained in section 131, the Central Government may, on the basis of the recommendation of the National Board and after notifying its intention so to do for not less than forty-five days, by notification, amend the Second Schedule.

(4) The State Government may, with the prior approval of the Central Government, by notification amend the standards made under sub-section (1) and sub-section (2) for the establishment for which it is the appropriate Government situated in the State.

Research  
related  
activities

19. It shall be the duty of such institutions in the field of occupational safety and health as the Central or State Government may notify to conduct research, experiments and demonstrations relating to occupational safety and health and thereafter submit their recommendations to the Central Government or the State Government, as the case may be.

Provided that the State Government shall consult National Board before notifying conduct of research, experiments and demonstration relating to occupational safety and health.

Safety and  
occupational  
health surveys

20. (1) At any time during the normal working hours of an establishment or at any other time as he may deem necessary,—

(a) the Chief Inspector-cum-Facilitator in the case of factory or mine; or

(b) the Director General of Factory Advice Service and Labour Institute in the case of factory; or

(c) the Director General of Mines Safety in the case of mine; or

(d) the Director General of Health Services in the case of factory or mine; or

(e) such other officer as may be authorised by the appropriate Government in the case of any other establishment or class of establishments.

after giving notice in writing to the employer, conduct survey of the factory or mine or such other establishment or class of establishments and such employer shall afford all facilities for such survey, including facilities for the examination and testing of plant and machinery and collection of samples and other data relevant to the survey.

*Explanation.*—For the purposes of this sub-section, the expression "employer" includes manager for the factory or in the case of any other establishment or class of establishments such person who is for the time being responsible for the safety and the occupational health of such other establishment or class of establishments, as the case may be.

(2) For the purpose of facilitating surveys under sub-section (1) every worker shall, if so required by the person conducting the survey, present himself to undergo such medical examination as may be considered necessary by such person and furnish all information in his possession which is relevant to the survey.

(3) Any time spent by a worker for undergoing medical examination or furnishing information under sub-section (2) shall, for the purpose of calculating wages and extra wages for overtime work, be deemed to be working hour for him.

*Explanation.*—For the purposes of this section, the report submitted to the appropriate Government by the person conducting the survey under sub-section (1) shall be deemed to be a report submitted by an Inspector-cum-Facilitator under this Code.

Collection of  
statistics and  
portal for  
inter-State  
migrant  
workers

21. (1) For the purposes of this Code, the Central Government and the State Government shall collect, compile and analyse occupational safety and health statistics in such form and manner as may be prescribed.

(2) The Central Government and the State Governments shall maintain the database or record, for inter-State migrant workers, electronically or otherwise in such portal and in such form and manner as may be prescribed by the Central Government.

Provided that an inter-State migrant worker may register himself as an inter-State migrant worker on such portal on the basis of self-declaration and Aadhaar.

Provided further that the workers who have migrated from one State to any other State and are self-employed in that other State may also register themselves on that portal.

*Explanation.*—For the purposes of this sub-section, the expression "Aadhaar" shall have the same meaning as assigned to it in clause (a) of section 2 of the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016.

22. (1) The appropriate Government may, by general or special order, require any establishment or class of establishments to constitute in the prescribed manner a Safety Committee consisting of representatives of employers and workers engaged in such establishment in such manner that the number of representatives of workers on the Committee shall not be less than the number of representatives of the employer and the representatives of the workers shall be chosen in such manner and for such purpose as may be prescribed by the appropriate Government.

Safety  
Committee  
and safety  
officers

(2) In every establishment which is a—

- (a) factory wherein five hundred workers or more; or
- (b) factory carrying on hazardous process wherein two hundred fifty workers or more; or
- (c) building or other construction work wherein two hundred fifty workers or more; or
- (d) mine wherein one hundred workers or more, are ordinarily employed,

the employer shall also appoint such number of safety officers, who shall possess such qualifications and perform such duties, as may be prescribed by appropriate Government.

#### CHAPTER V

##### HEALTH, SAFETY AND WORKING CONDITIONS

23. (1) The employer shall be responsible to maintain in his establishment such health, safety and working conditions for the employees as may be prescribed by the Central Government.

Responsibility  
of employer  
for  
maintaining  
health, safety  
and working  
conditions.

(2) Without prejudice to the generality of the power conferred under sub-section (1), the Central Government may prescribe for providing all or any of the following matters in the establishment or class of establishments, namely—

- (i) cleanliness and hygiene;
- (ii) ventilation, temperature and humidity;
- (iii) environment free from dust, noxious gas, fumes and other impurities;
- (iv) adequate standard of humidification, artificially increasing the humidity of the air, ventilation and cooling of the air in work rooms;
- (v) potable drinking water;
- (vi) adequate standards to prevent overcrowding and to provide sufficient space to employees or other persons, as the case may be, employed therein;
- (vii) adequate lighting;
- (viii) sufficient arrangement for latrine and urinal accommodation to male, female and transgender employee separately and maintaining hygiene therein;
- (ix) effective arrangements for treatment of wastes and effluents; and
- (x) any other arrangement which the Central Government considers appropriate.

#### CHAPTER VI

##### WELFARE PROVISIONS

24. (1) The employer shall be responsible to provide and maintain in his establishment such welfare facilities for the employees as may be prescribed by the Central Government, including—

Welfare  
facilities in  
the  
establishment,  
etc.

(i) adequate and suitable facilities for washing to male and female employees separately;

(ii) bathing places and locker rooms for male, female and transgender employees separately;

(iii) place of keeping clothing not worn during working hours and for the drying of wet clothing;

(iv) sitting arrangements for all employees obliged to work in a standing position;

(v) facilities of canteen in an establishment for employees thereof, wherein one hundred or more workers including contract labourers are ordinarily employed;

(vi) in case of mines, medical examination of the employees employed or to be employed in the mines, before their employment and at specific intervals;

(vii) adequate first-aid boxes or cupboards with contents readily accessible during all working hours; and

(viii) any other welfare measures which the Central Government considers, under the set of circumstances, as required for decent standard of life of the employees.

(2) Without prejudice to the generality of the powers referred to under sub-section (1), the Central Government may also prescribe for the following matters, namely:—

(i) ambulance room in every factory, mine, building or other construction work wherein more than five hundred workers are ordinarily employed;

(ii) medical facilities at the operating centres and halting stations, uniforms, raincoats and other like amenities for protection from rain or cold for motor transport workers;

(iii) adequate, suitable and separate shelters or rest-rooms for male, female and transgender employees and lunch-rooms in every factory and mine wherein more than fifty workers are ordinarily employed and in motor transport undertaking wherein employee is required to halt at night;

(iv) the appointment of welfare officer in every factory, mine or plantation wherein two hundred and fifty or more workers are ordinarily employed and the qualification, conditions of service and duties of such welfare officer;

(v) for providing by the employer temporary living accommodation, free of charges and within the work site or as near to it as may be possible, to all building workers employed by him and for causing removal or demolition of such temporary living accommodation and for returning by the employer the possession of any land obtained by him for such purpose from Municipal Board or any other local authority;

(vi) for payment by the principal employer the expenses incurred on providing the accommodation to the contractor, where the building or other construction work is done through the contractor;

(vii) any other matter which may be prescribed.

(3) The Central Government may make rules to provide for the facility of creche having suitable room or rooms for the use of children under the age of six years of the employees at suitable location and distance either separately or along with common facilities in establishments wherein more than fifty workers are ordinarily employed:

Provided that an establishment can avail common creche facility of the Central Government, State Government, municipality or private entity or provided by non-Governments' organisation or by any other organisation or group of establishments may pool their resources for setting up of common creche in the manner as they may agree for such purpose.

## CHAPTER VII

## HOURS OF WORK AND ANNUAL LEAVE WITH WAGES

25. (1) No worker shall be required or allowed to work, in any establishment or class of establishment for more than—

Daily and  
weekly  
working hours,  
leave, etc.

(a) eight hours in a day; and

(b) the period of work in each day under clause (a) shall be so fixed, as not to exceed such hours, with such intervals and spread overs, as may be notified by the appropriate Government;

Provided that subject to clause (a) in the case of mines,—

(i) the persons employed below ground in a mine shall not be allowed to work for more than such hours as may be notified by the Central Government in any day;

(ii) no work shall be carried on below ground in any mine except by a system of shifts so arranged that the period of work for each shift is not spread over more than the daily maximum hours as notified under clause (i);

(iii) no person employed in a mine shall be allowed to be present in any part of a mine below ground except during the periods of work shown in respect of him in the register maintained under clause (a) of section 33;

Provided further that subject to clause (a) that the hours of work in case of motor transport worker shall include—

(i) the time spent in work done during the running time of the transport vehicle;

(ii) the time spent in subsidiary work; and

(iii) period of mere attendance at terminals of less than fifteen minutes.

*Explanation*—For the purposes of this sub-section—

(a) "running time" in relation to a working day means the time from the moment a transport vehicle starts functioning at the beginning of the working day until the moment when the transport vehicle ceases to function at the end of the working day, excluding any time during which the running of the transport vehicle is interrupted for a period exceeding such duration as may be prescribed by the Central Government during which period the persons who drive, or perform any other work in connection with the transport vehicle are free to dispose of their time as they please or are engaged in subsidiary work;

(b) "subsidiary work" means the work in connection with a transport vehicle, its passengers or its load which is done outside the running time of the transport vehicle, including in particular—

(i) the work in connection with accounts, paying of cash, signing of registers, handover of service sheets, the checking of tickets and other similar work;

(ii) taking over and gagging of the transport vehicles;

(iii) travelling from the place where a person signs on to the place where he takes over the transport vehicle and from the place where he leaves the transport vehicle to the place where he signs off;

(iv) work in connection with the upkeep and repair of the transport vehicle; and

(v) the loading and unloading of the transport vehicle;

(c) "period of mere attendance" means the period during which a person remains at his post solely in order to reply to possible calls or to resume action at the time fixed in the duty schedule.

(2) Notwithstanding anything contained in sub-section (1), the hours of work for working journalist shall, subject to a maximum of one hundred and forty-four hours of work during any period of four consecutive weeks and a period of not less than twenty-four consecutive hours of rest during any period of seven consecutive days, be such as may be prescribed by the Central Government.

(3) Notwithstanding anything contained in sub-sections (1) and (2), a sales promotion employee or the working journalist—

(i) in addition to such holidays, casual leave or other kinds of leave as may be prescribed by the Central Government, shall be granted, if requested for—

(a) earned leave on full wages for not less than one-eleventh of the period spent on duty;

(b) leave on medical certificate on non-half of the wages for not less than one-eighteenth of the period of service;

(c) may accumulate earned leave up to such maximum limit as may be prescribed by the Central Government;

(d) shall be entitled for the limit up to which the earned leave may be either encashed or availed of at a time by him and the reasons for which such limit may be exceeded shall be such as may be prescribed by the Central Government;

(e) shall—

(a) when he voluntarily relinquishes his post or retires from service; or

(b) when his services are terminated for any reason whatsoever (not being termination as punishment),

be entitled to cash compensation, subject to such conditions and restrictions as may be prescribed by the Central Government (including conditions by way of specifying the maximum period for which such cash compensation shall be payable), in respect of the earned leave earned by him and not availed of.

(v) who dies while in service, his heirs shall be entitled to cash compensation for the earned leave earned by him and not availed of his heirs shall be paid the cash compensation in respect of any period of earned leave for which he or his heirs, in or are entitled to cash compensation under clause (iv) or clause (v), which shall be an amount equal to the wages due to him for such period.

(4) Notwithstanding anything contained in this section, the working hours of an adolescent worker shall be regulated in accordance with the provisions of the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986.

Act of 1986

Weekly and  
compensatory  
holidays

26. (1) No worker shall be allowed to work in an establishment for more than six days in any one week:

Provided that in any motor transport undertaking, an employer may, in order to prevent any dislocation of a motor transport service, require a worker to work on any day of weekly holiday which is not a holiday so arranged that the worker does not work for more than ten days consecutively without a holiday for a whole day intervening.

(2) The appropriate Government may, by notification, exempt such workers as it thinks fit from the provisions of sub-section (1), subject to such conditions as may be prescribed.

(3) Where, as a result of the passing of an order or the making of a rule under the provisions of this Code exempting an establishment or the workers therein from the provisions of sub-section (1), a worker is deprived of any of the weekly holidays, the worker shall be allowed, within the month in which the holidays were due or within the two months immediately following that month, compensatory holidays of equal number to the holidays so deprived.

27. There shall be paid wages at the rate of twice the rate of wages in respect of overtime work, where a worker works in an establishment or class of establishment for more than such hours of work in any day or in any week as may be prescribed by the appropriate Government and the period of overtime work shall be calculated on a daily basis or weekly basis, whichever is more favourable to such worker.

Extra wages  
for overtime.

Provided that a worker shall be required to work overtime by the employer subject to the consent of such worker for such work.

Provided further that the appropriate Government may prescribe the total number of hours of overtime.

28. Where a worker in an establishment works on a shift which extends beyond midnight.—

Night shift.

(a) for the purposes of section 26, a weekly holiday for a whole day shall mean in his case a period of twenty-four consecutive hours beginning when his shift ends,

(b) the following day for him shall be deemed to be the period of twenty-four hours beginning when such shift ends, and the hours he has worked after midnight shall be counted in the previous day.

29. (1) The work shall not be carried on in any establishment by means of a system of shifts so arranged that more than one relay of workers is engaged in work of the same kind at the same time.

Prohibition of  
overlapping  
shifts.

(2) The appropriate Government or subject to the approval of the appropriate Government, the Chief Inspector-cum-Facilitator may, by written order and for the reasons specified therein, exempt on such conditions as may be deemed expedient, any establishment or class of establishments or any department or section of an establishment or any category or description of workers therein from the provisions of sub-section (1).

Provided that the provisions of this sub-section shall not apply to mines.

30. No worker shall be required or allowed to work in a mine or factory if he has already been working in any other such similar establishment within the preceding twelve hours, save in such circumstances as may be prescribed by the appropriate Government.

Restriction on  
double  
employment  
in factory and  
mine.

31. (1) There shall be displayed and correctly maintained in every establishment a notice of periods of work, showing clearly for every day the periods during which workers may be required to work in accordance with the provisions of this Code.

Notice of  
periods of  
work.

(2) The form of notice required by sub-section (1), the manner of display of such notice and the manner in which such notice shall be sent to the Inspector-cum-Facilitator shall be such as may be prescribed by the appropriate Government.

(3) Any proposed change in the system of work in any establishment which will necessitate a change in the notice referred to in sub-section (1) shall be intimated to the Inspector-cum-Facilitator before the change is made, and except with the previous sanction of the Inspector-cum-Facilitator, no such change shall be made until one week has elapsed since that last change.



Annual leave  
with wages,  
etc.

31. (1) Every worker employed in an establishment shall be entitled for leave in a calendar year with wages subject to the following conditions, namely:—

(i) that he has worked one hundred and eighty days or more in such calendar year;

(ii) that he shall be entitled for one-day leave for every twenty days of his work, in the case of adolescent worker for fifteen days of his work, and in case of worker employed below ground mine, at the rate of one day for every fifteen days of his work, in such calendar year;

(iii) any period of layoff, maternity leave or annual leave availed by such worker in such calendar year shall be counted for calculating the period of one hundred and eighty days or more under clause (i), but he shall not earn leave for the period so counted;

(iv) any holidays falling between the leave availed by such worker (in a calendar year or prefixed or suffixed holiday) shall be excluded from the period of leave so availed;

(v) in case of such worker whose service commences otherwise than on the first day of January shall be entitled to leave with wages at the rate specified in clause (ii), if he has worked for one-fourth of the total number of days in the remainder of the calendar year;

(vi) in case such worker is discharged or dismissed from service or quits employment or is superannuated or dies while in service, during the course of the calendar year, such worker or his heir or nominee, shall be entitled to wages in lieu of the quantum of leave to which such worker was entitled immediately before his discharge, dismissal, quitting of employment, superannuation or death, calculated as specified in preceding clauses, even if such worker has not worked for the required period under this sub-section making such worker eligible to avail such leave, and such payment shall be made—

(a) where such worker is discharged or dismissed or quits employment before the expiry of the second working day from the date of such discharge, dismissal or quitting; and

(b) where such worker is superannuated or dies while in service, before the expiry of two months from the date of such superannuation or death;

(vii) if such worker does not in any one calendar year take the whole of the leave allowed to him under this sub-section and the rules made thereunder, then, any leave not taken by him shall be added to the leave to be allowed to him in the succeeding calendar year so that—

(a) the total number of days of leave that may be carried forward to a succeeding year shall not exceed thirty days; and

(b) such worker, who has applied for leave with wages but has not been given such leave in accordance with this sub-section and the rules made thereunder shall be entitled to carry forward the leave refused without any limit;

(viii) without prejudice to clause (vii) such worker shall be entitled on his demand for encashment of leave at the end of calendar year;

(ix) such worker shall be entitled, where his total number of leave exceeds thirty days under sub-clause (a) of clause (vii), to encash such exceeded leave;

(2) The appropriate Government may, by notification, extend the provisions of sub-section (1) to any other establishment except railway establishment.

(3) The provisions of sub-section (7) shall not operate to the prejudice of any right to which a person employed in a mine may be entitled under any other law or under the terms of any award, agreement or contract of service.

Provided that if such award, agreement or contract of service, provides for longer annual leave with wages than that provided in sub-section (7), the quantum of leave, which the person employed shall be entitled to, shall be in accordance with such award, agreement or contract of service but leave shall be regulated in accordance with the provisions of sub-section (7) with respect of matters not provided for in such award, agreement or contract of service.

Provided further that where the Central Government is satisfied that the leave rules applicable to persons employed in any mine provide benefits which in its opinion are not less favourable than those provided for in sub-section (7) it may, by order in writing and subject to such conditions as may be specified therein exempt the mine from all or any of the provisions of sub-section (7).

#### CHAPTER VIII

##### MAINTENANCE OF REGISTERS, RECORDS AND RETURNS

33. An employer of an establishment shall—

(a) maintain register in prescribed form, electronically or otherwise, containing such particulars of workers as may be prescribed by the appropriate Government including—

Maintenance of registers, records and filing of returns

(i) work performed by them;

(ii) number of hours of work constituting normal working hours in a day;

(iii) day of rest allowed in every period of seven days;

(iv) wage paid and receipts given therefor;

(v) leave, leave wages, overtime work, attendance and dangerous occurrences; and

(vi) employment of adolescent;

(b) display notices at the work place of the workers in such manner and form as may be prescribed by the appropriate Government;

(c) issue wage slips to the workers, in electronic form or otherwise; and

(d) file such return electronically or otherwise to the Inspector-cum-Facilitator in such manner and during such periods as may be prescribed by the appropriate Government.

#### CHAPTER IX

##### INSPECTOR-CUM-FACILITATORS AND OTHER AUTHORITY

34. (1) The appropriate Government may, by notification, appoint Inspector-cum-Facilitators for the purposes of this Code who shall exercise the powers conferred on them under this Code throughout their respective jurisdiction specified in the notification.

Appointment of Inspector-cum-Facilitators

(2) The Inspector-cum-Facilitators appointed under sub-section (1) shall, apart from other duties to be discharged by them under this Code, conduct such inspections as specified in sub-section (3).

(3) The appropriate Government may—

(i) for the purposes of inspection referred to in sub-section (2), by notification, lay down an inspection scheme which may provide for the generation of web-based

inspection and calling of information under this Code: electronically and such scheme shall, *inter alia*, have provisions to cater to special circumstances for assigning inspection and calling for information from establishment or any other person besides web-based inspections; and

(ii) without prejudice to the provisions of sub-section (2), by notification under the scheme, provide for the randomised selection of establishment and the Inspector-cum-Facilitator for inspection.

(4) Without prejudice to the powers of the appropriate Government under this section, the inspection scheme referred to in sub-section (1) may be designed taking into account, *inter alia*, the following factors, namely:—

(a) assignment of unique number, to each establishment (which will be same as the registration number allotted to the establishment registered under section 3), unique number to each Inspector-cum-Facilitator and to each inspection in such manner as may be notified by the appropriate Government;

(b) timely uploading of inspection reports in such manner and subject to such conditions as may be notified in the scheme;

(c) provisions for special inspections based on such parameters as may be notified by the appropriate Government; and

(d) the characteristics of employment, the nature of work, and characteristics of the workplaces based on such parameters as may be notified by the appropriate Government.

(5) The appropriate Government may, by notification, appoint any person or persons possessing the prescribed qualifications and experience to be Chief Inspector-cum-Facilitator for the purposes of such establishments or class of establishments and for such local limits of jurisdiction as may be specified in the notification.

Provided that a Chief Inspector-cum-Facilitator may be appointed for the purposes of a State or more than one States or for the purposes of the whole of the Country.

(6) The appropriate Government may, by notification, appoint for the purposes of establishments as may be notified by that Government, as many Additional Chief Inspector-cum-Facilitators, Joint Chief Inspector-cum-Facilitators and Deputy Chief Inspector-cum-Facilitators or any other officer of any designation as it thinks appropriate, to exercise such powers of the Chief Inspector-cum-Facilitator within his jurisdiction, as may be specified in the notification.

(7) Every Additional Chief Inspector-cum-Facilitator, Joint Chief Inspector-cum-Facilitator, Deputy Chief Inspector-cum-Facilitator and every other officer appointed under sub-section (6) shall, in addition to the powers of a Chief Inspector-cum-Facilitator specified in the notification by which the officer is appointed, exercise the powers of an Inspector-cum-Facilitator within such local limits as may be specified in the notification.

(8) No person shall be appointed under this section or having been so appointed, shall continue to hold office, who is, or who becomes, directly or indirectly interested in a work place or work activity or in any process or business carried on in any work place or in any plant or machinery connected therewith.

(9) The appropriate Government may also, by notification, appoint such public officers as it thinks fit to be Inspector-cum-Facilitators in addition to existing Inspector-cum-Facilitator for exercising the powers and discharging the duties of Inspector-cum-Facilitator for all or any of the purposes of this Code within such local limits as may be specified in such notification.

(70) Without prejudice to the other functions of the Inspector-cum-Facilitator under this Code, an Inspector-cum-Facilitator may in respect of any establishment or class of establishments in local area or areas of his jurisdiction where the Chief Inspector-cum-Facilitator with the approval of the appropriate Government and subject to such restrictions or conditions as he may think fit to impose, by order in writing authorise the Inspector-cum-Facilitator to exercise such of the powers of the Chief Inspector-cum-Facilitator as may be specified in such order.

Provided that the Chief Inspector-cum-Facilitator, with the approval of the appropriate Government, may by order in writing, prohibit the exercise, by any Inspector-cum-Facilitator or any class of Inspector-cum-Facilitators specified in such order, of any such power by such Inspector-cum-Facilitator or class of Inspector-cum-Facilitators.

(71) Every Chief Inspector-cum-Facilitator, Additional Chief Inspector-cum-Facilitator, Joint Chief Inspector-cum-Facilitator, Deputy Chief Inspector-cum-Facilitator, Inspector-cum-Facilitator and every other officer appointed under this section shall be deemed to be a public servant within the meaning of section 21 of the Indian Penal Code, and shall be officially subordinate to such authority as the appropriate Government may specify in this behalf.

45 of 1800

35. (1) Subject to any rules made in this behalf, an Inspector-cum-Facilitator may—

Power of  
Inspector-  
cum-  
Facilitator.

(i) enter, with such assistance of persons, being persons in the service of the Government, or any local or other public authority, or with an expert, as he thinks fit, any place which is used, or which he has reason to believe, is used as a work place;

(ii) inspect and examine the establishment, any premises, plant, machinery, article, or any other relevant material;

(iii) inquire into any accident or dangerous occurrence, whether resulting in bodily injury, disability or death or not and take on the spot or otherwise statement of any person which he may consider necessary for such inquiry;

(iv) subject to any rules made by the State Government in this behalf, within his jurisdiction, examine the crops grown in any plantation or any worker employed therein or require the production of any register or other document maintained in pursuance of this Code, and take on the spot or otherwise statement of any person which he may consider necessary, for carrying out the purposes of this Code relating to plantation;

(v) supply information and sensitize the employers and workers regarding the provisions of this Code and compliance thereof;

(vi) require the production of any register or any other document relating to the work place or work activity;

(vii) search or seize, or take copies of any register, record or other document or any portion thereof, as he may consider necessary in respect of any offence under this Code, which he has reason to believe, has been committed;

(viii) direct the concerned occupier or employer that any premises or any part thereof, or anything lying therein, shall be left undisturbed (whether generally or in particular respects) for so long as is necessary for the purpose of any inspection or inquiry;

(ix) take measurements, photographs and videographs and make such recordings as he considers necessary for the purpose of any examination or inquiry;

(x) take samples of any articles or substances found in any establishment or premises into which he has power to enter and of the air of the atmosphere in or in the vicinity of any such establishment or premises in such manner as may be prescribed by the appropriate Government.

(xi) in case of any article or substance found in any establishment or premises, being an article or substance which appears to him as having caused or is likely to cause danger to the health and safety of the employees, direct it to be dismantled or subject it to any process or test (but not so as to damage or destroy it unless the same is, in the circumstances necessary, for carrying out the purposes of any provision of this Code) and take possession of any such article or substance or a part thereof, and detain it for so long as is necessary for such examination;

(xii) issue show cause notice relating to safety, health and welfare provisions arising under this Code, rules, regulations and bye-laws made thereunder;

(xiii) prosecute, conduct or defend before any court any complaint or other proceeding arising under this Code, the rules and regulations made thereunder; and

(xiv) exercise such other powers and perform such other duties as may be prescribed by the appropriate Government.

(2) Any person required to produce any document or to give any information required by an Inspector-cum-Facilitator under sub-section (1) shall be deemed to be legally bound to do so within the meaning of section 175 and section 176 of the Indian Penal Code.

45 of 1960

(3) The provisions of the Code of Criminal Procedure, 1973, shall, so far as may be, apply to such search or seizure under sub-section (1) as they apply to any search or seizure made under the authority of a warrant issued under section 94 of the said Code.

2 of 1974

Powers and duties of District Magistrate

36. The District Magistrate shall, within the local limits of his jurisdiction, exercise such powers and duties of the Inspector-cum-Facilitator in respect of mines as may be prescribed by the Central Government.

Third party audit and certification.

37. (1) The appropriate Government may by notification, formulate a scheme to empanel experts possessing such qualifications and experience as may be prescribed for the purpose of such start-up establishments or class of establishments, as may be specified in the notification.

(2) The experts empanelled under sub-section (1), shall,—

(a) be assigned the third party audit and certification in a randomised manner, by the appropriate Government through a web-based scheme;

(b) carry out the audit and certification in the manner and for the purpose specified in the scheme referred to in sub-section (1);

(c) perform such duties as may be specified in such scheme and submit his report to the concerned employer and to the Inspector-cum-Facilitator.

Special powers of Inspector-cum-Facilitator in respect of factory, mines, dock work and building or other construction work.

38. (1) Without prejudice to the other powers of an Inspector-cum-Facilitator in this Code, an Inspector-cum-Facilitator—

(a) shall have the following special powers in respect of a factory, namely—

(i) where it appears to the Inspector-cum-Facilitator that conditions in a factory or part thereof are such that they may cause serious hazard or imminent danger by way of injury or death to the persons employed therein or to the general public in the vicinity, he may, by order in writing to the occupier of the factory, state the particulars in respect of which he considers the factory or part thereof to be the cause of such serious hazard or imminent danger and prohibit such occupier from employing any person in the factory or any part thereof other than the minimum number of persons necessary to attend to the minimum tasks till the hazard or danger is removed;

(ii) any order issued by the Inspector-cum-Facilitator under sub-clause (i) shall have effect for a period of three days until extended by the Chief Inspector-cum-Facilitator by a subsequent order;

(c) any person aggrieved by an order of the Inspector-cum-Facilitator under sub-clause (a), and the Chief Inspector-cum-Facilitator under sub-clause (b), shall have the right to appeal to the High Court.

(d) any person whose employment has been affected by an order issued under sub-clause (a), shall, without prejudice to the rights of the parties under the Industrial Disputes Act, 1947, be entitled to wages and other benefits and it shall be the duty of the occupier to provide alternative employment to him wherever possible in such manner as may be prescribed by the appropriate Government.

14 of 1947

(E) shall have the following special powers in respect of mines, namely:—

(a) if, in respect of any matter for which no express provision is made by or under this Code, it appears to the Chief Inspector-cum-Facilitator or an Inspector-cum-Facilitator that any mine or part thereof or any matter, thing or practice in or connected with the mine, or with the control, supervision, management or direction thereof, is dangerous to human life or safety or is defective so as to threaten or tend to cause, the bodily injury of any person, he may give notice in writing thereof to the employer of the mine stating therein the particulars in respect of which he considers the mine or part thereof or the matter, thing or practice to be dangerous or defective and require the same to be remedied within such time and in such manner as he may specify in the notice;

(b) where the employer of a mine fails to comply with the terms of a notice given under sub-clause (a) within the period specified therein, the Chief Inspector-cum-Facilitator or the Inspector-cum-Facilitator may, by order in writing, prohibit the employment in or about the mine or any part thereof of any person whose employment is not in his opinion reasonably necessary for securing compliance with the terms of the notice;

(c) without prejudice to the provisions contained in sub-clause (a), the Chief Inspector-cum-Facilitator or the Inspector-cum-Facilitator may, by order in writing addressed to the employer of a mine, prohibit the extraction or reduction of pillars or blocks of minerals in the mine or part thereof, if, in his opinion, such operation is likely to cause the crushing of pillars or blocks of minerals or the premature collapse of any part of the workings or otherwise endanger the mine or the life or safety of persons employed therein or if, in his opinion, adequate provision against the outbreak of fire or flooding has not been made by providing for the sealing off and isolation of the part of the mine in which such operation is contemplated and for restricting the area that might be affected by fire or flooding;

(d) if the Chief Inspector-cum-Facilitator or an Inspector-cum-Facilitator authorised, by general or special order in writing by the Chief Inspector-cum-Facilitator, is of opinion that there is urgent and immediate danger to the life or safety of any person employed in any mine or part thereof, he may, by order in writing containing a statement of the grounds of his opinion, prohibit until he is satisfied that the danger is removed, the employment in or about the mine or any part thereof of any person whose employment is not in his opinion reasonably necessary for the purpose of removing the danger;

(e) every person whose employment is prohibited under sub-clause (b) or sub-clause (d) shall be entitled to payment of full wages for the period for which he would have been, but for the prohibition, in employment and the employer shall be liable for payment of such full wages of that person.

Provided that the employer may, instead of paying such full wages provide such person with an alternative employment at the same wages which such person was receiving in the employment which was prohibited.

(f) where a notice has been given under sub-clause (c) or an order is made under sub-clause (b) or sub-clause (c) or sub-clause (d) by an Inspector-cum-Facilitator, the employer of the mine may, within ten days after the receipt of the notice or order, as the case may be, appeal against the same to the Chief Inspector-cum-Facilitator who may confirm, modify, or cancel the notice or order;

(g) the Chief Inspector-cum-Facilitator or the Inspector-cum-Facilitator sending a notice under sub-clause (a) or making an order under sub-clause (b) or sub-clause (c) or sub-clause (d) and the Chief Inspector-cum-Facilitator making an order (other than an order of cancellation in appeal) under sub-clause (f) shall forthwith report the same to the Central Government;

(h) if the employer of the mine objects to a notice sent under sub-clause (a) by the Chief Inspector-cum-Facilitator or the Inspector-cum-Facilitator or to an order made by the Chief Inspector-cum-Facilitator or the Inspector-cum-Facilitator under sub-clause (b) or sub-clause (c) or sub-clause (d) or sub-clause (f), as the case may be, he may, within twenty days after the receipt of the notice containing the requisition or of the order or after the date of the decision on appeal, as the case may be, send his objection in writing stating the grounds thereof to the Central Government which shall, ordinarily within a period of one month from the date of receipt of the objection, decide the matter;

(i) every notice under sub-clause (a) or order under sub-clause (b) or sub-clause (c) or sub-clause (d) or sub-clause (f), to which objection is made under sub-clause (h), shall be complied with, pending the objection with the concerned Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator of the mine, for the decision of the Central Government;

Provided that the Central Government may, on the application of the employer, suspend the operation of a notice under sub-clause (a), pending its decision on the objection;

(j) nothing in this section shall affect the powers of a magistrate under section 144 of the Code of Criminal Procedure, 1973;

3 of 1974

(k) where in respect of any matter relating to safety of mine for which express provision is made by or under this Code, the employer of a mine fails to comply with such provisions, the Chief Inspector-cum-Facilitator may give notice in writing requiring the same to be complied with within such time as he may specify in the notice or within such extended period of time as he may, from time to time, specify thereafter;

(l) where the employer fails to comply with the terms of a notice given under sub-clause (k) within the period specified in such notice or within the extended period of time specified under that sub-clause, the Chief Inspector-cum-Facilitator may, by order in writing, prohibit the employment, in or about the mine or any part thereof, of any person whose employment is not, in his opinion, reasonably necessary for securing compliance with the terms of the notice;

(m) every person whose employment is prohibited under sub-clause (l), shall be entitled to payment of full wages for the period for which he would have been, but for the prohibition, in employment, and the owner, agent or manager referred to in section 67 shall be liable for payment of such full wages of that person;

Provided that the employer may, instead of paying such full wages, provide such person with an alternative employment at the same wages which such person was receiving in the employment which was prohibited under sub-clause (l);

(n) the provisions of sub-clauses (g), (k) and (l) shall apply in relation to a notice issued under sub-clause (k) or an order made under sub-clause (l) as they apply in relation to a notice or an order under sub-clause (b);

(o) the Chief Inspector-cum-Facilitator may, for reasons to be recorded in writing, reverse or modify any order passed by him under this Code or under any regulation, rule or bye-law made thereunder in relation to mine;

(p) no order prejudicial to the owner, agent or manager of a mine shall be made under this section unless such owner, agent or manager has been given a reasonable opportunity of making representation;

(q) the Central Government may reverse or modify any order passed by Chief Inspector-cum-Facilitator under this Code or under any regulation, rule or bye-laws thereunder in relation to mine;

(C) shall have the following special powers in respect of dock work namely:—

(a) if it appears to an Inspector-cum-Facilitator that any place where any dock work is being carried on is in such a condition that it is dangerous to life, safety or health, of workmen employed in dock work, he may, in writing, serve on the employer, an order prohibiting any dock work, in such place, until measures have been taken to remove the cause of the danger to his satisfaction;

(b) an Inspector-cum-Facilitator after serving an order under clause (a) shall endorse a copy thereof to the Chief Inspector-cum-Facilitator who may modify or cancel the order without waiting for an appeal;

(c) any person aggrieved by an order under clause (a) or clause (b) may, within fifteen days from the date on which the order is communicated to him, prefer an appeal to the Chief Inspector-cum-Facilitator or where such order is by the Chief Inspector-cum-Facilitator, to the Central Government and the Chief Inspector-cum-Facilitator or the Central Government shall, after giving the appellant an opportunity of being heard, dispose of the appeal within sixty days;

Provided that the Chief Inspector-cum-Facilitator or the Central Government may entertain the appeal after the expiry of the said period of fifteen days, if he or it is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time;

Provided further that an order under clause (a) or an order modified under clause (b) shall be complied with, pending the decision of the Chief Inspector-cum-Facilitator or the Central Government;

(2) Without prejudice to the other powers of an Inspector-cum-Facilitator elsewhere in this Code,—

(a) if it appears to the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator that any site or place at which any building or other construction work is being carried on, is in such condition that it is dangerous to life, safety or health of building workers or the general public, he may, in writing serve, on the employer or building workers working at such site or place or on the employer of the establishment in which such site or place is situated or on the person in charge of such site or place, an order prohibiting any building or other construction work at such site or place until measures have been taken to remove the cause of the danger to his satisfaction;

(b) an Inspector-cum-Facilitator serving an order under clause (a) shall endorse a copy of the order to the Chief Inspector-cum-Facilitator;

(c) such prohibition order made by the Inspector-cum-Facilitator shall be complied with by the employer forthwith.



(3) Any person aggrieved by an order under clause (a) of sub-section (2), may, within fifteen days from the date on which the order is communicated to him, prefer an appeal to the Chief Inspector-cum-Facilitator or where such order is by the Chief Inspector-cum-Facilitator, to the appropriate Government and the Chief Inspector-cum-Facilitator or the appropriate Government, as the case may be, shall, after giving the appellant an opportunity of being heard, dispose of the appeal within sixty days:

Provided that the Chief Inspector-cum-Facilitator or the appropriate Government may, entertain the appeal after the expiry of the said period of fifteen days if it is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

Provided further that the order under clause (a) of sub-section (2), shall be complied with, subject to the decision of the Chief Inspector-cum-Facilitator or the appropriate Government as the case may be.

Secrecy of information by Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator, etc.

39. (1) All copies of, and extracts from, registers or other records pertaining to any establishment and all other information relating to any manufacturing or commercial business or any working process acquired by the Chief Inspector-cum-Facilitator or an Inspector-cum-Facilitator or by any one assisting him, in the course of the inspection or survey of any establishment under this Code or acquired by any officer authorised under section 10 in the exercise of his duties thereunder, shall be regarded as confidential and shall not, while in service or after leaving the service, be disclosed to any person or authority unless the Chief Inspector-cum-Facilitator or the Inspector-cum-Facilitator considers disclosure necessary to ensure the health, safety or welfare of any person employed in establishment.

(2) Nothing in sub-section (1) shall apply to the disclosure of any such information to—

- (a) any court;
- (b) any Committee or Board constituted under this Code;
- (c) an official superior or the employer of the establishment concerned;
- (d) a Commissioner for employees' compensation appointed under the Employees' Compensation Act, 1923;
- (e) the Controller, Indian Bureau of Mines; and
- (f) any such officer, authority or authorised person as may be specified in this behalf by the appropriate Government.

8 of 1923

(3) Notwithstanding anything contained in the Right to Information Act, 2005, no Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator shall disclose the source of any complaint made to him regarding the contravention of the provisions of this Code without the consent of the complainant and shall also not while making an inspection under this Code in pursuance of such complaint, disclose to the employee concerned or any of his representative that the inspection is being made in pursuance of such complaint.

22 of 2005

Facilities to be afforded to Inspector-cum-Facilitator

40. Every employer of an establishment shall afford the Chief Inspector-cum-Facilitator and every Inspector-cum-Facilitator having jurisdiction or every person authorised by the Chief Inspector-cum-Facilitator all reasonable facilities for making any entry, inspection, survey, measurement, examination or inquiry under this Code.

Powers of special officer to enter, etc., in relation to mine.

41. Any person in the service of the Government duly authorised in this behalf by a special order in writing of the Chief Inspector-cum-Facilitator or of an Inspector-cum-Facilitator may, for the purpose of surveying, leveling or measuring any mine or any output therefrom, after giving not less than three days' notice to the manager of such mine, enter the mine and may survey, level or measure the mine or any part thereof or any output therefrom at any time by day or night:

Provided that, where in the opinion of the Chief Inspector-cum-Facilitator or of an

Inspector-cum-Facilitator an emergency exists, he may, by order in writing, authorise any such person to enter the mine for any of the aforesaid purposes without giving any such notice.

42. (1) The appropriate Government may appoint medical practitioners having prescribed qualification to be medical officers for the purposes of this Code in relation to factory, mines, plantation, motor transport undertakings and in any other establishment as may be prescribed. Medical officer

Provided that the medical officers so appointed shall before entering into their office shall disclose to the appropriate Government their interest in the concerned establishment.

(2) The medical officer shall perform the following duties, namely:—

(a) the examination and certification of workers in a mine or factory or in such other establishment engaged in such dangerous occupations or processes as may be prescribed;

(b) the exercise of such medical supervision for any factory, mines, plantation, motor transport undertaking and for such other establishment as may be prescribed by the appropriate Government where cases of illness have occurred which it is reasonable to believe are due to the nature of any process carried on or other conditions of work prevailing in such establishments;

(c) the examination and certification of adolescent for the purpose of ascertaining his fitness for employment in factory, plantation, motor transport undertakings and in any other establishment as may be prescribed by the appropriate Government in any work which is likely to cause injury to their health.

#### CHAPTER X

##### SPECIAL PROVISION RELATING TO EMPLOYMENT OF WOMEN

43. Women shall be entitled to be employed in all establishments for all types of work under this Code and they may also be employed, with their consent before 6 a.m. and beyond 7 p.m. subject to such conditions relating to safety, holidays and working hours or any other condition to be observed by the employer as may be prescribed by the appropriate Government. Employment of women

44. Where the appropriate Government considers that the employment of women is dangerous for their health and safety, in an establishment or class of establishments or in any particular hazardous or dangerous processes in such establishment or class of establishments, due to the operation carried out therein, such Government may in the prescribed manner, require the employer to provide adequate safeguards prior to the employment of women for such operation. Adequate safety of employment of women in dangerous operations.

#### CHAPTER XI

##### SPECIAL PROVISIONS FOR CONTRACT LABOUR AND INTER-STATE Migrant WORKER, ETC.

#### PART I

##### CONTRACT LABOUR

45. (1) This Part shall apply to—

Applicability of this Part

(i) every establishment in which fifty or more contract labour are employed or were employed on any day of the preceding twelve months through contract;

(ii) every manpower supply contractor who has employed, on any day of the preceding twelve months, fifty or more contract labour.

(2) This Part shall not apply to the establishment in which work only of an intermittent or casual nature is performed:

Provided that if a question arises as to whether work performed in an establishment is of an intermittent or casual nature, the appropriate Government shall decide that question after consultation with the National Board as a State Advisory Board and its decision thereon shall be final.

*Explanation*—For the purpose of this sub-section, work performed in an establishment shall not be deemed to be of an intermittent nature—

(i) if it is performed for more than one hundred and twenty days in the preceding twelve months; or

(ii) if it is of seasonal character and is performed for more than sixty days in a year.

Appointment  
of designated  
authority

46. The appropriate Government may, by an order, appoint such persons, being Gazetted officers of the Government, as it thinks fit to be designated as authority under sub-section (1) of section 119 and specify the limits of their jurisdiction and vest with such powers and duties including dealing with issuance and revocation of licences electronically as may be specified therein.

Licensing of  
contractors

47. (1) No contractor to whom this Part applies shall—

(a) supply or engage contract labour in any establishment; or

(b) undertake or execute the work through contract labour;

except under and in accordance with a licence issued to him by the authority referred to in sub-section (1) of section 119 in accordance with the provisions of that section after satisfying that the contractor fulfils such requisite qualifications or criteria as may be prescribed by the Central Government and such licence shall, in addition to the requisite particulars and conditions specified in sub-section (3), specify the number of such contract labour who can be supplied or engaged and the amount of security to be decided by the contractor.

(2) Where the contractor does not fulfil the requisite qualifications or criteria referred to in sub-section (1), the authority referred to in sub-section (1) of section 119 may issue him a "work specific licence" electronically renewable within such period as may be prescribed by the Central Government to supply or engage the contract labour, or execute the work through contract labour, only for the concerned work order as may be specified in such licence and subject to such conditions as may be specified in such licence.

(3) Subject to the provisions of this Part—

(a) a licence under sub-section (1) may contain such conditions including, in particular, conditions as to hours of work, fixation of wages and other essential amenities in respect of contract labour as may be prescribed by the appropriate Government;

(b) the licence referred to in sub-section (1) or sub-section (2), shall be obtained from, if for such establishment the appropriate Government is—

(i) the Central Government, the authority referred to in sub-section (1) of section 119 designated by that Government; and

(ii) the State Government, the authority referred to in sub-section (1) of section 119 designated by that Government;

Provided that where the contractor is desirous of obtaining licence for supplying or engaging contract labour or undertaking or executing the contract works under sub-section (1) or sub-section (2) in more than one States or for the whole of India, then, he

may obtain the licence from the authority referred to in sub-section (1) of section 119 designated by the Central Government for such purpose and the provisions of that section shall apply.

Provided further that before issuing such licence the authority referred to in the first proviso shall consult the concerned State or States authorities designated under sub-section (1) of section 119, electronically before issuing licence for the establishments for which the appropriate Government is the State Government.

48. (1) Subject to the provisions of section 119, every application for issuing a licence under section 119 for the purposes of sub-section (1) or sub-section (2) of section 47 shall be made electronically, in such form and manner and shall contain such particulars regarding the number of contract labour, nature of work for which contract labour is to be employed and such other particulars including the information relating to the employment of inter-State migrant workers as may be prescribed by the appropriate Government.

Procedure for issue or renewal of licence

(2) Subject to the provisions of section 119, the authority referred to in sub-section (1) thereof shall follow such procedure as may be prescribed by the appropriate Government.

(3) Subject to the provisions of section 119, the licence issued for the purposes of sub-section (1) of section 47 shall be valid for a period of five years in respect of the number of contract labour specified therein and in case the contractor wants to increase the number of the contract labour, he shall apply in the prescribed manner for the amendment to the licence for such purpose to the authority referred to in sub-section (1) of section 119 and if the licence is so amended, the number of contract labour shall be increased to such extent by depositing such security deposit as specified in the amended licence for the balance period.

(4) Subject to the provisions of section 119, the licence issued for the purposes of sub-section (1) of section 47 shall contain responsibility of the contractor as may be prescribed by the appropriate Government.

49. The contractor shall not charge directly or indirectly, in whole or in part, any fee or commission from the contract labour.

No fee or commission or any cost to workers.

50. (1) When a contractor receives work order from an establishment either to supply contract labour in the establishment or to execute the contract through contract labour in the establishment he shall, within such time and in such manner as may be prescribed, intimate to the authority referred to in section 119.

Information regarding work order to be given to the appropriate Government

(2) Where the contractor fails to give intimation under sub-section (1), the designated authority may, after giving the holder of the licence an opportunity of showing cause, suspend or cancel the licence in such manner as may be prescribed by the appropriate Government.

51. (1) If the authority referred to in sub-section (1) of section 119 is satisfied, either on a reference made to him in this behalf or otherwise, that—

Revocation, suspension and amendment of licence

(a) a licence granted for the purposes of this Part has been obtained by misrepresentation or suppression of any material fact, or

(b) the holder of a licence has, failed to comply with the conditions subject to which the licence has been granted or has contravened any of the provisions of this Part or the rules made thereunder, then,

without prejudice to any other penalty to which the contractor may be liable under this Code, the authority referred to in sub-section (1) of section 119 may, after giving the contractor an opportunity of showing cause, revoke or suspend the licence in accordance with the procedure as may be prescribed by the Central Government.

(2) Subject to any rules that may be made in this behalf, the authority referred to in sub-section (1) of section 119 may amend a licence granted for the purposes of this Part.

Appeal

52. (1) Any person aggrieved by an order made under section 47, section 48 or section 51 may, within thirty days from the date on which the order is communicated to him, prefer an appeal to an appellate authority prescribed by the appropriate Government under sub-section (6) of section 119.

Provided that the appellate authority may entertain the appeal after the expiry of the said period of thirty days, if he is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

(2) On receipt of an appeal under sub-section (1), the appellate authority shall, after giving the appellant an opportunity of being heard, dispose of the appeal within thirty days from the date on which the appeal is preferred.

Liability of principal employer for welfare facilities

53. Welfare facilities specified under section 23 and section 24 shall be provided by the principal employer of the establishment to the contract labour who are employed in such establishment.

Effect of employing contract labour from a non-licensed contractor

54. Where any principal employer of an establishment is employing contract labour through a contractor who is required to obtain a licence under this Part, but he has not obtained such licence, then, such employment shall be deemed to be in contravention of the provision of this Code.

Responsibility of payment of wages

55. (1) A contractor shall be responsible for payment of wages to each contract labour employed by him and such wages shall be paid before the expiry of such period as may be prescribed by the appropriate Government.

(2) Every contractor shall, make the disbursement of wages referred to in sub-section (1) through bank transfer or electronic mode and inform the principal employer electronically the amount so paid by such mode.

Provided that where it is not practicable to disburse payment in the mode specified in this section, then, the payment shall be made in such manner as may be prescribed by the appropriate Government.

(3) In case the contractor fails to make payment of wages referred to in sub-section (1) within the prescribed period or makes short payment, then, the principal employer shall be liable to make payment of the wages in full or the unpaid balance (as the case may be, to the concerned contract labour employed by the contractor and recover the amount so paid from the contractor either by deduction from any amount payable to the contractor under any contract or as a debt payable by the contractor.

(4) The appropriate Government, in the event the contractor does not pay the wages to the contract labour employed by him, shall pass the orders of making payment of such wages from the amount deposited by such contractor as security deposit under the licence issued by the licensing officer to the contractor, in such manner as may be prescribed by such Government.

Experience certificate

56. Every concerned contractor shall issue, on demand, experience certificate, in such form as may be prescribed by the appropriate Government, to the contract labour giving details of the work performed by such contract labour.

Prohibition of employment of contract labour

57. (1) Notwithstanding anything contained in this Part, employment of contract labour in core activities of any establishment is prohibited.

Provided that the principal employer may engage contract labour through a contractor to any core activity, if—

(a) the normal functioning of the establishment is such that the activity is ordinarily done through contractor; or

(b) the activities are such that they do not require full time workers for the major portion of the working hours in a day or for longer periods, as the case may be;

(c) any sudden increase of volume of work in the core activity which needs to be accomplished in a specified time.

(2) (c) The appropriate Government may, by notification, appoint a designated authority to enquire that Government on the question whether any activity of an establishment is a core activity or otherwise.

(b) if a question arises as to whether any activity of an establishment is a core activity or otherwise, the aggrieved party may make an application in such form and manner as may be prescribed, to the appropriate Government for decision;

(c) the appropriate Government may refer any such question ~~and refer~~ or refer the application to the designated authority, which on the basis of relevant material in its possession, or after making such an enquiry as it deems fit, shall report to the appropriate Government, within such period and thereafter the appropriate Government shall decide the question within such period as may be prescribed.

58. The appropriate Government may, in the case of an emergency, direct, by notification, that subject to such conditions and restrictions, if any, and for such period, as may be specified in the notification, all or any of the provisions of this Code or the rules made thereunder shall not apply to any establishment or class of establishments or any class of contractors.

Power to exempt in special cases

## PART II

### INTER-STATE MIGRANT WORKERS

59. This Part shall apply to every establishment in which ten or more inter-State migrant workers are employed or were employed on any day of the preceding twelve months.

Applicability of Part II

60. It shall be the duty of every contractor or the employer, of an establishment employing inter-State migrant workers in connection with the work of that establishment—

Facilities to inter-State migrant workers

(i) to ensure suitable conditions of work to such worker having regard to the fact that he is required to work in a State different from his own State;

(ii) in case of fatal accident or serious bodily injury to any such worker, to report to the specified authorities of both the States and also the next of kin of the worker;

(iii) to extend all benefits to such worker which are available to a worker of that establishment including benefits under the Employees' State Insurance Act, 1948 or the Employees' Provident Funds and Miscellaneous Provisions Act, 1952 or any other law for the time being in force and the facility of medical check-up as available to a worker under clause (c) of sub-section (1) of section 6.

34 of 1948  
19 of 1952

61. The employer shall pay, to every inter-State migrant worker employed in his establishment, in a year a lump sum amount of fare for to and fro journey to his native place from the place of his employment, in the manner taking into account the minimum service for entitlement, periodicity and class of travel and such other matters as may be prescribed by the appropriate Government.

Journey allowance

62. The appropriate Government shall make schemes to provide—

Benefits of public distribution system, etc

(a) option to an inter-State migrant worker for availing benefits of public distribution system either in his native State or the destination State where he is employed; and

(b) for portability of the benefits of the inter-State migrant worker working for building or other construction work out of the building and other construction cess fund in the destination State where such inter-State migrant worker is employed.

Toll-free  
helpline:

63. The appropriate Government may provide facility of toll free helpline to the inter-State migrant workers in such manner as may be prescribed by that Government.

Study of  
inter-State  
migrant  
workers:

64. The appropriate Government may provide for study of inter-State migrant workers in such manner as may be prescribed by that Government.

Post-litigation:

65. No suit or other proceeding shall lie in any court or before any authority for the recovery of debt or any part thereof relating to an inter-State migrant worker after the completion of his employment where it remains unsettled obligation to the contractor or the principal employer and such debt or part thereof shall, on the completion of the period of employment of such worker, be deemed to have been extinguished.

### PART III

#### AUDIO-VISUAL WORKERS

Prohibition of  
employment  
of audio-visual  
worker  
without  
agreement:

66. (1) No person shall be employed as an audio-visual worker in or in connection with production of any audio-visual programme unless—

(a) an agreement in writing is entered into—

(i) with such person by the producer of such audio-visual programme; or

(ii) with such person by the producer of such audio-visual programme with the contractor, where such person is employed through such contractor; or

(iii) with such person by the contractor or other person through whom such person is employed; and

(b) such agreement is registered with the competent authority, to be notified by the appropriate Government, by the producer of such audio-visual programme.

(2) Every agreement, referred to in sub-section (1) shall—

(a) be in the prescribed form;

(b) specify the name and such other particulars as may be prescribed by the appropriate Government with respect to, such person to be employed under the agreement as audio-visual worker;

(c) include, where such audio-visual worker is employed through a contractor, a specific condition to the effect that in the event of the contractor failing to discharge his obligations under the agreement to the audio-visual worker with respect to payment of wages or any other matter, the producer of the audio-visual programme shall also be liable to discharge such obligations and shall be entitled to be reimbursed with respect thereto by the contractor.

(3) A copy of the agreement referred to in sub-section (1) with respect to the employment of the audio-visual worker shall, if such audio-visual worker is covered under the provision of an enactment for the time being in force for providing the benefit of provident fund to him, also be forwarded to the producer of the audio-visual programme to such authority as may be prescribed by the appropriate Government.

(4) Notwithstanding anything contained in Chapters V, VI and VII, the agreement referred to in sub-section (1) shall include—

(i) nature of assignment;

16 of 1952

(ii) wages and other benefits (including provident fund, if covered under the Employees' Provident Fund and Miscellaneous Provisions Act, 1952);

(iii) health and working conditions;

(iv) safety;

(v) hours of work;

(vi) welfare facilities; and

(vii) dispute resolution process or mechanism, the constitution and other details of which shall be prescribed by the appropriate Government;

14 of 1947

Provided that in case of failure of the resolution of the dispute in such dispute resolution process or mechanism, either party in the dispute may invoke the jurisdiction of the Industrial Tribunal established by the appropriate Government under section 7A of the Industrial Disputes Act, 1947 and for such purpose such dispute shall be deemed to be industrial dispute within the meaning of that Act and it shall be the responsibility of the producer of the audio-visual programme to provide the facilities specified in the agreement to the audio-visual worker and the payment of wages shall be through electronic mode.

#### PART IV

##### Mines

47. (1) Save as may be otherwise prescribed, every mine shall be under a sole manager who shall have such qualifications as may be prescribed by the Central Government and the owner or agent of every mine shall appoint a person having such qualifications to be the manager. Manager

Provided that the owner or agent may appoint himself as manager if he possesses the prescribed qualifications.

(2) Subject to any instructions given to him by or on behalf of the owner or agent of the mine, the manager shall be responsible for the overall management, control, supervision and direction of the mine and all such instructions when given by the owner or agent shall be confirmed in writing forthwith.

(3) Except in case of an emergency, the owner or agent of a mine or any one on his behalf shall not give, otherwise than through the manager, instructions affecting the fulfilment of his statutory duties, to a person, employed in a mine, who is responsible to the manager.

48. (1) The provisions of this Code, except those contained in sections 35, 38, 40, 41 and 44, shall not apply to— Code not to apply in certain cases.

(a) any mine or part thereof in which excavation is being made for prospecting purposes only and not for the purpose of obtaining minerals for use or sale subject to such conditions relating to number of employees, depth of excavation and other matters as may be prescribed by the Central Government;

(b) any mine engaged in the extraction of bankar, murum, laterite, boulder, gravel, shingle, ordinary sand (excluding mouldings and glass sand and other mineral sands), ordinary clay (excluding kaolin, china clay, white clay or fire clay), building stone, slate, road-metal, earth, fuller's earth (marl, chalk) and lime stone subject to such conditions relating to workings, open cast workings and explosives as may be prescribed by the Central Government.

(2) Notwithstanding anything contained in sub-section (1), the Central Government may declare that the provisions of this Code shall apply to such mine or part thereof as may be prescribed by the Central Government.



(3) Without prejudice to the provisions contained in sub-section (2), if at any time any of the conditions specified in clause (a) or clause (b) of sub-section (1) is not fulfilled in relation to any mine referred to in that sub-section, the provisions of this Code not set out in sub-section (1) shall become immediately applicable, and it shall be the duty of the employer of the mine to inform about such non-fulfilment to such authority in such manner and within such time as may be prescribed by the Central Government.

Exemption  
from  
certain  
provisions  
regarding  
employment

69. (1) In case of an emergency involving serious risk to the safety of the mine or of persons employed therein, or in case of an accident, whether actual or apprehended, or in case of any act of God or in case of any urgent work to be done to machinery, plant or equipment of the mine as a result of breakdown of such machinery, plant or equipment, the manager may, subject to the provision of clause (B) of sub-section (1) of section 38 and in accordance with the provisions of section 25 relating to exemption from hours of work above ground, hours of work below ground and notification regarding hours of work and weekly day of rest relating to mines under section 26, permit persons to be employed in contravention of sections 25 and 30 and sub-section (1) of section 31 on such work as may be necessary to protect the safety of the mine or of the persons employed therein.

Provided that in case of any urgent work to be done to machinery, plant or equipment under this section, the manager may take the action permitted by this section, although the production of mineral would thereby be incidentally affected, but any action so taken shall not exceed the limits necessary for the purpose of avoiding serious interference with the ordinary working of the mine.

(2) Every case in which action has been taken by the manager under sub-section (1), shall be recorded together with the circumstances relating thereto and a report thereof shall also be made to the Chief Inspector-cum-Facilitator or the Inspector-cum-Facilitator.

Employment  
of persons  
below eighteen  
years of age

70. (1) No person below eighteen years of age shall be allowed to work in any mine or part thereof.

(2) Notwithstanding anything contained in sub-section (1), apprentices and other trainees, not below sixteen years of age, may be allowed to work, under proper supervision, in a mine or part thereof by the manager as referred to in section 67.

Provided that in the case of trainees, other than apprentices, prior approval of the Chief Inspector-cum-Facilitator or an Inspector-cum-Facilitator shall be obtained before they are allowed to work.

(3) The Central Government may prescribe the provisions for medical examination of apprentice, other trainee and employe in the mine to ensure their fitness to work and to prevent the persons below sixteen years of age to work as apprentice or trainee and those who are not adults to work as such employe.

*Explanation.*—In this section, "apprentice" means an apprentice as defined in clause (a) of section 2 of the Apprentices Act, 1961.

37 of 1961

Exemption to  
certain  
persons

71. The Central Government may make rules to provide for exemption to certain persons or category of persons employed in mines from the provisions of sub-section (1) of section 25, sub-section (1) of section 26, section 30 and sub-section (1) of section 31.

Establishment  
maintenance  
of marine  
hulks and  
vocational  
training

72. The Central Government may prescribe vocational training and rescue and recovery services for persons employed in a mine.

73. If any question arises as to whether any excavation or working or premises in or adjacent to and belonging to a mine, on which any process ancillary to the getting, dressing or preparation for sale of minerals or of lace is being carried on in a mine within the meaning of this Code, the Central Government may decide the question, and a certificate signed by a Secretary to the Government of India in the Ministry of Labour and Employment shall be conclusive proof thereof.

Decision of  
Minister  
is either a  
rule or  
covered  
under this  
Code.

## PART V

### BREEDS AND CIGAR WORKERS

74. (1) Save as otherwise provided in this Part, no employer shall use or allow to use any place or premises as an industrial premises unless he holds a valid licence issued under section 119 for the purposes of this Part and no such premises shall be used except in accordance with the terms and conditions of such licence.

License to  
industrial  
premises and  
person.

(2) Subject to the provisions of section 119, any person who intends to use or allows to use any place or premises specified in sub-section (1) shall make an application to the authority referred to in sub-section (1) of section 119, in such form and on payment of such fees as may be prescribed by the State Government, for a licence to use, or allow to use, such premises as an industrial premises.

(3) Subject to the provisions of section 119, the application shall specify the maximum number of employees proposed to be employed at any time of the day in the place or premises and shall be accompanied by a plan of the place or premises prepared in such manner as may be prescribed by the State Government.

(4) Subject to the provisions of section 119, the authority referred to in sub-section (1) thereof shall, in deciding whether to grant or refuse to grant a licence, have regard to the following matters, namely:—

(a) the suitability of the place or premises which is proposed to be used for the manufacture of breeds or cigars or both;

(b) previous experience of the applicant or he has employed experienced person or has entered into agreement with the experienced person for employment for the period of licence;

(c) the financial resources of the applicant including his financial capacity to meet the demands arising out of the provisions of the laws for the time being in force relating to welfare of labour;

(d) whether the application is made *bona fide* on behalf of the applicant himself or in *bonam* of any other person;

(e) welfare of the labour in the locality, the interest of the public generally and such other matters as may be prescribed by the State Government.

(5) Subject to the provisions of section 119, a licence granted under the said section for the purposes of this section shall be valid for five years and may be renewed thereafter.

(6) Subject to the provisions of section 119, an application for the renewal of a licence for the purposes of this Part shall be made at least thirty days before the expiry of the period thereof, on payment of such fees as may be prescribed by the State Government, and where such an application has been made, the licensee shall be deemed to continue, notwithstanding the expiry of the period thereof, until the renewal of the licence, or, as the case may be, the rejection of the application for the renewal thereof.

Provided that the authority referred to in sub-section (1) of section 119 shall not grant or renew a licence unless it is satisfied that the provisions of this Part and the rules made thereunder have been complied with:

Provided further that the authority referred to in sub-section (1) of section 119 shall renew or refuse to renew the licence within such period as may be prescribed by the State Government and in deciding whether to renew a licence or to refuse a renewal thereof shall have regard to the matters specified in sub-section (4).

(7) Subject to the provisions of section 119, the authority referred to in sub-section (1) thereof may, after giving the holder of a licence an opportunity of being heard, cancel or suspend any licence granted or renewed under section 119 for the purposes of this Part, if it appears to it that such licence has been obtained by misrepresentation or fraud or that the licence has contravened or failed to comply with any of the provisions of this Part or the rules made thereunder or any of the terms or conditions of the licence.

(8) The State Government may issue in writing to an authority referred to in sub-section (1) of section 119 such directions of a general character as that Government may consider necessary in respect of any matter relating to the grant or renewal of licence under section 119 relating to this section.

(9) Subject to section 119 and the foregoing provisions of this section, the authority referred to in sub-section (1) of section 119 may, grant or renew licence relating to this Part on such terms and conditions as it may determine and where such authority refuses to grant or renew any licence, it shall do so by an order communicated to the applicant, giving the reasons in writing for such refusal.

#### Appeals

75. Any person aggrieved by the denial of the authority referred to in sub-section (1) of section 119 refusing to grant or renew a licence, or cancelling or suspending a licence, relating to this Part may, within such time and on payment of such fees as may be prescribed, appeal to the appellate authority referred to in sub-section (4) of section 119, and such authority may by order confirm, modify or reverse any order refusing to grant or renew a licence, or cancelling or suspending a licence, relating to this Part.

#### Permission to work by employees outside industrial premises.

76. (1) The State Government may permit the wetting or curing of beedi or tobacco leaves by employees outside the industrial premises on an application made to it by the employer on behalf of such employees, subject to such conditions as may be prescribed.

(2) The employer shall maintain the record of the work permitted under sub-section (1), to be carried on outside the industrial premises, in such form as may be prescribed.

(3) Save as otherwise provided in this section, no employer shall require or allow any manufacturing process connected with the making of beedi or cigar or both to be carried on outside the industrial premises:

Provided that nothing in this sub-section shall apply to any worker who is given raw material by an employer or a contractor to make beedi or cigar or both at home.

#### Part not to apply to self-employed persons in private dwelling houses.

77. Nothing contained in this Part shall apply to the owner or occupier of a private dwelling house, not being an employee of an employer to whom this Part applies, who carries on any manufacturing process in such private dwelling house with the assistance of the members of his family living with him in such dwelling house and dependent on him.

Explanation.—For the purposes of this section,—

(i) "family" does not include child, as defined in the Child and Adolescent (Prohibition and Regulation) Act, 1986, for this section;

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(ii) "private dwelling house" means a house in which persons engaged in the manufacture of beedi or cigar or both reside.

## PART VI

## BUILDING OR OTHER CONSTRUCTION WORKERS

78. No person, about whom the employer knows or has reasons to believe that he is a deaf or he has a defective vision or he has a tendency to giddiness, shall be required or allowed to work in any such operation of building or other construction work which is likely to involve a risk of any accident either to the building worker himself or to any other person.

Prohibition of employment of certain persons in certain building or other construction work.

## PART VII

## FACTORIES

79. (1) The appropriate Government may make rules in respect of factory, or class or description of factories for—

Approval and licensing of factories

(a) the submission of plans including specifications, nature and certification thereof;

(b) the previous permission for the site on which the factory is to be situated and for the construction or extension thereof; and

(c) subject to the provision of sub-section (1)9, licensing and renewal thereof including fees to be payable for such, licensing and renewal, if required, as the case may be.

(2) If on an application for permission referred to in clause (b) of sub-section (1) accompanied by the plans and specifications required by the rules made under clause (a) of that sub-section, sent to the State Government or Chief Inspector-cum-Facilitator in the electronic mode, no order is communicated to the applicant within such period not exceeding thirty days, the permission applied for in the said application shall be deemed to have been granted.

(3) Where a State Government or a Chief Inspector-cum-Facilitator refuses to grant permission to the site, construction or extension of a factory and licensing of a factory, the applicant may within thirty days of the date of such refusal appeal to the Central Government if the decision appealed from was of the State Government and to the State Government in any other case.

*Explanation*—A factory shall not be deemed to be extended within the meaning of this section by reason only of the replacement of any plant or machinery or within such limits as may be prescribed, or the addition of any plant or machinery if such replacement or addition does not reduce the minimum clear space required for safe working around the plant or machinery or adversely affect the environmental conditions from the evolution or emission of steam, heat or dust or fumes injurious to health.

80. Where any premises or separate buildings are leased to different occupiers for use as separate factories, the owner of the premises and occupiers of the factories utilizing such common facilities which include safety and fire prevention and protection, access, hygiene, occupational health, ventilation, temperature, emergency preparedness and response, canteens, shelter, rest rooms and creches shall jointly and severally be responsible for provision and maintenance of such common facilities and services as may be prescribed by the appropriate Government.

Liability of owner of premises in certain circumstances

81. (1) The appropriate Government may, by notification, declare that all or any of the provisions of this Part shall apply to any place wherein a manufacturing process is carried on with or without the aid of power or is ordinarily carried on irrespective of the number of workers working in the factory.

Power to apply Code to certain premises

(2) After a place is so declared, it shall be deemed to be a factory for the purposes of this Code, and the owner shall be deemed to be the occupier, and any person working therein, a worker.

*Explanation*—For the purposes of this section, "owner" shall include a lessee or mortgagee with possession of the premises.

Dangerous operations

82. The appropriate Government may by rules make the provisions relating to any factory or class or description of factories in which manufacturing process or operation is carried on which exposes any of the persons employed in it to a serious risk of bodily injury, poisoning or disease, for—

(a) specifying the manufacturing process or operation and declaring it to be dangerous;

(b) prohibiting or restricting the employment of pregnant women in the manufacturing process or operation;

(c) the periodical medical examination before, or at any time during the employment to ascertain the fitness of a worker or employee for such employment on the cost of the occupier; and

(d) welfare amenities, sanitary facilities, protective equipment and clothing, and any other requirement necessary for dangerous operations.

Constitution of site appraisal committee

83. (1) The appropriate Government may constitute one or more site appraisal committees consisting of a chairman and other members, for such purpose as may be prescribed including to consider and to give recommendations on an application for grant of permission for the initial location of a factory involving a hazardous process or for the expansion of such factory.

(2) The site appraisal committee referred to in sub-section (1) shall make its recommendation within a period of thirty days of the receipt of the application for any of the purpose referred to in the said sub-section in such form, as may be prescribed.

Compulsory disclosure of information by occupier

84. (1) The occupier of every factory involving a hazardous process shall disclose in the manner prescribed by the State Government all information regarding dangers, including health hazards and the measures to overcome such hazards arising from the exposure to or handling of the materials or substances in the manufacture, transportation, storage and other processes, to the workers employed in the factory, the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator, the local authority within whose jurisdiction the factory is situate and the general public in the vicinity.

(2) The occupier shall, at the time of registering the factory involving a hazardous process, lay down a detailed policy with respect to the health and safety of the workers employed therein and intimate such policy to the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator and the local authority and, thereafter, at such intervals as may be prescribed by the State Government, inform the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator and the local authority of any change made in the said policy.

(3) The information furnished under sub-section (1) shall include accurate information as to the quantity, specifications and other characteristics of wastes and the manner of their disposal.

(4) Every occupier shall, with the approval of the Chief Inspector-cum-Facilitator, draw up an on-site emergency plan and detailed disaster control measures for his factory and make known to the workers employed therein and to the general public living in the vicinity of the factory, the safety measures required to be taken in the event of an accident taking place.

(5) Every occupier of a factory shall, if such factory proposes to engage in a hazardous process at any time after the commencement of this Code, within a period of thirty days before the commencement of such process, inform the Chief Inspector-cum-Facilitator about the nature and details of the process in such form and in such manner as may be prescribed by the State Government.

(6) Where any occupier of a factory contravenes the provisions of sub-section (5), the licence issued under section 79 to such factory shall, notwithstanding any penalty to which the occupier of factory shall be subjected to under the provisions of this Code, be liable for cancellation.

(7) The occupier of a factory involving a hazardous process shall, with the previous approval of the Chief Inspector-cum-Facilitator, lay down measures for the handling, usage, transportation and storage of hazardous substances inside the factory premises and the disposal of such substances outside the factory premises and publicise them in the manner prescribed by the State Government among the workers and the general public living in the vicinity.

85. Every occupier of a factory involving any hazardous process shall—

Specific  
responsibility  
of the  
occupier in  
relation to  
hazardous  
processes

(a) maintain accurate and up-to-date health records or, as the case may be, medical records, of the workers in the factory who are exposed to any chemical, toxic or any other harmful substances which are manufactured, stored, handled or transported and such records shall be accessible to the workers subject to such conditions as may be prescribed by the State Government;

(b) appoint persons who possess prescribed qualifications and experience in handling hazardous substances and are competent to supervise such handling within the factory and to provide at the working place all the necessary facilities for protecting the workers in the manner prescribed by the State Government;

Provided that where any question arises as to the qualifications and experience of a person so appointed, the decision of the Chief Inspector-cum-Facilitator shall be final;

(c) provide for medical examination of every worker—

(i) before such worker is assigned to a job involving the handling of, or working with, a hazardous substance; and

(ii) while continuing in such job, and after he has ceased to work in such job, at intervals not exceeding twelve months, in such manner as may be prescribed by the State Government.

86. (1) The Central Government may, in the event of the occurrence of an extraordinary situation involving a factory engaged in a hazardous process, direct the National Board to inquire into the standards of health and safety observed in the factory with a view to finding out the causes of any failure or neglect in the adoption of any measures or standards prescribed by the State Government for the health and safety of the workers employed in the factory or the general public affected, or likely to be affected due to such failure or neglect and for the prevention of recurrence of such extraordinary situations in future in such factory or elsewhere.

National  
Board to  
inquire into  
serious  
situations

(2) The recommendations of the National Board shall be advisory in the nature.

87. (1) Where the Central Government is satisfied that no standards of safety have been prescribed in respect of a hazardous process or class of hazardous processes, or where the standards so prescribed are inadequate, it may direct the Directorate General Occupational Safety and Health formerly known as the Directorate General of Factory Advice Service and Labour Institutes or any institution authorised in matters relating to standards of safety in hazardous processes, to lay down emergency standards for enforcement of suitable standards in respect of such hazardous processes.

Emergency  
standards

(2) The emergency standards laid down under sub-section (1) shall, until they are incorporated in the rules made under this Code, be enforceable and have the same effect as if they had been incorporated in the rules made under this Code.

Permissible limits of exposure of chemical and toxic substances.

88. The maximum permissible limits of exposure of chemical and toxic substances in manufacturing process in any factory shall be of the value as may be prescribed by the State Government.

Right of workers to warn about imminent danger.

89. (1) Where the workers employed in any factory engaged in a hazardous process have reasonable apprehension that there is a likelihood of imminent danger to their lives or health due to any accident, they may, bring the same to the notice of the occupier, agent, manager or any other person who is in-charge of the factory or the process concerned directly or through their representatives in the Safety Committee and simultaneously bring the same to the notice of the Inspector-cum-Facilitator.

(2) It shall be the duty of such occupier, agent, manager or the person in-charge of the factory or process to take immediate remedial action if he is satisfied about the existence of such imminent danger and send a report forthwith of the action taken to the Inspector-cum-Facilitator.

(3) If the occupier, agent, manager or the person in-charge referred to in sub-section (2) is not satisfied about the existence of any imminent danger as apprehended by the workers, he shall, nevertheless, refer the matter forthwith to the Inspector-cum-Facilitator whose decision on the question of the existence of such imminent danger shall be final.

Appeal against the order of Inspector-cum-Facilitator in case of factory.

90. The appropriate Government may prescribe provisions providing the manner in which and the appropriate authority to whom the manager or occupier of the factory may make appeal against the order of the Inspector-cum-Facilitator and the procedure for disposing of such appeals.

Power to make rules to exempt.

91. (1) The appropriate Government may make rules,—

(a) specifying the persons who hold positions of supervision or management or are employed in a confidential position in a factory or empowering the Chief Inspector-cum-Facilitator to declare any person, other than a person so specified, as a person holding position of supervision or management or employed in a confidential position in a factory if, in the opinion of the Chief Inspector-cum-Facilitator, such person holds such position or is so employed, and the provisions of this Code, shall not apply to any person so defined or declared;

(b) in respect of any worker or class of workers in any establishment or class of establishment for providing the exemption, extent of exemption and conditions subject to which such exemption may be given.

(2) The appropriate Government or the Chief Inspector-cum-Facilitator may, by order in writing, exempt subject to such conditions as it may deem expedient, any or all of the adult workers in any establishment or class of establishments.

## PART VIII

### PLANTATION

Facilities for workers in plantation.

92. (1) Without prejudice to the generality of sections 23 and 24, the State Government may prescribe requiring every employer to make provisions in his plantation for—

(a) necessary housing accommodation including drinking water, kitchen and toilet in every worker employed in the plantation (including his family);

(b) creches facilities where in the plantation fifty or more workers (including workers employed by any contractor) are employed or were employed on any day of the preceding twelve months:

Provided that—

(i) an establishment may avail common crèche facility of the Central Government, State Government, municipality or private entity or provided by non-Governmental organisation or by any other organisation; or

(ii) a group of establishments may agree to pool their resources for setting up of common crèche;

(c) educational facilities for the children of the workers employed in the plantation where the children between the ages of six to twelve of the workers exceed twenty-five in number;

(d) health facilities to every worker employed in the plantation (including his family) or provide coverage under the Employees State Insurance Act, 1948; and

(e) recreational facilities for the workers employed in the plantation.

(2) An employer of a plantation shall be responsible to provide and maintain welfare facilities for which the workers in the plantation are entitled under this Code either from his own resources or through the scheme of the Central Government or State Government, Municipality or Panchayat for the locality in which the plantation is situated.

*Explanation*—For the purposes of this sub-section—

(i) the expression "Municipality" has the same meaning as assigned to it in clause (e) of article 243 of the Constitution; and

(ii) the expression "Panchayat" has the same meaning as assigned to it in clause (d) of article 243 of the Constitution.

93. (1) In every plantation, arrangement shall be made by the employer to provide for Safety, the safety of a worker in connection with the use, handling, storage and transport of insecticides, pesticides and chemicals and toxic substances:

(2) The State Government may prescribe for special safeguards for employment of women or adolescents in using or handling hazardous chemicals.

(3) The employer of a plantation shall appoint persons possessing the prescribed qualifications to supervise the use, handling, storage and transportation of insecticides, chemicals and toxic substances in his plantation.

(4) Every employer of a plantation shall ensure that every worker in plantation employed for handling, mixing, blending and applying insecticides, chemicals and toxic substances, is trained about the hazards involved in different operations in which he is engaged, the various safety measures and safe work practices to be adopted in emergencies arising from spillage of such insecticides, chemicals and toxic substances and such other matters as may be prescribed by the State Government.

(5) Every worker in a plantation who is exposed to insecticides, pesticides, chemicals and toxic substances shall be medically examined periodically, in such manner as may be prescribed by the State Government.

(6) Every employer of a plantation shall maintain health record of every worker in plantation who is exposed to insecticides, pesticides, chemicals and toxic substances which are used, handled, stored or transported in a plantation, and every such worker shall have access to such record.

(7) Every employer of a plantation shall provide—



(c) washing, bathing and cloak-room facilities; and

(d) protective clothing and equipment,

to every worker engaged in the handling insecticides, pesticides, chemicals and toxic substances in such manner as may be prescribed by the State Government.

(8) Every employer of a plantation shall display in the plantation, a list of permissible concentrations of insecticides, pesticides, chemicals and toxic substances in the breathing zone of the workers engaged in the handling and application of insecticides, pesticides, chemicals and toxic substances in the plantation.

(9) Every employer of a plantation shall exhibit such precautionary notices in the plantation as may be prescribed by the State Government indicating the hazards of insecticides, pesticides, chemicals and toxic substances.

## CHAPTER XII

### OFFENCES AND PENALTIES

General  
penalty for  
offence

94. Save as otherwise expressly provided in this Code, if in, or in respect of, any establishment, there is any contravention of the provisions of this Code or regulations or rules, or bye-laws or any of standards, made thereunder or of any order in writing given under this Code or such regulations or rules or bye-laws or standards, the employer or the principal employer of the establishment, as the case may be, shall be liable to penalty which shall not be less than two lakhs rupees but which may extend up to three lakh rupees, and if the contravention is continued after the conviction, then, with further penalty which may extend to two thousand rupees for each day till such contravention continues.

Punishment  
for causing  
obstruction to  
Chief  
Inspector-  
cum-  
Facilitator or  
Inspector-cum-  
Facilitator  
etc.

95. (1) Whoever wilfully—

(i) prevents or causes obstruction to a Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator or an officer of the appropriate Government or a person authorised to discharge any duty or to exercise any powers under this Code or the rules or the regulations or the bye-laws made thereunder, from discharging such duty or exercising such power; or

(ii) refuses entry to the Chief Inspector-cum-Facilitator or the Inspector-cum-Facilitator or person or public authority referred to in clause (i) of sub-section (1) of section 35 or expert referred to in section 37, to any place where such Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator or such person or authority or expert is entitled to enter; or

(iii) fails or refuses to produce any document which he is required to produce; or

(iv) fails to comply with any requisition or order issued to him,

under this Code or the rules, regulations or bye-laws made thereunder he shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to one lakh rupees, or with both.

(2) Where any person convicted of an offence punishable under sub-section (1) is again convicted of an offence under the same provision, then, he shall be punishable with imprisonment for a term which may extend to six months, or with fine which shall not be less than one lakh rupees but which may extend to two lakh rupees, or with both.

Penalty for  
non-  
maintenance  
of register,  
records and  
non-filing of  
returns etc.

96. (1) Any person, who is required under this Code or the rules or regulations or bye-laws or order made thereunder, to—

(i) maintain any register or other document or to file returns, omits or fails to maintain such register or document or to file such returns; or

(f) produce any register or plan or record or report or any other document, omits or fails to produce such register or plan or record or report or such other document,

he shall be liable to penalty which shall not be less than fifty thousand rupees but which may extend to one lakh rupees.

(2) Where any person convicted of an offence punishable under sub-section (1) is again convicted of an offence under the same provision, then, he shall be liable to penalty which shall not be less than fifty thousand rupees but which may extend to two lakh rupees.

87. (1) Any person, who, save as permitted by or under this Code, contravenes any—

(i) provision of this Code or of any rule, regulation or bye-law; or

(ii) order made under this Code prohibiting, restricting or regulating the employment of workers (including women, audio-visual worker and contract labour and employee below eighteen years of age) in case of mines.

he shall be liable to penalty which shall not be less than fifty thousand rupees but which may extend to one lakh rupees.

(2) Where any person convicted of an offence punishable under sub-section (1) is again convicted of an offence under the same provision, then, he shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to two lakh rupees, or with both.

88. (1) Whoever—

(a) produces false records or counterfeits or knowingly makes or produces or uses a false statement, declaration or evidence regarding any document in connection with compliance of any of the provisions of this Code or any rules, regulations or bye-laws or an order made thereunder; or

(b) falsifies any plan or section, the maintenance of which is required by or under this Code or produces before any authority such plan or section, knowing the same to be false; or

(c) makes, gives or delivers knowingly a false plan, section, return, notice, record or report containing a statement, entry or detail,

he shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to one lakh rupees, or with both.

(2) Where any person convicted of an offence punishable under sub-section (1) is again convicted of an offence under the same provision, then, he shall be punishable with imprisonment for a term which may extend to six months, or with fine which shall not be less than one lakh rupees but which may extend to two lakh rupees, or with both.

89. Any person who, without reasonable excuse the burden of proving which shall lie upon him, omits to make or furnish in the prescribed form or manner or at, or within, the prescribed time any plan, section, return, notice, register, record or report required by or under any provision of this Code to be made or furnished, he shall be liable to penalty which shall not be less than one lakh rupees but which may extend to two lakh rupees.

100. (1) Whoever being the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator or any other person referred to in section 39 or section 42f discloses, contrary to the provisions of that section, any such information as is referred to in that section without the consent of the appropriate Government, he shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to one lakh rupees, or with both.

Punishment for contravention of certain provisions.

Punishment for falsification of records, etc.

Penalty for omission to furnish plans, etc.

Punishment for disclosure of information.

(2) No court shall proceed with the trial of any offence under this section except with the previous sanction of the appropriate Government.

Punishment for wilfully disclosing results of analysis

101. Whoever, except in so far as it may be necessary for the purposes of a prosecution for any offence punishable under this Code, publishes or discloses to any person the results of an analysis of a sample of substance used or intended to be used in any process under this Code, shall be punishable with imprisonment for a term which may extend to six months, or with fine, which may extend to fifty thousand rupees, or with both.

Punishment for contravention of duties relating to hazardous processes

102. (1) Whoever fails to comply with or contravenes any of his duties specified under—

(i) clauses (a) to (k) of sub-section (1) or sub-section (2) of section 6 or clause (d) of section 13 in so far as such duty relates to hazardous processes; or

(ii) section 80,

shall, in respect of such failure or contravention, be punishable with an imprisonment for a term which may extend to two years and with fine which may extend to five lakh rupees, and in case the failure or contravention continues, with additional fine which may extend to twenty-five thousand rupees for every day during which such failure or contravention continues, after the conviction for the first such failure or contravention.

(2) If the failure or contravention referred to in sub-section (1) continues beyond a period of one year after the date of conviction, the offender shall be punishable with imprisonment for a term which may extend to three years or with a fine of twenty lakh rupees, or with both.

Punishment for contravention of provisions of duties relating to safety provision resulting in an accident

103. (1) If a person fails to comply with or contravenes any duties under this Code or the regulations, rules, bye-laws or orders made thereunder and such non-compliance or contravention has resulted in an accident or dangerous occurrences causing—

(a) death, he shall be punishable with imprisonment for a term which may extend to two years, or with a fine which shall not be less than five lakh rupees, or with both; or

(b) serious bodily injury to any person within the establishment, he shall be punishable with imprisonment for a term which may extend to one year, or with a fine which shall not be less than two lakh rupees but not exceeding four lakh rupees, or with both;

Provided that while imposing the fine under this section, the court may direct that a portion of the fine, which shall not be less than fifty per cent. thereof, shall be given as compensation to the victim or to the legal heirs of the victim, in the case of his death.

(2) Where a person having been convicted under sub-section (1) is again convicted thereunder, shall be punishable with double the punishment provided under that sub-section for first conviction.

Special provision for contravention of order under section 38.

104. Whoever continues to work in contravention of any general or special order issued under the provisions of section 38, shall be punishable with imprisonment for a term which may extend to two years and shall also be liable to fine which may extend to five lakh rupees.

Provided that the court shall not impose a fine under this section which shall be less than two lakh rupees without recording in the judgment the reasons for imposing such fine.

Failure to appoint manager in mine.

105. Whoever in compliance of the provisions of section 67, fails to appoint a manager shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to one lakh rupees, or with both.

106. (1) Subject to the provisions of section 13, except clause (d) thereof, if any employee employed in a workplace contravenes any provision of this Code or any rules or orders made thereunder, imposing any duty or liability on employee, he shall be punishable with penalty which may extend to ten thousand rupees.

Offences by employees.

(2) Where an employee is convicted of an offence punishable under sub-section (1), the employer of the establishment shall not be deemed to be guilty of an offence in respect of that contravention, unless it is proved that he failed to take all reasonable measures for its prevention.

107. No prosecution shall be instituted against any owner, agent or manager of a mine for any offence under this Code except at the instance of the Chief Inspector-cum-Facilitator or of the District Magistrate or of Inspector-cum-Facilitator authorised in this behalf by general or special order in writing by the Chief Inspector-cum-Facilitator:

Prosecution of owner, agent or manager of mine.

Provided that the Chief Inspector-cum-Facilitator or the District Magistrate or the Inspector-cum-Facilitator as so authorised shall before instituting such prosecution satisfy himself that the owner, agent or manager of a mine had failed to exercise due diligence to prevent the commission of such offence.

Provided further that in respect of an offence committed in the course of the technical direction and management of a mine, the District Magistrate shall not institute any prosecution against an owner, agent or manager of a mine without the previous approval of the Chief Inspector-cum-Facilitator.

108. Where the owner, agent or manager of the mine or employer or occupier of the factory is charged with an offence punishable under this Code he shall be entitled, upon complaint duly made by him and on giving to the prosecutor not less than three clear days' notice in writing of his intention so to do, to have any other person whom he charges as the actual offender brought before the Court at the time appointed for hearing the charge; and if, after the commission of the offence has been proved, the owner, agent or manager of the mine or occupier or manager of the factory, as the case may be, proves to the satisfaction of the Court—

Exemption of owner, agent or manager of mine or occupier of factory from liability in certain cases.

(a) that he has exercised due diligence to enforce the execution of this Code; or

(b) that the said other person committed the offence in question without his knowledge, consent or connivance,

that other person shall be convicted of the offence and shall be liable to the like punishment as if he was the owner, agent or manager of the mine or occupier or manager of the factory, as the case may be, and the owner, agent or manager of a mine or the occupier or the manager of the factory shall be discharged from any liability under this Code in respect of such offence:

Provided that in seeking to prove as aforesaid the owner, agent or manager of a mine or the occupier or manager of the factory, as the case may be, may be examined on oath, and his evidence and that of any witness whom he calls in his support, shall be subject to cross-examination on behalf of the person he charges as the actual offender and by the prosecutor:

Provided further that, if the person charged as the actual offender by the owner, agent or manager of the mine or occupier or manager of the factory, as the case may be, cannot be brought before the court at the time appointed for hearing the charge, the court shall adjourn the hearing from time to time for a period not exceeding three months and if by the end of the said period the person charged as the actual offender cannot still be brought before the court, the court shall proceed to hear the charge against the owner, agent or manager of the mine or occupier or manager of the factory, as the case may be, and shall, if the offence be proved, convict him.

Offences by  
companies;  
etc.

109. (1) Where an offence under this Code has been committed by a company, every person who, at the time the offence was committed, was in charge of, and was responsible to, the company for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly.

Provided that nothing contained in this sub-section shall render any such person liable to any punishment, if he proves that the offence was committed without his knowledge or that he had exercised all due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1) where any offence under this Code has been committed by a company and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of any director, manager, company secretary or other officer of the company, such director, manager, company secretary or other officer shall be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

*Explanation*—For the purposes of this section,—

(a) "company" means any body corporate and includes a firm or other association of individuals; and

(b) "director" means,—

(i) in relation to a firm a partner thereof; or

(ii) the owner of a mine being a firm or other association of individuals or a company; or

(iii) in case of association of individuals other than specified in sub-clause (ii), any of its members.

Limitation of  
prosecution  
and  
cognizance of  
offences.

110. (1) Notwithstanding anything contained in this Chapter, the Inspector-cum-Facilitator shall, not initiate prosecution proceeding against an employer for any offence under this Chapter, give an opportunity to comply with relevant provisions of this Act within a period of thirty days from the date of notice giving opportunity, and, if the employer complies with such provisions within such period, then, no such proceeding shall be initiated against such employer.

Provided that no such opportunity shall be accorded to an employer in case of an accident and if the violation of the same nature of the provisions under this Code is repeated within a period of three years from the date on which such first violation was committed and in such case the prosecution shall be initiated in accordance with provisions of sub-section (2).

(2) No court shall take cognizance of any offence punishable under this Code, unless a complaint in respect thereof is made within six months of the date on which the alleged commission of the offence came to the knowledge of the Inspector-cum-Facilitator and a complaint is filed in that regard by him.

(3) No court inferior to that of a Metropolitan Magistrate or a Judicial Magistrate of the First Class shall try any offence punishable under this Code.

*Explanation*—For the purposes of this section,—

(a) in the case of a continuing offence, the period of limitation shall be computed with reference to every point of time during which the offence continues;

(b) where for the performance of any act, time is granted or extended on an application made by the employer or of an establishment, the period of limitation shall be computed from the date on which the time so granted or extended expired.

111. (7) Notwithstanding anything contained in section 110, for the purpose of imposing penalty under sub-section (3) of section 12 or sections 94, 96, 97, 99, 106 and sub-section (3) of section 114, the appropriate Government may appoint any officer not below the rank of Under Secretary to the Government of India or an officer of equivalent rank in the State Government, as the case may be, for holding enquiry in such manner, as may be prescribed by the Central Government.

Power of officers of appropriate Government to impose penalty in certain cases.

(2) While holding the enquiry, the officer referred to in sub-section (1) shall have the power to summon and enforce attendance of any person acquainted with the facts and circumstances of the case to give evidence or to produce any documents, which in the opinion of such officer, may be useful for or relevant to the subject-matter of the enquiry and if, on such enquiry, he is satisfied that the person has committed any offence under the provisions referred to in sub-section (1), he may impose such penalty as he thinks fit in accordance with the provisions of that sub-section.

(3) Any person aggrieved by an order made by the officer under sub-section (2) may prefer an appeal, in such form and manner and accompanied by such fee as may be prescribed, to the appellate authority to be appointed by the appropriate Government from amongst officers not below the rank of Deputy Secretary to the Government of India or an officer of equivalent rank in the State Government, as the case may be, within sixty days from the date on which the copy of the order made by the officer referred to in sub-section (1) is received by the aggrieved person.

(4) The appellate authority may, after giving the parties to the appeal an opportunity of being heard, pass such order as he thinks fit, confirming, modifying or setting aside the order appealed against, within a period of sixty days from the date of receipt of appeal.

(5) Where a person fails to pay the penalty so imposed within a period of ninety days from the date of receipt of the copy of the order, he shall be punishable with fine which shall not be less than twenty-five thousand rupees but which may extend up to two lakh rupees.

(6) The amount of penalty imposed and received under this section shall be credited to the fund established under sub-section (1) of section 115.

112. For the purposes of conferring jurisdiction on any court in relation to an offence under this Code or the rules, regulation or bye-laws made hereunder in connection with an establishment, the place where the establishment is for the time being situated, shall be deemed to be the place where such offence has been committed.

Fixation of court for transferring proceedings etc., for offence.

113. (1) Where the employer of a mine or a factory or a dealer is convicted of an offence punishable under this Code, the court may, in addition to awarding him any punishment, by order in writing, require him within the period specified in the order (which may be extended by the court from time to time on application made in his behalf) to take such measures as may be specified in the order for remedying the matters in respect of which the offence was committed.

Power of court to make order.

(2) Where an order is made under sub-section (1), the employer of the mine or the factory shall not be liable under this Code in respect of the continuance of the offence during the period or extended period, if any, but if on the expiry of such period or extended period the order of the court has not been fully complied with, employer shall be deemed to have committed a further offence and shall be punishable with imprisonment for a term which may extend to six months, or with fine which may extend to one hundred rupees for every day after such expiry on which the order has not been complied with, or with both.

114. (1) Notwithstanding anything contained in the Code of Criminal Procedure, 1973, any penalty under sub-section (3) of section 12 or section 94 or section 96 or sub-section (1) of section 97 or section 99 or section 106 or sub-section (3) or any offence

Composition of certain offences.

under sub-section (2) of section 97 or sub-section (7) of section 100 or section 101 or clause (b) of sub-section (7) of section 103 or section 105 or sub-section (2) of section 113 may, either before or after the holding the enquiry or, as the case may be, of institution of prosecution may be compounded by such officer of the appropriate Government as may be notified by that Government in the manner as may be prescribed by it—

(a) in a case of penalty for a sum of fifty per cent. of the maximum penalty provided for such penalty; and

(b) in a case of offence for a sum of seventy-five per cent. of the maximum fine provided for such offence.

(2) Where a penalty or an offence has been compounded under sub-section (1), the person liable for penalty or the offender as the case may be, shall be discharged of the penalty or offence and there shall be no further proceedings against him in respect of such penalty or offence.

(3) Any person who fails to comply with an order made by the officer referred to in sub-section (1), shall be liable to pay a penalty equivalent to twenty per cent. of the maximum penalty or fine provided for the penalty or the offence, as the case may be, in addition to the penalty or fine.

(4) The amount of composition received under sub-section (1) shall be credited to the fund established under sub-section (7) of section 115 for the unorganised workers.

(5) Nothing contained in sub-section (1) shall apply to a penalty or an offence committed by a person for a second or subsequent time within a period of three years from the date of penalty or offence, as the case may be,—

(a) which was earlier compounded; or

(b) for which such person was earlier convicted.

#### CHAPTER XIII

##### SOCIAL SECURITY FUND

Social security  
fund

115. (1) There shall be established by the appropriate Government a social security fund for the welfare of the unorganised workers to which there shall be credited the amount received from composition of the offence as specified in sub-section (4) of section 114 and the amount of the penalty as specified in sub-section (6) of section 111.

(2) The fund may also be funded by such other sources as may be prescribed by the appropriate Government.

(3) The fund shall be administered and expended for welfare of the unorganised workers in such manner as may be prescribed by the appropriate Government including the transfer of the amount in the fund to any fund established under any other law for the time being in force for the welfare of the unorganised workers.

*Explanation*—For the purpose of this section the expression "unorganised worker" shall have the same meaning as is assigned to it under clause (a) of section 2 of the Unorganised Workers Social Security Act, 2008.

33 of 2008

#### CHAPTER XIV

##### MISCELLANEOUS

Delegation of  
powers

116. The Central Government may, by notification, direct that any power exercisable by it under this Code or rules made thereunder shall, in relation to such matters and subject to such conditions, if any, as may be specified in the notification, be exercisable also by the State Government or by such officer or authority subordinate to the State Government as may be specified in the said notification.

117. (1) When any offence is committed under this Code involving an issue of a certain age of a person and such person is in the opinion of the court *prima facie* under such age, the burden shall be on the accused to prove that such person is not under such age.

Onus as to age.

(2) The medical authority prescribed by the Central Government shall, while examining a worker for issuing the certificate of age for the purposes of this Code, take into account the Aadhaar card of the worker, and in the absence thereof, the date of birth certificate from school or the matriculation or equivalent certificate from the concerned examination Board of the worker, if available, and in the absence thereof, the birth certificate of the worker given by a corporation or a municipal authority or a Panchayat, and only in the absence of any of the methods specified in this sub-section, the age shall be determined by such medical authority through an ossification test or any other latest medical age determination test.

118. In any proceeding for an offence for the contravention of any provision of this Code or regulations or bye-laws or rules made thereunder consisting of a failure to comply with a duty or requirement to do something, it shall be for the person who is alleged to have failed to comply with such duty or requirement, to prove that it was not reasonably practicable for all practicable measures were taken to satisfy the duty or requirement.

Onus of proving failure of what is practicable, etc.

119. (1) Notwithstanding anything contained in this Code, any person desirous of obtaining common licence in respect of a factory, industrial premises for *bread* and cigar work and for engaging contract workers or any combination thereof or single licence for any one of them under this Code shall make an application electronically or otherwise to such authority as may be designated, by notification, by the appropriate Government.

Common licence for contractor, factories and in industrial premises, etc.

(2) The application under sub-section (1),—

(a) shall be in such form and filed in such manner and accompanied by such fee and contain such information as may be prescribed by the appropriate Government;

(b) shall, in so far as it relates to the licence for engaging contract labour, contain the number of inter-State migrant workers employed.

(3) On receipt of an application under sub-section (1), the authority referred to in that sub-section shall take such actions in such manner and make such inquiry as may be prescribed by the appropriate Government.

(4) Where the authority referred to in sub-section (1) is satisfied that the common licence may be issued in respect of a factory, industrial premises for *bread* and cigar work and for engaging contract workers or any combination thereof or single licence for any one of them under this Code, such authority shall issue a licence electronically within forty-five days of the receipt of application failing which the licence shall be deemed to be issued and shall be auto-generated and the responsibility of such failure shall be on such authority.

Provided that where the licence is deemed to be issued, no further inquiry shall be made.

Provided further that the form of licence shall, as far as practicable, be similar throughout India.

Provided also that where such authority rejects the application he shall assign the reason for such rejection.

(5) Notwithstanding anything contained in this Code, any licence in respect of a factory, industrial premises for *bread* and cigar work and for engaging contract labour has been obtained under any Central labour law before the commencement of this Code, in respect of any establishment shall be deemed to have been obtained under the provisions of this Code and shall be valid for the period for which it was issued and shall have to be obtained afresh after its expiration.



(6) Any person aggrieved by an order passed under this section by the authority referred to in sub-section (1) may, file, within thirty days from the date of the order, an appeal in such form, accompanied with such fee to such appellate authority as may be prescribed by the appropriate Government and the appeal shall be disposed of electronically within thirty days of the filing of the appeal.

Effect of law and agreement/accident with Code.

120. (7) The provisions of this Code shall have effect notwithstanding anything (inconsistent) therewith contained in any other law for the time being in force or in the terms of any award, agreement or contract of service whether made before or after the commencement of this Code.

Provided that where under any award, agreement, contract of service or otherwise an employee is entitled to benefits in respect of any matters which are more favourable to him than those to which he will be entitled to under this Code, the employee shall continue to get the former notwithstanding that he receives benefits in respect of other matters under this Code.

(2) Nothing contained in this Code shall be construed as precluding any employee from entering into an agreement with an employer for granting him rights or privileges in respect of any matter which are more favourable to him than those to which he would be entitled under this Code.

Powers of appropriate Government to direct inquiry in certain cases.

121. (1) The appropriate Government may, in the event of the occurrence of an accident in an establishment which has caused or had the potentiality to cause serious danger to employees and other persons within, and in the vicinity of the workplace or whether immediate or delayed, or any occupational disease as specified in the Third Schedule, which has been or is suspected to have been contracted, in epidemic proportions, appoint one or more persons possessing legal or special knowledge to act as assessors or competent persons in such inquiry in order to inquire into the causes of the accident and disease, fix responsibilities and suggest a plan of action for the future to prevent such accidents or diseases and submit the report to the appropriate Government.

(2) The appropriate Government may direct a Chief Inspector-cum-Facilitator or any other officer under the control of the Government concerned or appoint a committee to undertake a survey in such manner as may be prescribed by the appropriate Government into the situation relating to safety or health at work at any workplace or field of workplaces or into the effect of work activity on the health of the employees and other persons within and in the vicinity of the workplace.

(3) The officer directed or committee appointed, under sub-section (1) or sub-section (2), to hold an inquiry, shall have the powers of a civil court under the Code of Civil Procedure, 1908, for the purposes of enforcing the attendance of witnesses and compelling the production of documents and material objects, and may also so far as may be necessary for the purposes of the inquiry, exercise such powers of an Inspector-cum-Facilitator under this Code as may be necessary.

5 of 1908.

(4) The Central Government may make rules for regulating the procedure of inquiry and survey and other related matters under this section.

Publication of reports.

122. The appropriate Government may, if it thinks fit, cause to be published any report submitted to it by the National Board or State Advisory Board or any extracts from any report submitted to it under this Code.

Powers of Central Government to give directions.

123. The Central Government may give directions to a State Government for the implementation of the provisions of this Code.

General prohibition on disclosure of information.

124. (1) No person shall in respect of the establishment, disclose any information relating to any manufacturing or commercial business or any working process which may come to his knowledge in the course of his official duties.

(2) Nothing in sub-section (1) shall apply to any disclosure of information made with the previous consent in writing of the owner of the business or process or for the purposes of any legal proceeding (including adjudication or arbitration), pursuant to any of the relevant statutory provisions or of any criminal proceeding under this Code which may be taken, whether pursuant to any of the relevant statutory provisions or otherwise, or for the purposes of any report of any such proceedings.

125. No civil court shall have jurisdiction in respect of any matter to which any provision of this Code applies and no injunction shall be granted by any civil court in respect of anything which is done or intended to be done by or under this Code.

Jurisdiction of civil courts barred.

126. (1) No suit, prosecution or other legal proceeding shall lie against any person for anything which is in good faith done or intended to be done in pursuance of this Code or any rule or regulation or bye-laws or order made thereunder.

Protection of action taken in good faith.

(2) No prosecution or other legal proceeding shall lie against the Government, any Board or committees constituted under this Code or any member of such Board or any officer or employee of the Government or the Board or any other person authorised by the Government or any Board or committee, for any damage caused or likely to be caused by anything which is in good faith done or intended to be done in pursuance of this Code or any rule or regulation or bye-laws or order made or issued thereunder.

127. (1) The appropriate Government may, by notification and subject to such conditions and restrictions, if any, and for such period or periods as may be specified in the notification, direct that all or any of the provisions of this Code or the rules or the regulations made thereunder shall not apply to or in relation to any establishment or class of establishments.

Power to exempt in special cases.

(2) Without prejudice to the generality of sub-section (1), where the State Government is satisfied in the public interest that it is necessary to create more economic activities and employment opportunities, it may, by notification, exempt, subject to such conditions as it may think fit, any new factory or class or description of new factories from all or any of the provisions of this Code for such period from the date on which such commercial production starts, as may be specified in the notification.

63 of 1948

Provided that any notification issued by a State Government under the Factories Act, 1948 for the time being in force in the State prior to the commencement of this Code to achieve the same purpose as is specified in this sub-section, shall remain in force after such commencement for its remaining period as if the provisions of this Code, to the extent they defeat any purpose to be achieved by such notification issued by the State Government, were not in force.

*Explanation*—For the purpose of this sub-section, the expression "new factory or class or description of new factories" means such factory or class or description of factories which are established and whose commercial production start within such period as may be specified in the notification.

128. In case of a public emergency or disaster or pandemic in whole or part thereof, the appropriate Government may, by notification, exempt any workplace or work activity or class thereof from all or any of the provisions of this Code for such period and subject to such conditions as it may think fit.

Power to exempt during public emergency.

Provided that no such notification shall be made for a period exceeding one year at a time.

*Explanation*—For the purposes of this section "public emergency" means a grave emergency whereby the security of India or any part of the territory thereof is threatened, whether by war or external aggression or internal disturbance.

Power to  
exempt public  
institution.

129. The appropriate Government may exempt, subject to such conditions as it may consider necessary, any workshop or workplace where a manufacturing process is carried on and which is attached to a public institution maintained for the purposes of education, training, research or information, from all or any of the provisions of this Code:

Provided that no such exemption shall be granted from the provisions relating to hours of work and holidays unless the persons having the control of the institution submit for the approval of the appropriate Government, a scheme of the regulation of the hours of employment, intervals for meals, and holidays of the persons employed in or attending the institution or who are inmates for the institution, and the appropriate Government is satisfied that the provisions of the scheme are not less favourable than the corresponding provisions of this Code.

Persons  
required in  
the police  
are legally  
bound to do  
so.

130. Every person required to give any notice or to furnish any information to any authority in relation to the provisions of this Code shall be legally bound to do so within the meaning of section 176 of the Indian Penal Code.

45 of 1860

Power of  
Central  
Government  
to amend  
Schedule.

131. The Central Government may, by notification, amend any Schedule by way of addition, alteration or omission therein and on any such notification being issued, the Schedule shall be deemed to be amended accordingly.

Power to  
remove  
difficulties.

132. (1) If any difficulty arises in giving effect to the provisions of this Code, the Central Government may, by order published in the Official Gazette, make such provisions not inconsistent with the provisions of this Code, as appear to it to be necessary or expedient for removing the difficulty.

Provided that no such order shall be made after the expiry of two years from the date on which this Code comes into force.

(2) Every order made under this section shall, as soon as may be after it is made, be laid before each House of Parliament.

Power of  
appropriate  
Government  
to make rules.

133. (1) The appropriate Government may, subject to the condition of previous publication and by notification, make rules for carrying out the purposes of this Code.

(2) In particular and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:—

(a) income from the sources under *Explanation* to clause (z) of sub-section (1) of section 2;

(b) substance or quantity of substance under clause (zb) of sub-section (1) of section 2;

(c) the late fee under the proviso to sub-section (1) of section 3;

(d) the manner of submitting application under sub-section (2) of section 3 and the form of such application and the particulars to be contained therein and the fees to be accompanied therewith;

(e) the form and manner of sending the notice and the authority to whom the notice shall be sent and the manner of intimating the authority under sub-section (1) of section 5;

(f) annual health examination or test free of cost, age of employees or class of employee or establishment or class of establishments under clause (c) of sub-section (1) of section 6;

(g) the information to be included in the letter of appointment and the form of such letter under clause (f) of sub-section (1) of section 6;

(h) the nature of bodily injury and the manner of notice and the time within which the notice shall be sent and the authority to which notice shall be sent under sub-section (1) of section 10;

(i) nature of dangerous occurrence and the form of notice, the time within which and the authority to which notice shall be sent under section 11;

(j) the form of notice related to certain diseases and the time within which the notice shall be sent and the authority to which the notice shall be sent under sub-section (1) of section 12;

(k) the form and manner of the report and the time within which such report shall be sent to the office of the Chief Inspector-cum-Facilitator under sub-section (2) of section 12;

(l) manner of making report by employees under clause (d) and other duties of employees under clause (g) of section 13;

(m) manner of sending report of action taken under sub-section (3) of section 14;

(n) the manner of constituting a safety committee and the manner and the purpose for choosing the representative of the workers in the Safety Committee under sub-section (1) of section 22;

(o) the qualifications, duties and number of safety officers under sub-section (2) of section 22;

(p) conditions for exemption of workers from weekly and compensatory holidays under sub-section (2) of section 26;

(q) the total number of overtime under second proviso to section 27;

(r) circumstances for exemption from restriction on double employment in factory and mine under section 30;

(s) the form of notice and manner of display of such notice and the manner in which such notice shall be sent to the Inspector-cum-Facilitator under sub-section (2) of section 31;

(t) the form of register and particulars of workers under clause (a) of section 33;

(u) the manner and form of displaying notices under clause (b) of section 33;

(v) return, manner of filing the return and periods of filing return to the Inspector-cum-Facilitator under clause (d) of section 33;

(w) the qualification and experience of Chief Inspector-cum-Facilitator under sub-section (3) of section 34;

(x) the manner of taking samples of any article or substance found in any premises and air of atmosphere under clause (x) of sub-section (1) of section 35;

(y) the other powers and duties under clause (xii) of sub-section (1) of section 35;

(z) the specialized qualification and experience, duties and responsibilities of experts to be empanelled under section 37;

(aa) the manner of providing alternative employment under sub-clause (d) of clause (4) of sub-section (1) of section 38;

(ab) the qualification for the appointment of medical practitioner and other establishment under sub-section (1) of section 42;

(zc) other establishment engaged in the dangerous occupation or processes under clause (a) of sub-section (2) of section 42;

(zd) medical supervision and other establishment under clause (b) of sub-section (2) of section 42;

(ze) other establishment under clause (c) of sub-section (2) of section 42;

(zf) conditions relating to safety, holidays and working hours or any other condition to be observed by the employer under section 43;

(zg) the manner of requiring the employer to provide the adequate safeguards under section 44;

(zh) conditions including, in particular, conditions as to hours of work, fixation of wages and other essential amenities in respect of contract labour under clause (a) of sub-section (3) of section 47;

(zi) the form and manner of application and the particulars which such application shall contain regarding the number of contract labour, nature of work for which contract labour is to be employed and other particulars including the information relating to the employment of inter-State migrant workers under sub-section (1) of section 48;

(zj) the procedure under sub-section (2) of section 48;

(zk) manner of applying for the renewal of licence and the manner of renewal of licence under sub-section (3) of section 48;

(zl) responsibility of the contractor under sub-section (4) of section 48;

(zm) the manner of intimation of work, order and time-limit for such intimation under sub-section (1) of section 50;

(zn) the manner of suspending or cancelling the licence under sub-section (2) of section 50;

(zo) the period before which the wages shall be paid under sub-section (1) of section 55;

(zp) the mode of payment of wages under proviso to sub-section (2) of section 55;

(zq) the manner of payment of wages from security deposit under sub-section (4) of section 55;

(zr) the form of issuing experience certificate under section 56;

(zs) the form and manner of making application under clause (b) of sub-section (2) of section 57;

(zt) period of making report and the period of deciding the question under clause (c) of sub-section (2) of section 57;

(zu) minimum service for entitlement, class of travel and other matters under section 61;

(zv) manner of providing facility of toll free helpline under section 63;

(zw) manner of providing for study on inter-State migrant workers under section 64;

(zx) authority to whom a copy of the agreement shall be forwarded by the producer under sub-section (3) of section 66;

(zy) details under clause (vi) of sub-section (4) of section 66;

(zz) rules in respect of factory or class or description of factories under sub-section (1) of section 79;

(zza) mode of submission of application under sub-section (2) of section 79;

(zzb) common facilities and services for joint liability of owner of premises and occupiers of the factories under section 80;

(zzc) rules under section 82;

(zsd) purposes under sub-section (1) of section 83;

(zse) form of application under sub-section (2) of section 83;

(zsf) the appellate authority for appeal against the order of Inspector-cum-Facilitator of factory and the manner of appeal under section 90;

(zsg) rules under section 91;

(zsh) manner of holding enquiry under sub-section (1) of section 111;

(zsi) form and manner of preferring appeal and the fee to accompany such appeal under sub-section (3) of section 111;

(zsj) manner of compounding under sub-section (1) of section 114;

(zsk) other sources of fund under sub-section (2) of section 115;

(zsl) the manner of administering and expending the Fund under sub-section (3) of section 115;

(zsm) the form of application, manner of filing the application and the fee to be accompanied therewith including the information relating to the employment of inter-State migrant workers under sub-section (2) of section 119;

(zsn) actions, manner of taking actions and inquiry under sub-section (3) of section 119;

(zso) the form of appeal, the fee to be accompanied therewith and the appellate authority under sub-section (6) of section 119;

(zsp) the manner of survey under sub-section (2) of section 121;

(zsq) any other matter which is required to be, or may be, prescribed under this Code.

124. (1) The Central Government may, subject to the condition of previous publication and by notification, make rules for carrying out the purposes of this Code.

Power of  
Central  
Government  
to make rules.

(2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:—

(a) the other authority, under sub-clause (iii) of clause (xx) of sub-section (1) of section 2;

(b) the matters which are directly related to the condition of ship under the provision to sub-clause (ii) of clause (xx) of sub-section (1) of section 2;

(c) other period under clause (a) of sub-section (1) of section 3;

(d) the form of certificate of registration, the time within which and the conditions subject to which such certificate shall be issued under sub-section (3) of section 3;

(e) the form of intimation by the employer electronically and the manner of amendment in the certificate electronically under sub-section (4) of section 3;

(f) the manner of informing closing of establishment and certifying payment to the registering officer under sub-section (5) of section 3;

(g) procedure for nomination and discharge of functions of members of National Board under sub-section (3) of section 16;

(h) the terms and conditions of service of officers and employees of the National Board under sub-section (4) of section 16;

(i) the number of members of technical committees or advisory committees and their qualifications under sub-section (5) of section 16;

(j) the form and manner of collecting, compiling and analyzing occupational safety and health statistics under sub-section (1) of section 21;

(k) the form and manner of maintaining database electronically or otherwise and the documents to be produced under sub-section (2) of section 21;

(l) health and working conditions under sub-section (1) of section 23;

(m) regarding matters specified in sub-section (2) of section 23;

(n) welfare facilities for the employees under sub-section (1) of section 24;

(o) regarding matters specified in sub-section (2) of section 24;

(p) facility of crèche under sub-section (3) of section 24;

(q) definition of "running time" in relation to a working day under clause (a) of the explanation to sub-section (1) of section 25;

(r) the hours of work for working journalist under sub-section (2) of section 25;

(s) other kinds of leave under clause (i) of sub-section (3) of section 25;

(t) the maximum period of accumulating leave under clause (ii) of sub-section (3) of section 25;

(u) the limit up to which the earned leave may be availed of at a time and the reasons for which such leave may be exceeding under clause (iii) of sub-section (3) of section 25;

(v) conditions and restrictions for entitlement of cash compensation under clause (iv) of sub-section (3) of section 25;

(w) powers and duties of District Magistrate under section 36;

(x) requisite qualifications or criteria under sub-section (1) of section 47;

(y) period of renewal of licence under sub-section (2) of section 47;

(z) procedure under clause (b) of sub-section (1) of section 51;

(aa) form of agreement under clause (a) and the name and other particulars under clause (b) of sub-section (3) of section 66;

(ab) the matter which may be saved and the qualifications of sole manager under sub-section (1) of section 67;

(ac) the conditions relating to number of employees, depth of excavation and other matters under clause (a) of sub-section (1) of section 68;

(ad) conditions relating to workings, open-cut workings and explosives under clause (b) of sub-section (1) of section 68;

(ae) to declare the mines and part thereof for the purpose of applicability of the provisions of this Code under sub-section (2) of section 68;

(af) the authority, the manner of informing such authority and the time limit for making such information under sub-section (3) of section 68;

(ag) to provide for medical examination of apprentice, other trainee or employee under sub-section (3) of section 70;

(k) to exempt certain persons or category of persons holding positions of supervision or management and the persons employed in mine and the persons employed therein under section 71;

(l) to provide for vocational training and requisite and recovery services to the persons employed in a mine under section 72;

(m) medical authority under sub-section (2) of section 117;

(n) rules under sub-section (4) of section 121;

(o) the language of the bye-laws under sub-section (7) of section 139;

(w) any other matter which is required to be, or may be prescribed.

135. (1) The State Government may, subject to the condition of previous publication and by notification, make rules for the carrying out the provisions of this Code.

Power of State Government to make rules.

(2) In particular and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:—

(a) the constitution, procedure and other matters relating to State Advisory Board under sub-section (2) of section 17;

(b) the number of members and their qualifications under sub-section (3) of section 17;

(c) the form of application and the payment of fees under sub-section (2) of section 74;

(d) the manner of preparing the plan of the plant or premises under sub-section (3) of section 74;

(e) other matters under clause (e) of sub-section (4) of section 74;

(f) fees under sub-section (6) of section 74;

(g) period under the second proviso to sub-section (6) of section 74;

(h) the time of filing appeal and fees under section 75;

(i) the form of application by the employee and conditions under sub-section (1) of section 76;

(j) form of maintaining the record of the work under sub-section (2) of section 76;

(k) the manner of disclosing information by occupier of a factory under sub-section (1) of section 84;

(l) the interval of informing Chief Inspector-cum-Facilitator and the local authority about the policy with respect to the health and safety of the workers under sub-section (2) of section 84;

(m) the form and manner of informing Chief Inspector-cum-Facilitator under sub-section (3) of section 84;

(n) the manner of publicising among the workers and the general public living in the vicinity of the factory the measures and disposal laid down under sub-section (7) of section 84;

(o) the conditions for accessibility to the record by the workers under clause (n) of section 85;



(b) the qualification and experience of persons handling hazardous substance and manner of providing necessary facilities for protecting the workers under clause (b) of section 85;

(g) the manner of providing for medical examination of a worker under sub-clause (ii) of clause (c) of section 85;

(r) the measures or standards under sub-section (1) of section 86;

(s) the value of the maximum permissible limit of exposure of chemical and toxic substances in manufacturing process in any factory under section 88;

(t) requiring every employer to make in his plantation provisions in respect of as specified in clauses (a) to (d) of sub-section (1) of section 92;

(u) for prohibiting or restricting employment of women or adolescents under sub-section (2) of section 93;

(v) qualifications under sub-section (3) of section 93;

(w) other matters under sub-section (4) of section 93;

(x) manner of periodical medical examination of worker under sub-section (5) of section 93;

(y) the manner of providing facilities, clothing and equipment under sub-section (7) of section 93;

(z) precautionary notices under sub-section (9) of section 93;

(aa) any other matter which is required to be, or may be, prescribed.

(3) The Central Government may, by notification and in consultation with the State Government, make rules for the purposes of bringing uniformity, throughout the country, in occupational safety, health or such other matters as it considers necessary in respect of factories.

Power of  
Central  
Government  
to make  
regulations in  
relation to  
mines and  
dock work.

135. The Central Government may, by notification, make regulations consistent with this Code for all or any of the following purposes, namely:—

(a) for specifying the qualifications required for appointment as Inspector-cum-Facilitator;

(b) for specifying and regulating the duties and powers of the Chief Inspector-cum-Facilitator and of Inspector-cum-Facilitators in regard to the inspection of mines under this Code;

(c) for specifying the duties of owners, agents and managers of mines and of persons acting under them, and for specifying the qualifications (including age) of agents and managers of mines and of persons acting under them;

(d) for requiring facilities to be provided for enabling managers of mines and other persons acting under them to efficiently discharge their duties;

(e) for regulating the manner of ascertaining, by examination or otherwise, the qualifications of managers of mines and persons acting under them, and the granting and renewal of certificates of competency;

(f) for fixing the fees, if any, to be paid in respect of such examinations and of the grant and renewal of such certificates;

(g) for determining the circumstances in which and the conditions subject to which it shall be lawful for more mines than one to be under a single manager, or for any mines to be under a manager not having the specified qualifications;

- 5 of 1908. (h) for providing for inquiries to be made under this Code, including any inquiry relating to misconduct or incompetence on the part of any person holding a certificate under this Code and for the suspension or cancellation of any such certificate and for providing, wherever necessary, that the person appointed to hold an inquiry shall have all the powers of a civil court under the Code of Civil Procedure, 1908, for the purpose of enforcing the attendance of witnesses and compelling the production of documents and material objects;
- 8 of 1884. (i) for regulating, subject to the provisions of the Indian Explosives Act, 1884, and of any rules made thereunder, the storage, conveyance and use of explosives;
- (j) for prohibiting, restricting or regulating the employment of women in mines or in any class of mines or on particular kinds of labour which are attended by danger to the life, safety or health of such persons and for limiting the weight of any single load that may be carried by any such person;
- (k) for providing for the safety of the persons employed in a mine, their means of entrance there into and exit therefrom, the number of shafts or outlets to be furnished, and the fencing of shafts, pits, outlets, pathways and subsidences;
- (l) for prohibiting the employment in a mine either as manager or in any other specified capacity of any person except persons paid by the owner of the mine and directly answerable to the owner or manager of the mine;
- (m) for providing for the safety of the roads and working places in mines, including the siting, maintenance and extraction or reduction of pillars or blocks of minerals and the maintenance of sufficient barriers between mine and mine;
- (n) for the inspection of workings and sealed-off fire-areas in a mine, and for the restriction of workings in the vicinity of the sea or any lake or river or any other body of surface water, whether natural or artificial, or of any public road or building, and for requiring due precaution to be taken against the irruption or intrus of water or other liquid matter into, outbreak of fire in or premature collapse of any workings;
- (o) for providing for the ventilation of mines and the action to be taken in respect of dust, fire, and inflammable and noxious gases, including precautions against spontaneous combustion, underground fire and coal dust;
- 16 of 2005. (p) for regulating, subject to the provisions of the Electricity Act, 2003, and of any rules made thereunder, the generation, storage, transformation, transmission and use of electricity in mines and for providing for the care and the regulation of the use of all electrical apparatus and electrical cables in mines and of all other machinery and plant therein;
- (q) for regulating the use of machinery in mines, for providing for the safety of persons employed on or near such machinery and on haulage roads and for restricting the use of certain classes of locomotives underground;
- (r) for providing for proper lighting of mines and regulating the use of safety lamps therein and for the search of persons entering a mine in which safety lamps are in use;
- (s) for providing against explosions or ignitions of inflammable gas or dust or irruptions of or accumulations of water in mines and against danger arising therefrom and for prohibiting, restricting or regulating the extraction of minerals in circumstances likely to result in the premature collapse of workings or to result in or to aggravate the collapse of workings or irruptions of water or ignitions in mines;
- (t) for specifying type of accidents for the purposes of notice under section 10 and for specifying the notices of accidents and dangerous occurrences, and the notices, reports and returns of mineral output, persons employed and other matters

provided for by regulations, to be furnished by owners, agents and managers of mines, and for specifying the forms of such notices, returns and reports, the persons and authorities to whom they are to be furnished, the particulars to be contained in them, and the time within which they are to be submitted;

(u) for requiring owners, agents and managers of mines to have fixed boundaries for the mines, for specifying the plans and sections and field notes connected therewith to be kept by them and the manner and places in which such plans, sections and field notes are to be kept for purposes of record and for the submission of copies thereof to the Chief Inspector-cum-Facilitator, and for requiring the making of fresh surveys and plans by them, and in the event of non-compliance, for having the survey made and plans prepared through any other agency and for the recovery of expenses thereof in the same manner as an arrear of land revenue;

(v) for regulating the procedure on the occurrence of accidents or accidental explosions or ignitions in or about mines: for dealing effectively with the situation;

(w) for specifying the form of, and the particulars to be contained in, the notice to be given by the owner, agent or manager of a mine under section 5;

(x) for specifying the notice to be given by the owner, agent or manager of a mine before mining operations are commenced at or extended to any point within forty-five meters of any railway subject to the provisions of the Indian Railways Act, 1989 or of any public roads or other works as the case may be, which are maintained by the Government or any local authority;

24 of 1989

(y) for the protection from injury, in respect of any mine when the workings are discontinued, of property vested in the Government or any local authority or railway company as defined in the Indian Railways Act, 1989;

24 of 1989

(z) for requiring protective works to be constructed by the owner, agent or manager of a mine before the mine is closed, and in the event of non-compliance, for getting such works executed by any other agency and for recovering the expenses thereof from such owner in the same manner as an arrear of land revenue;

(aa) for requiring the fencing of any mine or part of a mine or any quarry, incline, shaft, pit or outlet, whether the same is being worked or not, or any dangerous or prohibited area, subsidence, haulage, tramline or pathway, where such fencing is necessary for the protection of the public;

(ab) for specifying the number of officials to be appointed;

(ac) for specifying the qualifications of the officials to be appointed;

(ad) for specifying the qualifications and experience of the agents;

(ae) for specifying the period during which the agent shall be resident in India;

(af) for specifying duties and responsibilities of suppliers, designers, importer and contractors for safety in mines;

(ag) for requiring the owners, agents and managers of mines to formulate, maintain and enforce safety management plan in their mines;

(ah) for requiring the managers of mines to formulate and implement codes of practice or standard operating procedure in respect of any machinery or operation used in the mines;

(ai) for providing for the safety in opencast mines and associated operations and machineries used therein;

(aj) for regulating the extraction of methane from working or abandoned coal mines or from virgin coal seams;

(13) for specifying the forms of returns which shall be filled by the establishments or the class of establishments under this Code;

(14) for the general requirement relating to the construction, equipping and maintenance for the safety of working places on shore, ship, dock, structure and other places at which any dock work is carried on;

(15) for the safety of any regular approaches over a dock, wharf, quay or other places which dock workers have to use for going for work and for fencing of such places and projects;

(16) for the efficient lighting of all areas of dock, ship, or other vessel, dock structure or working places where any dock work is carried on and of all approaches to such places to which dock workers are required to go in the course of their employment;

(17) providing and maintaining adequate ventilation and suitable temperature in every building or an enclosure on ship where dock workers are employed;

(18) providing for the fire and explosion prevention and protection;

(19) providing for safe means of access to ships, holds, stagings, equipment, lifting appliances and other working places;

(20) providing for the safety of workers engaged in the opening and closing of hatches, protection of ways and other openings in the docks which may be dangerous to them;

(21) providing for the safety of workers on docks from the risk of falling overboard being struck by cargo during loading or unloading operations;

(22) providing for the construction, maintenance and use of lifting and other cargo handling appliances and services, such as pallets containing or supporting loads and provision of safety appliances on them, if necessary;

(23) providing for the safety of workers employed in freight container terminals or other terminals for handling unitised cargo;

(24) providing for the fencing of machinery, live electrical conductors, steam pipes and hazardous openings;

(25) providing for the construction, maintenance and use of stagings;

(26) providing for the rigging and use of ship's derricks;

(27) providing for the testing, examination, inspection and certification as appropriate of loose gear including chains and ropes and of slings and other lifting devices used in the dock work;

(28) providing for the precautions to be taken to facilitate escape of workers when employed in a hold, bin, bopper or the like or between decks of a hold while handling coal or other bulk cargo;

(29) providing for the measures to be taken in order to prevent dangerous methods of working in the stacking, unstacking, stowing and unstowing of cargo or handling in connection therewith;

(30) providing for the handling of dangerous substances and working in dangerous or harmful environments and the precautions to be taken in connection with such handling;

(31) providing for the work in connection with cleaning, chipping, painting operations and precautions to be taken in connection with such work;

(zzd) providing for the employment of persons for handling cargo, handling appliances, power operated batch covers or other power operated ship's equipment, such as, door in the hull of a ship, ramp, retractable car deck or similar equipment or to give signals to the decks of such machinery;

(zze) providing for the transport of dock workers;

(zzf) providing for the precautions to be taken to protect dock workers against harmful effects of excessive noise, vibrations and air pollution at the workplace;

(zzg) providing for protective equipment or protective clothing;

(zzh) providing for the sanitary, washing and welfare facilities;

(zzi) providing for—

(i) the medical supervision;

(ii) the ambulance rooms, first aid and rescue facilities and arrangements for the removal of dock workers to the nearest place of treatment;

(iii) the safety and health organisation; and

(iv) the training of dock workers and for the obligations and rights of the dock workers for their safety and health at the workplace;

(zzj) providing for the investigation of occupational accidents, dangerous occurrences and diseases, specifying such diseases and the forms of notices, the persons and authorities to whom they are to be furnished, the particulars to be contained in them and the time within which they are to be submitted;

(zzk) providing for the submission of statement of accidents, man-days lost, volume of cargo handled and particulars of dock workers; and

(zzl) any other matter which is required to be or may be specified by regulation.

Prior-  
publication of  
rules, etc.

137. The power to make rules, regulations, and bye-laws under this Code shall be subject to the condition of the previous publication of the same being made, in the following manner, namely:—

(a) the date to be specified after a draft of rule, regulation, and bye-laws proposed to be made will be taken under consideration, shall not be less than forty-five days from the date on which the draft of the proposed rule, regulation and bye-laws is published for general information;

(b) rule, regulation and bye-laws shall be published in the Official Gazette and on such publication, shall have effect as if enacted in this Code.

Power to  
make  
regulations  
without  
previous  
publication

138. Notwithstanding anything contained in section 137, regulations under section 136 may be made without previous publication and without reference to the National Occupational Safety Health Advisory Board constituted under sub-section (1) of section 16. If the Central Government is satisfied that for the prevention of apprehended danger or the speedy remedy of conditions likely to cause danger and to avoid delay it is necessary to dispense with from such publication and reference.

Bye-law

139. (1) The employer of a mine may, and shall, if called upon to do so by the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator, frame and submit to the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator a draft of such bye-laws, not being inconsistent with this Code or any rules or regulations or standards for the time being in force, governing the use of any particular machinery or the adoption of a particular method of working in the mine, as the employer may deem necessary to prevent accidents and provide for the safety, convenience and discipline of the persons employed in the mine.

(2) If any such employer—

(a) fails to submit within two months a draft of bye-laws after being called upon to do so by the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator; or

(b) submits a draft of bye-laws which is not in the opinion of the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator sufficient, the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator may—

(i) propose a draft of such bye-laws as appear to him to be sufficient; or

(ii) propose such amendments in any draft submitted to him by the employer as will, in his opinion, render it sufficient, and shall send such draft bye-laws or draft amendments to the employer for consideration.

(3) If within a period of two months from the date on which any draft bye-laws or draft amendments are sent by the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator to the employer under the provisions of sub-section (2), the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator and the employer are unable to agree as to the terms of the bye-laws to be made under sub-section (2), the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator shall refer the draft bye-laws for settlement to the technical committee constituted under sub-section (5) of section 7h in respect of mines.

(4) When such draft bye-laws have been agreed to by the employer and the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator, or when they are unable to agree, have been settled by the technical Committee constituted under sub-section (5) of section 16 in respect of mines, a copy of the draft bye-laws shall be sent by the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator to the Central Government for approval:

Provided that the Central Government may make such modification of the draft bye-laws as it thinks fit;

Provided further that before the Central Government approves the draft bye-laws, whether with or without modifications, there shall be published, in such manner as the Central Government may think best adapted for informing the persons affected, a notice of the proposal to make the bye-laws and of the place where copies of the draft bye-laws may be obtained, and of the time (which shall not be less than thirty days) within which any objections with reference to the draft bye-laws made by or on behalf of persons affected should be sent to the Central Government.

(5) Every objection under second proviso to sub-section (4) shall be in writing and shall state—

(i) the specific grounds of objections, and

(ii) the omissions, additions or modifications asked for.

(6) The Central Government shall consider any objection made within the required time by or on behalf of persons appearing to it to be affected, and may approve the bye-laws either in the form in which they were published or after making such amendments therein as it thinks fit.

(7) The employer shall cause a copy of the bye-laws, in English and in such other language or languages as may be prescribed by the Central Government, to be pasted up in some conspicuous place at or near the mine, where the bye-laws may be conveniently read or seen by the persons employed; and, as and when the same become defaced, obliterated or destroyed, shall cause them to be pasted again.

(8) The Central Government may, by order in writing rescind, in whole or in part, any bye-law so made, and thereupon such bye-law shall cease to have effect accordingly.

Powers to  
regulate  
general safety  
and health

140. Notwithstanding any law for the time being in force, the Central Government may make rules to regulate general safety and health of the persons residing in whole or part of India, in the event of declaration of an epidemic, pandemic or disaster, for such period as may be notified by the Central Government.

Laying of  
regulations,  
rules, bye-  
laws, etc.  
before  
Parliament

141. Every rule, regulation, standard and bye-law notified or made by the Central Government under this Code shall be laid, as soon as may be after it is notified or made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the rule, regulation, standard or bye-law or both Houses agree that the rule, regulation, standard or bye-law should not be made, the rule, regulation, standard or bye-law shall thereafter have effect only, in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule, regulation, standard or bye-law as the case may be.

Laying of  
rules made by  
State  
Government

142. Every rule made by the State Government under this Code shall be laid, as soon as may be, after it is made, before the State Legislature.

Repeal and  
Savings

143. (1) The following enactments shall stand repealed on and from the date the notification referred to in sub-section (2) of section 1 is issued, namely:—

(a) The Factories Act, 1948;	63 of 1948
(b) The Plantations Labour Act, 1951;	69 of 1951
(c) The Mines Act, 1952;	33 of 1952
(d) The Working Journalists and other Newspaper Employees (Conditions of Service) and Miscellaneous Provisions Act, 1955;	45 of 1955
(e) The Working Journalists (Fixation of Rates of Wages) Act, 1958;	29 of 1958
(f) The Motor Transport Workers Act, 1961;	27 of 1961
(g) The Beedi and Cigar Workers (Conditions of Employment) Act, 1966;	32 of 1966
(h) The Contract Labour (Regulation and Abolition) Act, 1970;	37 of 1970
(i) The Sales Promotion Employees (Conditions of Service) Act, 1976;	11 of 1976
(j) The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979;	30 of 1979
(k) The Cine-Workers and Cinema Theatre Workers (Regulation of Employment) Act, 1981;	50 of 1981
(l) The Dock Workers (Safety, Health and Welfare) Act, 1986;	54 of 1986
(m) The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.	27 of 1996

(2) Every Chief Inspector, Additional Chief Inspector, Joint Chief Inspector, Deputy Chief Inspector, Inspector and every other officer appointed for the purposes under any of the provisions of the enactments repealed by this Code, shall be deemed to have been appointed under this Code for such purposes under this Code.

(3) Notwithstanding repeal under sub-section (1), anything done or any action taken under the enactments so repealed (including any rule, regulation, bye-laws, notification, nomination, appointment, order or direction made thereunder) shall be deemed to have been done or taken under the corresponding provisions of this Code and shall remain in force to the extent they are not contrary to the provisions of this Code till they are repealed by the Central Government.

(4) Without prejudice to the provisions of sub-section (2), provisions of section 6 of the General Clauses Act, 1897 shall apply to the repeal of such enactments.

10 of 1897



THE FIRST SCHEDULE  
[See section 2(22)]

List of Industries involving hazardous processes:

1. Ferrous Metallurgical Industries
  - Integrated Iron and Steel
  - Ferro-alloys
  - Special Steels.
2. Non-ferrous metallurgical industries
  - Primary Metallurgical industries, namely, zinc, lead, copper, manganese and aluminium.
3. Foundries (ferrous and non-ferrous)
  - Castings and forgings including cleaning or smoothening/roughening by sand and shot blasting.
4. Coal (including coke) industries
  - Coal, Lignite, Coke and like other substances
  - Fuel Gases (including Coal Gas, Producer Gas, Water Gas)
5. Power Generating Industries.
6. Pulp and paper (including paper products) industries.
7. Fertiliser Industries
  - Nitrogenous
  - Phosphatic
  - Mixed.
8. Cement Industries
  - Portland Cement (including slag cement, puzzolona cement and their products).
9. Petroleum Industries:
  - Oil Refining
  - Lubricating Oils and Greases.
10. Petro-chemical Industries.
11. Drugs and Pharmaceutical Industries
  - Narcotics, Drugs and Pharmaceuticals.
12. Fermentation Industries (Distilleries and Breweries).
13. Rubber (Synthetic) Industries.
14. Paints and Pigment Industries.
15. Leather Tanning Industries.
16. Electro-plating Industries.
17. Chemical Industries.
  - (a) Coke Oven by-products and Coal Tar Distillation products:

(b) Industrial Gases (nitrogen, oxygen, acetylene, argon, carbon dioxide, hydrogen, sulphur dioxide, nitrous oxide, halogenated hydrocarbon, ozone, or any like gases);

(c) Industrial Carbon;

(d) Alkalies and Acids;

(e) Chromates and dichromates;

(f) Lead and its compounds;

(g) Electrochemicals (metallic sodium, potassium and magnesium, chlorates, perchlorates and peroxides);

(h) Electrothermal produces (artificial abrasive, calcium carbide);

(i) Nitrogenous compounds (cyanides, isocyanides and other nitrogenous compounds);

(j) Phosphorous and its compounds;

(k) Halogens and Halogenated compounds (Chlorine, Fluorine, Bromine and Iodine);

(l) Explosives (including industrial explosives and detonators and fuses).

18. Insecticides, Fungicides, Herbicides and other Pesticides Industries.

19. Synthetic Resin and plastics.

20. Man made Fibre (Cellulosic and non-cellulosic) industry.

21. Manufacture and repair of electrical accumulators.

22. Glass and Ceramics.

23. Grinding or glazing of metals.

24. Manufacture, handling and processing of asbestos and its products.

25. Extraction of oils and fats from vegetable and animal sources.

26. Manufacture, handling and use of benzene and substances containing benzene.

27. Manufacturing processes and operations involving carbon disulphide.

28. Dyes and Dyestuff including their intermediates.

29. Highly flammable liquids and gases.

30. Printing and dyeing on fabrics in textiles and plywood and laminate manufacturing process.

31. Process involving usage of radium or Radioactive Substances.

32. Stone Crushing industry.

33. Extraction of Oil and Raw material from the scrap tyres.

34. Cigarette manufacturing industry.

35. Stone breaking industry.

36. Hazardous waste and e-waste processing plants.

37. Semiconductor manufacturing industry.

38. Styrene manufacturing, handling and processing industry.

39. Nano-particles utilising industry.

40. Manufacturing, processing, preparation and utilisation of Mercury or Compounds of Mercury, Lead Tetra-ethyl, Manganese, Arsenic, Chrome, Aliphatic series, Beryllium, Phosgene and Isocyanates.

## THE SECOND SCHEDULE

[See section 1 ff(2)(f)]

List of matters:

- (1) fencing of machinery;
- (2) work on or near machinery in motion;
- (3) employment of adolescents on dangerous machines;
- (4) striking gear and devices for cutting off power;
- (5) self acting machines;
- (6) casing of new machinery;
- (7) prohibition of employment of women, children and adolescent near certain powers;
- (8) cranes and lifts;
- (9) lifting machines, chains, ropes and lifting tackles;
- (10) revolving machinery;
- (11) pressure plant;
- (12) floors, stairs and means of access;
- (13) pits, sumps, openings in floors and other similar indentation of area;
- (14) safety officers;
- (15) protection of eyes;
- (16) precautions against dangerous fumes, gases, etc.;
- (17) precautions regarding the use of portable electric light;
- (18) explosive or inflammable dust, gas, and other like dusts or gases;
- (19) safety committee;
- (20) power to require specifications of defective parts or tests of stability;
- (21) safety of buildings and machinery;
- (22) maintenance of buildings;
- (23) prohibition in certain cases of danger;
- (24) notice in respect of accidents;
- (25) court of inquiry in case of accidents;
- (26) safety management in plantation;
- (27) the general requirements relating to the construction, equipments and maintenance for the safety of working places on shore, ship, dock, structure and other places at which any dock work is carried on;
- (28) the safety of any regular approaches over a dock, wharf, quay or other places which dock workers have to use for going for work and for fencing of such places and projects;
- (29) the efficient lighting of all areas of dock, ship, any other vessel, dock structure or working places where any dock work is carried on and of all approaches to such places to which dock workers are required to go in the course of their employment;

(10) adequate ventilation and suitable temperature in every building or an enclosure on ship where dock workers are employed;

(11) the fire and explosion preventions and protection;

(12) safe means of access in ships, holds, stowings, equipment, appliances and other working places;

(13) the construction, maintenance and use of lifting and other cargo handling appliances and services, such as, galleys containing or supporting loads and provision of safety appliances on them, if necessary;

(14) the safety of workers employed in freight container terminals or other terminals for handling unitized cargo;

(15) the fitting of machinery, live electrical conductors, steam pipes and hazardous openings;

(16) the construction, maintenance and use of staging;

(17) the rigging and use of ship's derricks;

(18) the testing, examination, inspection and certification as appropriate of loose gears including chains and ropes and of slings and other lifting devices used in the dock work;

(19) the precautions to be taken to facilitate escape of workers when employed in a bin, bin, hopper or the like or between decks of a hold while handling coal or other bulk cargo;

(20) the measures to be taken in order to prevent dangerous methods of working in the stacking, unstacking, stowing and unstowing of cargo or handling in connection therewith;

(21) the handling of dangerous substances and working in dangerous or harmful environments and the precautions to be taken in connection with such handling;

(22) the work in connection with cleaning, chipping, painting, operations and precautions to be taken in connection with such work;

(23) the employment of persons for handling cargo, handling appliances, power operated hatch covers or other power operated ship's equipment such as, door in the hull of a ship, ramp, retractable car deck or similar equipment or to give signals to the drivers of such machinery;

(24) the transport of dock workers;

(25) the precautions to be taken to protect dock workers against harmful effects of excessive noise, vibration and air pollution at the work place;

(26) protective equipment and protective clothing;

(27) the sanitary, washing and welfare facilities;

(28) the medical supervision;

(29) the ambulance rooms, first aid and rescue facilities and arrangements for the removal of dock workers to the nearest place of treatment;

(30) the investigation of occupational accidents, dangerous occurrences and diseases, specifying such diseases and the forms of notices, the persons and authorities to whom they are to be furnished, the particulars to be contained in them and the time within which they are to be submitted;

(31) the submission of statement of accidents, man-days lost, volume of cargo handled and particulars of dock workers.

(52) the safe means of access to, and the safety of, any working place, including the provision of suitable and sufficient scaffolding at various stages when work cannot be safely done from the ground or from any part of a building or from a ladder or such other means of support;

(53) the precautions to be taken in connection with the demolition of the whole or any substantial part of a building or other structure under the supervision of a competent person for the avoidance of danger from collapse of any building or other structure while removing any part of the framed building or other structure by shoring or otherwise;

(54) the handling or use of explosive under the control of competent persons so that there is no exposure to the risk of injury from explosion or from flying material;

(55) the erection, installation, use and maintenance of transporting equipment, such as locomotives, trucks, wagons and other vehicles and trailers and appointment of competent persons to drive or operate such equipment;

(56) the erection, installation, use and maintenance of hoists, lifting appliances and lifting gear including periodical testing and examination and heat treatment where necessary, precautions to be taken while raising or lowering loads, restrictions on carriage of persons and appointment of competent persons on hoists or other lifting appliances;

(57) the adequate and suitable lighting of every workplace and approach thereto, of every place where raising or lowering operations with the use of hoists, lifting appliances or lifting gears are in progress and of all openings dangerous to building workers employed;

(58) the precautions to be taken to prevent inhalation of dust, fumes, gases or vapours during any grinding, cleaning, spraying or manipulation of any material and steps to be taken to secure and maintain adequate ventilation of every working place or confined space;

(59) the measures to be taken during stacking or unstacking, stowing or unstowing of materials or goods or handling in connection therewith;

(60) the safeguarding of machinery including the fencing of every fly-wheel and every moving part of prime mover and every part of transmission or other machinery, unless it is in such a position or of such construction as to be safe to every worker working only of the operations and as if it were securely fenced;

(61) the safe handling and use of plant, including tools and equipment operated by compressed air;

(62) the precaution to be taken in case of fire;

(63) the limits of weights to be lifted or moved by workers;

(64) the safe transport of workers to or from any workplace by water and provision of means for rescue from drowning;

(65) the steps to be taken to prevent danger to workers from live electric wires or apparatus including electrical machinery and tools and from overhead wires;

(66) the keeping of safety nets, safety shoes and safety belts where the special nature or the circumstances of work render them necessary for the safety of the workers;

(67) the standards to be complied with regard to scaffolding, ladders and stairs, lifting appliances, ropes, chains and accessories, earth moving equipment and floating operational equipments;

(68) the precautions to be taken with regard to pile-driving, concrete work, work with hot asphalt, tar or other similar things, insulation work, demolition operations, excavation, underground construction and handling materials;

(69) the safety policy, that is to say, a policy relating to steps to be taken to ensure the safety and health of the building workers, the administrative arrangements therefore and the

matters connected therewith, to be framed by the employers and contractors for the operations to be carried on in a building or other construction work:

(70) emergency standards for enforcement of suitable standards in respect of hazardous processes in a factory;

(71) the maximum permissible threshold limits of exposure of chemical and toxic substances in manufacturing processes (whether hazardous or otherwise) in any factory;

(72) lightning; and

(73) any other matter which the Central Government considers under the circumstances for better working condition for safety at the workplace.

## THE THIRD SCHEDULE

[See section 12(1)]

## List of Notifiable Diseases:

1. Lead poisoning, including poisoning by any preparation or compound of lead or their sequelae.
2. Lead-tetra-ethyl poisoning.
3. Phosphorus poisoning or its sequelae.
4. Mercury poisoning or its sequelae.
5. Manganese poisoning or its sequelae.
6. Arsenic poisoning or its sequelae.
7. Poisoning by nitrous fumes.
8. Carbon bisulphide poisoning.
9. Benzene poisoning, including poisoning by any of its homologues, their nitro or amido-derivatives or its sequelae.
10. Chrome ulceration or its sequelae.
11. Anthrax.
12. Siltosis.
13. Poisoning by halogen or halogen derivatives of the hydrocarbons of the aliphatic series.
14. Pathological manifestations due to—
  - (a) radium or other radio-active substances;
  - (b) X-rays;
15. Primary epitheliomatous cancer of the skin.
16. Toxic anaemia.
17. Toxic jaundice due to poisonous substances.
18. Oil acne or dermatitis due to mineral oils and compounds containing mineral oil base.
19. Sycosis.
20. Asbestosis.
21. Occupational or contact dermatitis caused by direct contact with chemicals and paints. These are of two types, that is, primary irritants and allergic sensitizers.
22. Noise induced hearing loss (exposure to high noise levels).
23. Beryllium poisoning.
24. Carbon monoxide poisoning.



23. Coal miners' pneumoconiosis.
26. Phosgene poisoning.
27. Occupational cancer.
28. Cyanides poisoning.
29. Toxic hepatitis.

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DR. GNANAYANARAJU,  
*Secretary to the Govt. of India*

# ANNEXURE - C

PART 1

FORM-15

## Details of Source wise Fuel for Computation of Energy Charges<sup>1</sup>

Name of the Petitioner \_\_\_\_\_

Name of the Generating Station \_\_\_\_\_

S. No.	Month	Unit	For preceding 3rd Month (from COD or from 1.4.2019 as the case may be )			For preceding 2nd Month (from COD or from 1.4.2019 as the case may be )		For preceding 1st Month (from COD or from 1.4.2019 as the case may be )	
			Domestic Source (1)	Domestic Source (2)	Imported	Domestic	Imported	Domestic	Imported
<b>A)</b>	<b>OPENING QUANTITY</b>								
1	Opening Quantity of Coal/Lignite	(MMT)							
2	Value of Stock								
<b>B)</b>	<b>QUANTITY</b>								
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	(MMT)							
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	(MMT)							
5	Coal supplied by Coal/Lignite Company (3+4)	(MMT)							
6	Normative Transit & Handling Losses (For	(MMT)							

S. No.	Month	Unit	For preceding 3rd Month (from COD or from 1.4.2019 as the case may be )			For preceding 2nd Month (from COD or from 1.4.2019 as the case may be )			For preceding 1st Month (from COD or from 1.4.2019 as the case may be )			
	coal/Lignite based Projects)											
7	Net coal / Lignite Supplied (3-4)	(MMT)										
C)	<b>PRICE</b>											
8	Amount charged by the Coal /Lignite Company	(Rs.)										
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.)										
10	Handling, Sampling and such other similar charges											
11	Total amount Charged (8+9+10)	(Rs.)										
D)	<b>TRANSPORATION</b>											
12	Transportation charges by rail/ ship/ road transport	(Rs.)										
	By Rail											
	By Road											
	By Ship											
	.....											
13	Adjustment (+/-) in amount charged made by	(Rs.)										

S. No.	Month	Unit	For preceding				
			3rd Month (from COD or from 1.4.2019 as the case may be )	2nd Month (from COD or from 1.4.2019 as the case may be )	1st Month (from COD or from 1.4.2019 as the case may be )		
	Railways/ Transport Company						
14	Demurrage Charges, if any	( Rs.)					
15	Cost of diesel in transporting coal through MGR system, if applicable	( Rs.)					
16	Total Transportation Charges (12+13+14+15)	( Rs.)					
17	Total amount Charged for coal/lignite supplied including Transportation (11+16)	( Rs.)					
<b>E)</b>	<b>TOTAL COST</b>						
18	Landed cost of coal/ Lignite (2+17)/(1+7)	Rs./MT					
19	Blending Ratio (Domestic/Imported)						
20	Weighted average cost of coal/ Lignite for preceding three months	Rs./MT					
<b>F)</b>	<b>QUALITY</b>						
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)					
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)					

S. No.	Month	Unit	For preceding 3rd Month (from COD or from 1.4.2019 as the case may be )			For preceding 2nd Month (from COD or from 1.4.2019 as the case may be )		For preceding 1st Month (from COD or from 1.4.2019 as the case may be )	
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)							
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)							
25	Weighted average GCV of coal/ Lignite as Billed	(kCal/Kg)							
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)							
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)							
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)							
29	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)							
30	Weighted average GCV of coal/ Lignite as Received	(kCal/Kg)							

**Note:**

1. Similar details to be furnished for natural gas/liquid fuel for CCGT station and secondary fuel oil for coal/lignite based thermal plants with appropriate units.
2. As billed and as received GCV, quantity of coal, and price should be submitted as certified by statutory auditor.
3. Details to be provided for each source separately. In case of more than one source, add additional column.
4. Break up of the amount charged by the Coal Company is to be provided separately.

(Petitioner)

**Details of Source wise Fuel for Computation of  
Energy Charges<sup>1</sup>**

Name of the Petitioner

Name of the Generating Station

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Sr. No.	Month-wise	Unit	For Existing Plants Year wise and Month-wise details for the period 2024-29 ( For preceding 12 months )							
			Domestic Source (1)	.....	Domestic Source (n)	Integrated Mine (Basket)	Integrated Mine (Captive)	E-Auction	Imported	Others (specify)
A)	<b>OPENING QUANTITY</b>									
1	Opening Quantity of Coal/Lignite	(MMT)								
2	Value of Stock									
B)	<b>QUANTITY</b>									
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company for the particular month giving complete details of mode of transportation used for transportation along with quantity	(MMT)								
	By Rail									
	By Road									
	By Ship									

Sr. No.	Month-wise	Unit	For Existing Plants Year wise and Month-wise details for the period 2024-29 ( For preceding 12 months )							
			Domestic Source (1)	.....	Domestic Source (n)	Integrated Mine (Basket)	Integrated Mine (Captive)	E-Auction	Imported	Others (specify)
	By MGR									
	By any other mode (specify)									
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company *	(MMT)								
5	Coal supplied by Coal/Lignite Company (3+4)	(MMT)								
6	Actual Transit & Handling Losses (For coal/Lignite based Projects) specify the source	(MMT)								
7	Actual coal / Lignite received	(MMT)								
C)	<b>PRICE</b>									
8	Amount charged by the Coal /Lignite Company	(Rs.)								
9	Adjustment (+/-) in amount charged made by Coal/Lignite Company *	(Rs.)								
10	Unloading, Handling and Sampling charges.									
	Unloading charges									
	Handling charges									
	Sampling charges									

Sr. No.	Month-wise	Unit	For Existing Plants Year wise and Month-wise details for the period 2024-29 ( For preceding 12 months )							
			Domestic Source (1)	.....	Domestic Source (n)	Integrated Mine (Basket)	Integrated Mine (Captive)	E-Auction	Imported	Others (specify)
11	Total amount Charged (8+9+10)	(Rs.)								
D)	<b>TRANSPORATION</b>									
12	Transportation charges by rail/ship/road transport	(Rs.)								
	By Rail									
	By Road									
	By Ship									
13	By MGR									
	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)								
	14 Demurrage Charges, if any	( Rs.)								
	15 Cost of fuel in transporting coal through MGR system, if applicable	( Rs.)								
16	Total Transportation Charges (12+13+14+15)	( Rs.)								
17	Total amount Charged for coal/lignite supplied including Transportation (11+16)	( Rs.)								
E)	<b>TOTAL COST</b>									
18	Landed cost of coal/ Lignite (2+17)/(1+7)	Rs./MT								



Sr. No.	Month-wise	Unit	For Existing Plants Year wise and Month-wise details for the period 2024-29 ( For preceding 12 months )							
			Domestic Source (1)	.....	Domestic Source (n)	Integrated Mine (Basket)	Integrated Mine (Captive)	E-Auction	Imported	Others (specify)
19	Blending Ratio (Domestic/Imported)									
20	Weighted average cost of coal/ Lignite for preceding twelve months	Rs./MT								
<b>F)</b>	<b>QUALITY</b>									
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)								
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)								
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)								
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)								
25	Weighted average GCV of coal/ Lignite as Billed	(kCal/Kg)								
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)								
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)								

Sr. No.	Month-wise	Unit	For Existing Plants Year wise and Month-wise details for the period 2024-29 ( For preceding 12 months )							
			Domestic Source (1)	.....	Domestic Source (n)	Integrated Mine (Basket)	Integrated Mine (Captive)	E-Auction	Imported	Others (specify)
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)								
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)								
30	Weighted average GCV of coal/ Lignite as Received	(kCal/Kg)								

(\*specifying the period of adjustment along with reason and support document for the adjustment)

**Note:**

1. Similar details to be furnished for natural gas/liquid fuel for CCGT station and secondary fuel oil for coal/lignite based thermal plants with appropriate units.
2. As billed and as received GCV, quantity of coal, and price should be submitted as certified by statutory auditor.
3. The action taken to address the difference in GCV between as billed and as received should be submitted along with the petition.
4. The details of source wise fuel for computation of energy charges should be provided on year wise in above format along with month wise calculation as may be required by the Commission.
5. Details to be provided for each source separately. In case of more than one source, add additional column.
6. Break-up of the amount charged by the Coal Company is to be provided separately.
7. Distance of Integrated Mines from Generating Station, if applicable, is to be provided separately.

(Petitioner)



Our Ref: ABB / NTPC EOS / OB501  
Date: July 12, 2022.

To,  
M / S NTPC Limited  
EOC, Sector 24, NOIDA.

Kind Attn: Mr. Same Nath Kundu

Ref: Offer No. PAEN.PGRN.22.0071 & telephonic conversation

Subject: Obsolescence Windows Operating Systems and lifecycle support of ABB OEM software

Dear Sir,

ABB has been adjudged by ARC as the global leader in providing Lifecycle Services to its customers. We keep our customers updated about the lifecycle of the system components.

This brings us to the HMI & Server software of the ABB DCS installed at the locations in the table below. Microsoft, the OEM of the operating systems (OS), has made End Of the Life announcement of the respective software mentioned in the table below. DELL & HP has made similar announcements about the respective hardware.

Project Description		Servers			O/S		
Site	Unit	OS	App	HW	OS	App	HW
Barr	U4/U5/WHF/CHP/WMMU/CHP	Serv. 2008	PCP	DELL Poweredge R710	Win7	PCP	DELL Precision 3500
Ranpik	M1/U2/U3/Gen	Serv. 2008	PCP	HP Prolat ML350	Win7	PCP	HP Z230
Lax	YDBFP1/2	Win 7	S+ 2.0		Win 7	S+ 2.0	
Kanngan	M	Serv. 2008	PCP	DELL Poweredge T440	WinXP	PCP	Del 3630
Tahtar	YDBFP2	Serv. 2008	S+ 2.0		Win 7	S+ 2.0	
Vindhyachal	M1/T4/LE	Serv. 2008	PCP	DELL Poweredge T20	Win 7	PCP	DELL R330
Singrauli	U4/U5	Serv. 2008	PCP	HP Prolat	WinXP	PCP	HP

ABB continues to offer "Limited support" to the above-mentioned Application software however we carry the risk of hardware failure, no IT OEM/OS/Antivirus support, and more importantly system been vulnerable to cyber risk. We strongly recommend evolving the system to latest ABB S+ V3.3 software compatible with Windows Server 2019 & Windows 10 LTSC. This version of S+ is actively sold and supported by ABB.

This will bring host of additional advantages like updated antivirus, subscription to patch updates and access to "ABB My Control system".

We thank you for considering our proposal actively. Please contact the undersigned in case any further clarification is required.

Sincerely Yours

For & On behalf of ABB India Limited

Rajesh Raina

Associate Sales Director –Power & Water Services

Process Automation - Energy Industries

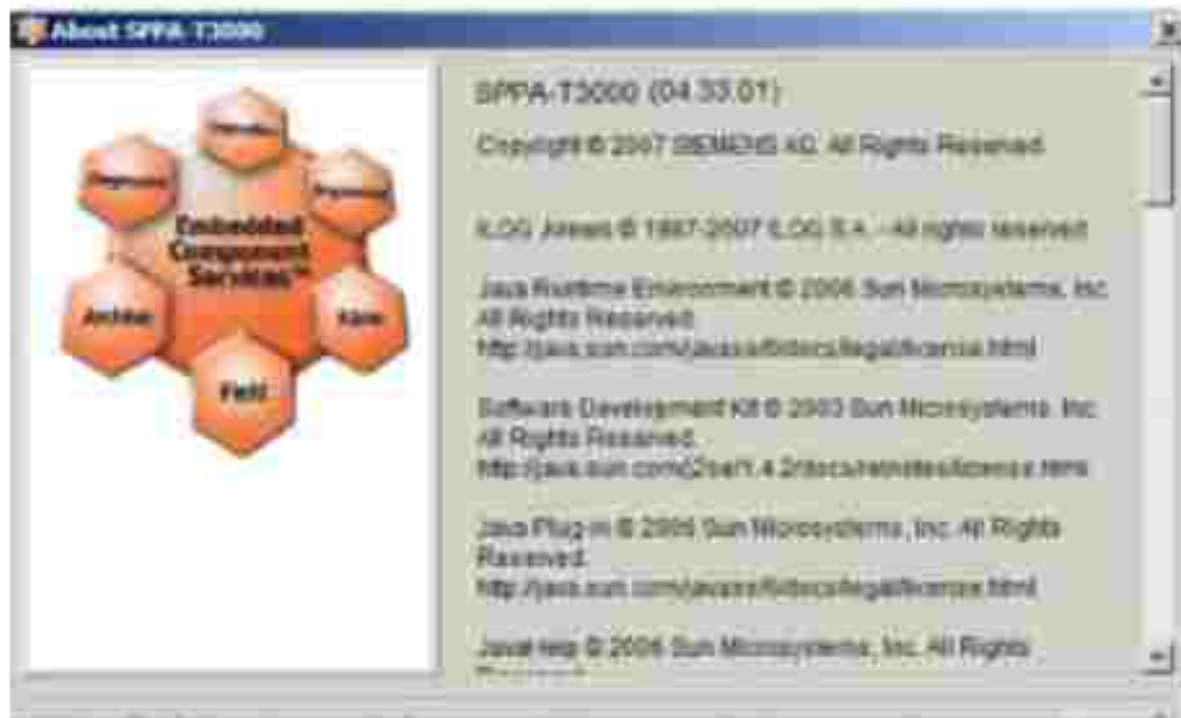
ABB India Limited

# ANNEXURE - 2

		NTPC Barh Stage-II : 2x660MW SPPA-T3000 TCS HMI Upgrade	SE GP SV CD
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## 1 Plant Information

NTPC Barh Stage-II STPP, 2x660 MW (Unit#1/2) is equipped with Siemens make DCS SPPA-T3000. The installed LTS release of SPPA-T3000 DCS is Rel-4.3 SP1 with Microsoft Windows-2003 Server & Microsoft Windows-XP operating system has been cancelled/obsolete. Please be aware that Microsoft has announced the "End of Extended Support" of Windows Server 2003R2 for 14 July 2015. After July 2015, no further security patches from Microsoft will be available for Windows Server 2003.



Hence, we strongly recommend updating the existing SPPA-T3000 Version-4.3 to the latest Omnivise-T3000 (SPPA-T3000 renamed as Omnivise-T3000) LTS Release 9.2. Also, Microsoft ensures maintenance and Security Patches of the Operating System for the Thin clients and all server types in Omnivise-T3000 R9.2 until 2029 for Windows-10 and until 2029 for Windows Server 2019.

# ANNEXURE - 3

File No.CEA-CH-13-12/4/2021-IT Division



भारत सरकार  
Government of India  
विद्युत मंत्रालय  
Ministry of Power  
केन्द्रीय विद्युत प्राधिकरण  
Central Electricity Authority  
सूचना प्रौद्योगिकी एवं साइबर सुरक्षा प्रभाग  
Information Technology & Cyber Security Division

**विषय : CEA (Cyber Security in Power Sector) Guidelines, 2021.**

CEA is mandated to prepare 'Guidelines on Cyber Security' in Power Sector under the provision of regulation (10) of the Central Electricity Authority (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2019. Guidelines on Cyber Security in Power Sector incorporating the cardinal principles has been prepared by CEA. In compliance to the provision of the above regulation, CEA (Cyber Security in Power Sector) Guidelines, 2021 are issued for compliance by all entities listed in the clause 2.3 (Applicability of the Guidelines) of the guidelines.

**Encl: Guidelines on Cyber Security**

  
व.क. मिश्रा  
(V.K. Mishra)  
Secretary CEA

## CEA (Cyber Security in Power Sector) Guidelines, 2021

### 1.0 Background

- 1.1 Cyber intrusion attempts and Cyber-attacks in any critical sector are carried out with a malicious intent. In Power Sector it's either to compromise the Power Supply System or to render the grid operation in-secure. Any such compromise, may result in mal-operations of equipments, equipment damages or even in a cascading grid brownout/blackout. The much hyped air gap myth between IT and OT Systems now stands shattered. The artificial air gap created by deploying firewalls between any IT and OT System can be jumped by any insider or an outsider through social engineering. Cyber-attacks are staged through tactics & techniques of Initial Access, Execution, Persistence, Privilege Escalation, Defence Evasion, Command and Control, Exfiltration. After gaining the entry inside the system through privilege escalation, the control of IT network and operations of OT systems can be taken over even remotely by any cyber adversary. The gain of sensitive operational data through such intrusions may help the Nation State sponsored or non-sponsored adversaries and cyber attackers to design more sinister and advanced cyber-attacks.
- 1.2 Government of India has set up the Indian Computer Emergency Response Team (CERT-In) for Early Warning and Response to cyber security incidents and to have collaboration at National and International level for information sharing on mitigation of cyber threats. CERT-In regularly issues advisories on safeguarding computer systems and publishes Security Guidelines which are widely circulated for compliances. All Central Government Ministries Departments and State/Union Territory Governments have been advised to conduct cyber security audit of their entire Cyber Infrastructure including websites at regular interval through CERT-In empanelled Auditors so as to identify gaps and appropriate corrective actions to be taken in cyber security practices. CERT-In extends supports to enable Responsible Entity in conducting cyber security mock drills and in assessment of their preparation to withstand cyber-attacks. The Responsible Entity must submit Reports of Cyber Audit of cyber security controls, architecture, vulnerability management, network security and periodic cyber security drills to sectoral CERT as well as CERT-In. Team of experts shall review these reports and shortcomings if any in the compliances shall be flagged by them. CERT-In on regular basis also conducts workshops and training programs to enhance Cyber awareness of all Stakeholders.
- 1.3 Ministry of Power has created 6(six) sectoral CERTs namely Thermal, Hydro, Transmission, Grid Operation, RE and Distribution for ensuring cyber security in Indian Power Sector. Each Sectoral CERT has prepared their sub-sector specific model Cyber Crisis Management Plan(C-CMP) for countering cyber-attacks and cyber terrorism. Each Sectoral CERT has circulated their model C-CMPs for preparation and implementation of organization specific C-CMP by each of their Constituent Utility.
- 1.4 All Responsible Entities, Service Providers, Equipment Suppliers Vendors and Consultants engaged in Power Sector are equally responsible for ensuring cyber security of the Indian Power Supply System. They are to act timely upon each threat intelligence,

advisories and other inputs received from authenticated sources, for continuous improvement in their cyber security posture.

- 1.5 In the current Indian scenario though many cyber security directives and guidelines exists, but none of them are power sector specific. Ministry of Power has directed CEA to prepare Regulation on Cyber Security in Power Sector. And as an interim measures CEA has been directed to issue Guideline on Cyber Security in Power Sector, under the provision of Regulation 10 on Cyber Security in the "Central Electricity Authority (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2019".
- 1.6 The Guidelines on Cyber Security, in the form of Articles written below, requires mandatory Compliance by all Responsible Entities. The Guidelines shall come into effect from the date of issue by Central Electricity Authority, New Delhi.
- 2.0 Hereby the Guidelines on Cyber Security are drawn in the form of Articles for compliance by the Requester as well as User under the following provision of Regulation 10 on Cyber Security, in the "Central Electricity Authority (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2019".

*"The requester and the user shall comply with cyber security guidelines issued by the Central Government, from time to time, and the technical standards for communication system in Power Sector laid down by the Authority."*

**2.1 Objective of issuing Guideline:**

- a) Creating cyber security awareness
- b) Creating a secure cyber ecosystem,
- c) Creating a cyber-assurance framework,
- d) Strengthening the regulatory framework,
- e) Creating mechanisms for security threat early warning, vulnerability management and response to security threats;
- f) Securing remote operations and services,
- g) Protection and resilience of critical information infrastructure,
- h) Reducing cyber supply chain risks,
- i) Encouraging use of open standards,
- j) Promotion of research and development in cyber security,
- k) Human resource development in the domain of Cyber Security,
- l) Developing effective public private partnerships,
- m) Information sharing and cooperation
- n) Operationalization of the National Cyber Security Policy

**2.2 Within the text of these Articles, 'Responsible Entity' shall mean all:**

- a) Transmission Utilities as well as Transmission Licensees,
- b) Load despatch centres (State, Regional and National),
- c) Generation utilities (Hydro, Thermal, Nuclear, RE),
- d) Distribution Utilities
- e) Generation Aggregators,
- f) Trading Exchanges,
- g) Regional Power Committees, and
- h) Regulatory Commissions.

### 2.3 Applicability:

All Responsible Entities as well as System Integrators, Equipment Manufacturers, Suppliers/Vendors, Service Providers, IT Hardware and Software OEMs engaged in the Indian Power Supply System.

### 2.4 Scope:

#### 2.4.1 Control Systems for System Operation and Operation Management.

- a) Grid Control and Management Systems,
- b) Power Plant Control Systems,
- c) Central Systems used to monitor and control of distributed generation and loads e.g. virtual power plants, storage management, central control rooms for hydroelectric plants, photovoltaic/wind power installations,
- d) Systems for fault management and work force management,
- e) Metering and measurement management systems,
- f) Data archiving systems,
- g) Parameterisation, configuration and programming systems,
- h) Supporting systems required for operation of the above mentioned systems.

#### 2.4.2 Communication System.

- a) Routers switches and firewalls,
- b) Communication technology-related network components,
- c) Wireless digital systems,
- d) Control Centre to Control Centre Communications for data exchange on ICCP. (IEC 61850/60850-5/TASE.2/)

#### 2.4.3 Secondary, Automation and Tele control technologies

- a) Control and Automation components,
- b) Control and field devices,
- c) Tele control devices,
- d) Programmable logic controllers / Remote Terminal Units, including digital sensor and actuators elements,
- e) Protection devices,
- f) Safety components,
- g) Digital measurement and metering installations,
- h) Synchronisation devices,
- i) Excitation Systems,

### 3.0 Definition of Terms:

1. **Access Management:** shall mean set of policies and procedures of the Responsible Entity for allowing Personnel, devices and IoT to securely perform a broad range of operational, maintenance, and asset management tasks either on site or remotely as laid down in Clause 5.2.5 of IS 16335.
2. **Accreditation:** shall mean the process of verifying that an organisation is capable of conducting the tests and assessments against a product/process that are required to be certified.



3. **Accreditation Body:** shall mean an organisation that has been accredited to verify the credentials and capabilities of the organisations that wish to become a certification body.
4. **Act:** shall mean the Information Technology Act, 2000 (21 of 2000)
5. **Asset:** shall mean anything that has value to the organization.
6. **Certification:** shall mean the process of verifying that a product has been manufactured in conformance with a set of predefined standards and/or regulations by an organisation, that is accredited to conduct the certification process
7. **Certification Body:** shall mean an organisation that has been accredited by an accreditation body to certify products / process against a certification scheme.
8. **Certification Scheme:** shall mean the processes, paperwork, tools, and documentation that define how a product or manufacturer is certified
9. **Chief Information Security Officer:** shall means the designated employee of Senior management level directly reporting to Managing Director/Chief Executive Officer Secretary of the Responsible Entity, having knowledge of Information Security and related issues, responsible for cyber security efforts and initiatives including planning, developing, maintaining, reviewing and implementation of Information Security Policies
10. **Critical Assets:** shall mean the facilities, systems and equipment which, if destroyed, degraded or otherwise declared unavailable, would affect the reliability or operability of the Power Supply System.
11. **Critical System:** shall mean cyber assets essential to the reliable operation of critical asset. Critical System consists of those cyber assets that have at least one of the following characteristics:
  - a) The cyber asset uses a routable protocol to communicate outside the electronic security perimeter.
  - b) The cyber asset uses a routable protocol within a control centre.
  - c) The cyber asset is dial-up accessible.
12. **Critical Information Infrastructure:** shall mean Critical Information Infrastructure as defined in explanation of sub-section (1) of Section 70 of the Act.
13. **Cyber Assets:** shall mean the programmable electronic devices, including the hardware, software and data in those devices that are connected over a network, such as LAN, WAN and HAN.
14. **Cyber Crisis Management Plan:** shall mean a framework for dealing with cyber related incidents for a coordinated, multi-disciplinary and broad-based approach for rapid identification, information exchange, swift response and remedial actions to mitigate and recover from malicious cyber related incidents impacting critical processes.
15. **Cyber Security Breach:** shall mean any cyber incident or cyber security violation that results in unauthorized or illegitimate access or use by a person as well as an entity, of data, applications, services, networks and/or devices through bypass of the underlying cyber security protocols, policies and mechanisms resulting in the compromise of the confidentiality, integrity or availability of data information maintained in a computer resource or cyber asset.
16. **Cyber Security Incident:** shall mean any real or suspected adverse cyber security event that violates, explicitly or implicitly, cyber security policy of Responsible Entity resulting in unauthorized access, denial of service or disruption, unauthorized use of computer resource for processing or storage of information or changes to data or information

without authorization, leading to harm to the power grid or its critical sub-sectoral elements Generation, Transmission and Distribution.

17. **Cyber Security Policy:** shall mean documented set of business rules and processes for protecting information, computer resources, networks, devices, Industrial Control Systems and other OT resources.
18. **Electronic Security Perimeter:** shall mean the logical border surrounding a network to which the Cyber Systems of Power Supply System are connected using a routable protocol.
19. **Information Security Division:** shall mean a division accountable for cyber security and protection of the Critical System of the Responsible Entity.
20. **Protected System:** shall mean any computer, computer system or computer network of the Responsible Entity notified under section 70 of the Act, in the official gazette by appropriate Government.
21. **Security Architecture:** shall mean a framework and guidance to implement and operate a system using the appropriate security controls with the goal to maintain the system's quality attributes like confidentiality, integrity, availability, accountability and assurance.
22. **Vulnerability:** shall mean intrinsic properties of something resulting in susceptibility to a risk source that can lead to an event with a consequence.
23. **Vulnerability Assessment:** shall mean a process of identifying and quantifying vulnerabilities.

#### 4.0 Standards

Reference	Description
ISO/IEC 15408	Common Criteria Certification Standard
ISO/IEC 17011	General requirements for accreditation bodies accrediting conformity assessment bodies
ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories
ISO/IEC 21827	Systems Security Engineering - Capability Maturity Model (SSE-CMM)
ISO/IEC 24748-1	Systems and software engineering — Life cycle management — Part 1: Guidelines for life cycle management.
ISO 27001/2	Information Security Management
ISO/IEC 27019	Information technology — Security techniques — Information Security controls for the energy utility industry
ISO/IEC 61508	Functional Safety of Electrical / Electronic / Programmable Electronic Safety-related Systems
IEC 61850	Communication networks and systems for power utility automation
IEC 62351	Standards for Securing Power System Communications
IEC 62443	Cyber Security for Industrial Control Systems
IS 16335	Power Control Systems – Security Requirements.

#### 5.0 Abbreviations

Abbreviations	Description
a) BES	Bulk Electric System

b)	CDAC	Centre for Development of Advanced Computing
c)	CEA	Central Electricity Authority
d)	CERC	Central Electricity Regulatory Commission
e)	CERT	Computer Emergency Response Team
f)	CERT-In	Indian Computer Emergency Response Team
g)	CII	Critical Information Infrastructure
h)	CISO	Chief Information Security Officer
i)	CSK	Cyber Swachhata Kendra
j)	COTS	Commercial off-the Shelf
k)	ESP	Electronic Security perimeter
l)	ICS	Industrial Control Systems
m)	ICT	Information and Communications Technology
n)	IEC	International Electro Technical Commission
o)	ISAC	Information Sharing and Analysis Centre
p)	ISD	Information Security Division
q)	ISO	International Organization for Standardization
r)	ISMS	Information Security Management System
s)	IT	Information Technology
t)	FAT	Factory Acceptance Test
u)	NABL	National Accreditation Board for Testing and Calibration Laboratories
v)	NCIIPC	National Critical Information Infrastructure Protection Centre
w)	NLDC	National Load Dispatch Centre
x)	NPTI	National Power Training Institute
y)	NSCS	National Security Council Secretariat
z)	OEM	Original Equipment Manufacturer
aa)	OT	Operational Technology
bb)	RLDC	Regional Load Dispatch Centres
cc)	SAT	Site Acceptance Test
dd)	SERC	State Electricity Regulatory Commission
ee)	SCADA	Supervisory Control and Data Acquisition Systems
ff)	SIEM	Security Information and Event Management
gg)	SLA	Service Level Agreement
hh)	SLDC	State Load Dispatch Centre
ii)	QCI	Quality Council of India

## CEA (Cyber Security in Power Sector) Guidelines, 2021

### **Article 1. Cyber Security Policy.**

#### **a. Cardinal Principles: The Responsible entity will strictly adhere to following cardinal principles while framing cyber security policy:**

- i. There is hard isolation of their OT Systems from any internet facing IT system.
  - ii. May keep only one of their IT systems with internet facing at any of their site/location if required which is isolated from all OT zones and kept in a separate room under the security and control of CISO.
  - iii. Downloading/Uploading of any data/information from their internet facing IT system is done only through an identifiable whitelisted device followed by scanning of both for any vulnerability/malware as per the SOP laid down and for all such activities digital logs are maintained and retained under the custody of CISO for at least 6 months. The log shall be readily to carry out the forensic analysis if asked by investigation agency.
  - iv. List of whitelisted IP addresses for each firewall is maintained by CISO and each firewall is configured for allowing communication with the whitelisted IP addresses only.
  - v. Communication between OT equipment systems is done through the secure channel preferably of POWERTEL through the fibre optic cable. Security configuration of the communication channel is also to be ensured.
  - vi. All ICT based equipment/system deployed in infrastructure/system mandatorily CII are sourced from the list of the "Trusted Sources" as and when drawn by MoP/CEA.
- b. The Responsible Entity shall be ISO/IEC 27001 certified (including sector specific controls as per ISO/IEC 27019).
- c. The Responsible Entity shall have a Cyber Security Policy drawn upon the guidelines issued by NCIIPC.
- d. The Responsible Entity shall ensure annual review of their Cyber Security Policy by subject matter expert and changes shall be made therein only after obtaining the due approval from Board of Directors.
- e. The process of Access Management for all Cyber Assets owned or under control of the Responsible Entity shall be detailed in the Cyber Security Policy.
- f. The Cyber Security Policy shall leverage state-of-art cyber security technologies and relevant processes at multiple layers to mitigate the cyber security risks.
- g. The Responsible Entity shall be solely responsible to get Cyber Security Policy implemented through its Information Security Division (ISD).
- h. The CISO shall record the reason(s) for exemption required, if any, in case, unable to comply with any of the provision(s) of the Cyber Security Policy. Any exception shall be allowed only after an approval of provisions of compensatory control(s) to mitigate residual cyber security risks.

- i. The CISO shall record the exemptions sought in statement of applicability controls, while getting the ISO 27001 certified. All exemptions and its justification need to be in conformance with Cyber Security Policy of the Responsible Entity.
- j. The Responsible Entity shall allocate sufficient Annual budget for enhancing cyber security posture, enhanced year over year.
- k. The Responsible Entity shall work in collaboration with other Industry Stakeholders as well as Academia to promote R&D activity in the domain of cyber security.
- l. The Responsible Entity shall ensure that cyber security issues are taken up as agenda items in their Board meetings once in every three months.

#### **Article 2 Appointment of CISO.**

- a) The Responsible Entity shall mandatorily appoint a CISO and shall confirm to qualification, if any, laid by Quality Council of India (QCI). In absence, the work of CISO shall be looked upon by Alternate CISO. In case qualification for appointment of Alternate CISO has been relaxed for reasons recorded thereof, Alternate CISO has to mandatorily acquire the minimum required cyber security skill sets within six months from the date of his appointment.
- b) The Responsible Entity shall regularly update details of CISO and Alternate CISO, with the Sectoral CERT, as well as on ISAC-Power Portal.
- c) Roles and Responsibility of CISOs shall be as laid by CERT-In and ring-fenced to ensure cyber security of the Cyber Assets of the Responsible Entity.

#### **Article 3: Identification of Critical Information Infrastructure (CII).**

- a) The Responsible Entity shall submit to NCIIPC through Sectoral CERT, details of Cyber Assets which uses a routable protocol to communicate outside the Electronic Security Perimeter drawn by the Responsible Entity or a routable protocol within a control centre and dial-up accessible Cyber Assets, within 30 days from the date of their commissioning in the System.
- b) The Responsible Entity shall submit details of Critical Business Processes and underlying information infrastructure along with mapped impact and Risk Profile to NCIIPC and shall get their CIIs identified in consultation with NCIIPC. The process of the notification/declaration by Appropriate Government shall follow thereafter.
- c) The Responsible Entity shall review their declared/notified CIIs at least once a year to examine changes if any in the functional dependencies, protocols and technologies or upon any change in security architecture. The Responsible Entity shall review their declared/notified CIIs once in every 6 months, in case if NCIIPC has directed them to constitute an Information Security Steering Committee.
- d) The Responsible Entity shall ensure that all cyber assets of their identified/notified CIIs are recorded in the asset register and considered for risk assessment as well as for finalization of controls in statement of applicability.

#### **Article 4. Electronic Security Perimeter**

- a) The Responsible Entity shall identify and document the Electronic Security Perimeter(s) and all Access Points to the perimeter(s).

- b) The Responsible Entity shall follow procedure of identifying "Electronic Security Perimeter" in case of distributed and/or hybrid information infrastructure, as per IEC 62443 / IS16335 (as amended from time to time).
- c) The Responsible Entity shall ensure that every Critical System resides within an Electronic Security Perimeter.
- d) The Responsible Entity shall perform a cyber-Vulnerability Assessment of each electronic Access Points to the Electronic Security Perimeter(s) at least once in every 6 (six) months and/or after any change in Security Architecture.
- e) The Responsible Entity shall ensure that all critical, high and medium vulnerabilities identified as a result of cyber Vulnerability Assessment shall be closed and verified for the effective closure.

#### Article 5. Cyber Security Requirements

- a) The Responsible Entity shall have an Information Security Division (ISD), headed by CISO.
- b) The Responsible Entity shall ensure that the ISD must be functional on 24x7x365 basis and is manned by sufficient numbers of Engineers having valid certificate of successful completion of course on cyber security of Power Sector from the Training Institutes designated by CEA.
- c) The Responsible Entity shall ensure that ISD
  - 1) has on-boarded Cyber Swachhita Kendra(CSK) of CERT-In, if they have public IP.
  - 2) has timely acted upon the advisories, guidelines and directive of NCIIPC, CSK, CERT-In and Sectoral CERTs,
  - 3) has deployed an Intrusion Detection System and Intrusion Prevention System capable of identifying behavioural anomaly in both IT as well as OT Systems.
  - 4) shares reports on incident response and targeted malware samples with CERT-In.
  - 5) updates the firmware/software with the digitally signed OEM validated patches only.
  - 6) enables only those ports and services that are required for normal operations. In case of any emergency the procedure as laid in Access management be followed.
  - 7) maintains firewall logs for the last 6 months duration. Firewall logs shall be analysed and all critical and high severity comments shall be addressed for effective closure.
  - 8) retains document of FAT, SAT test results and report/ certificate of cyber tests carried out for compliance of Government Orders and Cyber Security Audit.\*
  - 9) maintains all cyber logs and cyber forensic records of any incident for at least\*\* 90 days.

\* FAT, SAT must include comprehensive cyber security tests of the component/equipment/system to be delivered/delivered at site.

\*\* 90 days from date of the commissioning of the system/recovery from any incident, whichever is later.
- d) The Responsible Entity shall routinely audit and test security properties of the Critical System and must act upon, in case if any new vulnerabilities is identified through testing or by the equipment manufacturer.

- e) The Responsible Entity shall design a secure architecture for control system appropriate for their process control environment\*.
- f) All State Load Dispatch Centres(SLDCs) shall comply with the directions issued by the National Load Dispatch Centre(NLDC) as well as Regional Load Dispatch Centres(RLDCs) U/n 29 (1) of the Electricity Act, 2003 to ensure stability and cyber security of grid operation and achieve efficiency in the grid operation. In case of any non-compliance, the Head of SLDC shall be responsible and shall be liable for Penalty as per the provision of CERC/SERC.

\*There are so many different types of systems in existence and so many possible solutions, it is important that the selection process ensures that the level of protection is commensurate with the business risk and the Responsible Entity shall not rely on one single security measure for its defence. (Reference IEC/TR62351-10 Edition1.0 2012-10 *Power systems management and associated information exchange –Data and communications security – Part 10: Security architecture guidelines*)

#### **Article 6 Cyber Risk Assessment and Mitigation Plan**

- a) The Responsible Entity shall document in their Cyber Security Policy a Cyber Risk Assessment and Mitigation Plans drawn upon the best practises being followed in the Power Sector, and the same shall be approved by Board of Directors.
- b) The Cyber Risk Assessment and Mitigation Plans shall clearly define the matrix for assessing the cyber risk of both IT and OT environment and risk acceptance criteria.
- c) The Cyber Risk Assessment Plan shall be capable to demonstrate that repeated cyber security risk assessment delivers consistent, valid and comparable results.
- d) The review of cyber risk assessment shall be carried out at least once in a Quarter. The actionable of risk treatment and mitigation shall be tracked in this review for their effectiveness.
- e) The CISO shall be responsible for implementation and regular review, on the basis of internal and external feedbacks, of the Cyber Risk Assessment and Mitigation Plans.

#### **Article 7 Phasing out of Legacy System**

- a) As the life cycle of the Power System Equipment System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment System should have the ability to be upgraded.
- b) The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipments/systems nearing end life or are left without support from OEM. Thereafter CISO shall identify equipment/systems to be phased out from the list drawn, firm up their replacement plan and put up the replacement plan for approval before the Board of Directors.
- c) The CISO shall ensure that till equipments/systems nearing end life or left without support from OEM are not replaced, their cyber security is hardened and ensured through additional controls provisioned in consultation with the OEM or alternate Supplier(s)\*.  
\*e.g. Use of CDAC developed AppSamvid and whitelisting of applications installed may be explored across all legacy systems.
- d) The Responsible Entity shall document in their Cyber Security Policy a Standard Operating Procedure for safe and secure disposal of outlived or legacy devices.

## **Article 8. Cyber Security Training**

- a) The Responsible Entity shall establish, document, implement, and maintain an annual cyber security training program for personnel having authorized cyber or authorized physical access (unescorted or escorted) to their Critical Systems.
- b) The Responsible Entity shall review annually their cyber security training program and shall update it whenever necessary. Annual Review shall record evaluation of the effectiveness of the trainings held.
- c) The Responsible Entity shall ensure that Cyber Security training program designed for their IT as well as OT O&M Personnel must include following topics and as per their functional requirements and security concerns additional topics shall be added:
  - 1) User authentication and authorization.
  - 2) Cyber Security and Protection mechanisms of IT/OT/ICS Systems.
  - 3) Introduction to various standards i.e. ISO/IEC:15408, ISO/IEC:24748-1, ISO: 27001, ISO: 27002, ISO 27019, IS 16335, IEC ISO:62443.
  - 4) Training on implementation of ISO/IEC 27001 and awareness on IEC 62443.
  - 5) Vulnerability Assessment in the Critical System.
  - 6) Monitoring and preserving of electronic logs of access of Critical Assets.
  - 7) Detecting cyber-attacks on SCADA and ICS systems
  - 8) The handling of Critical System during cyber crisis.
  - 9) Action plans and procedures to recover or re-establish normal functioning of Critical Assets and access thereto following a Cyber Security Incident.
  - 10) Hands on SCADA operation at any of the Regional Load Dispatch Centre.
  - 11) Handling of risks involved in the procurement of COTS Products.
- d) All Personnel engaged in O&M of IT & OT Systems shall mandatorily undergo courses on cyber security of Power Sector from any of the training institute designated by CEA, immediately within 90 days from the notification of CEA Guidelines on Cyber Security in Power Sector.
- e) The Responsible Entity shall ensure that none of their newly hired or the current Personnel have access to the Critical System, prior to the satisfactory completion of cyber security training programme from the Training Institutes designated in India, except in specified circumstances such as cyber crisis or an emergency.
- f) NPTI in consultation with CEA shall identify and design domain specific courses on Cyber Security for different target groups. The "Governing Board for PSO Training and Certification" shall approve the content, duration etc of these courses and shall review it Annually. NPTI shall conduct these courses at all of their branches on regular basis and shall maintain the list of the Participants successfully completing the course.

## **Article 9 Cyber Supply Chain Risk Management**

- a) The Responsible Entity shall ensure that, as and when Ministry of Power, Government of India notifies the Model Contractual Clauses on cyber security, these clauses are included in their every Bid invited for procurement of any ICT based components/equipments/System to be used for Power System.
- b) The Responsible Entity shall ensure that all the Communicable Intelligent Equipments and the Service Level Agreements (SLAs) for their Critical Systems shall be sourced from the list of the "Trusted Sources" as and when drawn by MoP/CEA.



- c) The Responsible Entity shall ensure that, in case, for the any Communicable Intelligent Devices, if no Trusted Source has been identified, then the successful bidder in compliance with the provisions made in MoP order dated 27/2020 and any other relevant MoP order has got the product cyber tested for any kind of embedded malware/Trojan/cyber threat and for adherence to Indian Standards at the designated lab.
  - d) The Responsible Entity shall ensure that the essential cyber security tests are carried out successfully during FAT, SAT as detailed in **Annexure A**. The equipment/System besides for functionality shall also be tested in the factory for vulnerabilities, design flaws, parts being counterfeit or tainted, so as to minimize problems during on-site-testing and installation. Cyber Security Conformance Testing are to be carried out in the designated Lab as listed in **Annexure-I of MoP Order No. 12/13/2020-T&R dt. 8<sup>th</sup> June, 2021(Order at Annexure-B)**.
  - e) The Responsible Entity shall ensure that the Equipment/System supplied by the successful bidder shall accompany with a certificate<sup>1, 2</sup> obtained by OEM from a certification body accredited to assess devices and process for conformance to IEC 62443-4 standards during design and manufacture. The Responsible Entity shall accept the certificate submitted along with the supplied Equipment/System only if it is in line with the Testing Protocol as notified by Ministry of Power, Government of India, from time to time.
  - f) The Responsible Entity in compliance to the requirement of Article 9(e) shall also accept, till the setting up of an adequate certification facility in the India, a digitally signed self-declaration of conformance to the IEC 62443-4 standards during design and manufacture of the equipment/system, if submitted by the OEM.
  - g) The Responsible Entity shall dispose all unserviceable or obsolete Communicable Intelligent Devices as per the procedure laid in their Cyber Risk Assessment and Mitigation Plans which shall be in line with the prevailing best practices.
- § The National & International certification may be specified in the tender for critical systems/sub-systems being procured by the Responsible Entity.

# Certification Schemes:

- Embedded Device Security Assurance Certification** is for an individual product,
- System Security Assurance Certification** is for a set of products in a system (possibly from different vendors)
- Security Development Lifecycle Assurance Certification** is for the development processes that a manufacturer uses for developing products.

#### **Article 10 Cyber Security Incident Report and Response Plan**

- a) The CISO of the Responsible Entity shall report in the formats prescribed by CERT-In, all Cyber Security Incidents, classified as reportable events.
- b) Root cause analysis for all reportable events shall be carried out and corrective action taken, so as to ensure that any re-occurrence of such event can be managed with ease.
- c) The Responsible Entity shall mandatorily define in their Cyber Security Policy, criteria(s) identified on the basis of impact analysis, for declaring the occurrence of

Cyber Security Incident(s) as a Cyber Crisis in the System owned or controlled by them.

- d) The Responsible Entity shall mandatorily designate an Officer along with his/her standby by name and designation and empower them to declare an occurrence of the incident(s) as "Cyber Crisis". The contact details of these Officers shall be updated in the C-CMP within 15 days of changes if any due to transfer or superannuation etc.
- e) The CISO shall ensure that during any Cyber Security Incident, ISD monitors and minutely records every details of cyber security events and incidents in both IT as well as the OT System owned or controlled by the Responsible Entity.
- f) The CISO shall ensure that each cyber incident is handled strictly as per Cyber Security Incident Response Plan detailed in the latest C-CMP approved by the Board of Directors.
- g) The Responsible Entity shall ensure that the efficacy of the Cyber Security Incident Response Plan is tested annually through mock drill(s) carried out, if feasible, as simulation exercise(s) or as table top exercise(s) with wider participation of their employees, in consultation with CERT-In and sectoral CERT. In case if any shortcoming is observed in the Cyber Security Incident Response Plan suitable changes shall be made in it.
- h) The Responsible Entity shall ensure that the CISO compiles details of incident detection, incident handling, learnings from each incident and damage claims made if any and shall report to CERT-In as well as upload information on ISAC-Power Portal.

#### **Article 11. Cyber Crisis Management Plan(C-CMP)**

- a) The Responsible Entity shall prepare a Cyber Crisis Management Plan and submit to their sectoral-CERT for review with intimation to Ministry of Power CISO-MoP. Responsible Entity shall update their C-CMP on the basis of comments made by sectoral-CERT and then submit for vetting to CERT-In. The C-CMP shall be updated once again to include the observations made by CERT-In before seeking approval of Board of Directors for implementation of C-CMP.
- b) The Responsible Entity shall ensure that the C-CMP is reviewed at least annually. The CISO shall ensure that all changes are made in C-CMP only with the due approval of Board of Directors and the changes made in C-CMP have been communicated through a verifiable means to all the concerned Personnel of the Responsible Entity.
- c) The CISOs shall be the custodian of all the cyber security related documents including Cyber Crisis Management Plan, Risk Treatment Plan, Statement of Applicability of controls, and compliance to regulator's requirement.
- d) The CISO shall be accountable for ensuring enforcement of C-CMP by Information Security Division of the Responsible Entity, during a cyber-crisis, as and when declared by the designated Officer. (refer Article 10(d))

#### **Article 12: Sabotage Reporting%**

- a) The Responsible Entity shall incorporate procedure for identifying and reporting of sabotage in their Cyber Security Policy within 30 days from issue of the Guidelines, or grant of licence under the appropriate legal provisions to the Responsible Entity.
- b) The CISO shall be held liable for non-reporting of identified sabotage(s) as per procedure laid for identifying and reporting of sabotage in the Cyber Security Policy of the Responsible Entity.

- c) The CISO shall prepare a detailed report on disturbances or unusual occurrences, identified, suspected or determined to be caused by sabotage in the Critical System of the Responsible Entity, and shall submit the report to the Sectoral CERT as well as to CERT-In within 24 hours of its occurrence.
- d) The CISO shall submit to NCIIPC within 24 hours of occurrence the report on every sabotage classified as cyber incidents(s) on "Protected System".
- e) The CISO upon occurrence on every sabotage shall take custody of all log records as well as digital forensic records of affected Cyber Assets, Intrusion Detection System, Intrusion Protection System, SIEM and shall preserve them for at least 90 days and shall make them available as and when called upon for investigation by the concerned Agencies.

*\*Disturbances or unusual occurrences, suspected or determined to be caused by sabotage.*

*Sabotage e.g. can be a forced intrusion in un-manned/manned facility and taking control of operation of Critical System through a communicating device.*

### **Article 13 Security and Testing of Cyber Assets**

- a) The Responsible Entity shall ensure security of all in-service phase as well as standby Cyber Assets through regular firmware/Software updates and patching, Vulnerability management, Penetration testing (of combined installations), securing configuration, supplementing security controls. CISO shall maintain details of update version of each firmware and software and their certification if received from OEMs.
- b) The Responsible Entity shall carry out regularly Vulnerability Assessment of all Cyber Assets owned or under their control. If a Cyber Asset is found vulnerable to any exploits or upon any patch updates or major configuration changes, then further Penetration Testing may be carried out offline or in a suitably configured laboratory test-bed to determine other vulnerabilities that may have not been identified so far.
- c) The Responsible Entity shall specify security requirement and evaluation criteria during each phase of their procurement Process.
- d) The Responsible Entity shall ensure that all Cyber Assets being procured shall conform to the type tests as mentioned in the specification for type testing listed in the bid document. Type test reports of tests conducted in NABL accredited Labs or internationally accredited labs (with in last 5 years from the date of bid opening) shall be mandated to be submitted along with bid. In case, the submitted Type Test reports are not as per specification, the re-tests shall be conducted without any cost implication to the Responsible Entity.
- e) The Responsible Entity shall ensure that all Communicable devices are tested for communication protocol as per the ISO/IEC/IS standards listed in **MoP Order No. 12/13/2020-T&R dated 8<sup>th</sup> June, 2021(Annexure-B)**.
- f) The Responsible Entity shall ensure that all Critical Systems designed with Open Source Software are adequately cyber secured.
- g) The Responsible Entity as a best practise upon any incidence of Cyber Security Breach shall carry out cyber security tests at any lab designated for cyber testing by Ministry of Power. These tests shall be similar to Pre Commissioning Security Test and those essential for carrying out Post Incident Forensics Analysis.

### **Article 14 Cyber Security Audit**

- a) The Responsible Entity shall implement Information Security Management System (ISMS) covering all its Critical Systems.
- b) The Responsible Entity shall through a CERT-In Empanelled Cyber Security OT Auditor shall get their IT as well as OT System audited at least once in every 6 (six) months and shall close all critical and high vulnerabilities within a period of one month and medium as well as low non-conformity before the next audit. Effective closure of all non-conformities shall be verified during the next audit.
- c) The Cyber Security Audit shall be as per ISO/IEC 27001 along with sector specific standard ISO/IEC 27019, IS 16335 and other guidelines issued by appropriate Authority if any. These mentioned standards shall be current with all amendments if any and in case if any standard is superseded, the new standard shall be applicable. CISO shall ensure immediate closure of non-conformance, based on the criticality and by means all non-conformances are to be closed before the next audit.
- d) The Responsible Entity shall ensure that CISO has all the required systems and documents in place, as mandated by NSCS for base line cyber security audit.

**FAT & SAT**

1. During FAT stage, the customer has to verify all types test reports / certificates including Communication protocol and security conformance tests of the devices offered for FAT.
2. FAT of SCADA involves testing as a whole system in the integrated scale down set up. For SCADA, Indian standard IS 15953: 2011 "SCADA System for Power System Applications" provides definition and guidelines for the specification, performance analysis and application of SCADA systems for use in electrical utilities (for transmission & Distribution) including guidance on Tests and inspections.
3. The SAT will be done at customer site as per the SAT document mutually agreed by buyer and supplier. For SAT also, guidance from IS 15953: 2011 need to be applied.
4. IEC 61850-10-3 Communication Networks and Systems For Power Utility Automation- Functional testing of IEC 61850 systems (in draft stage - CDTR) covers testing of applications within substations covering
  - a. A methodical approach to the verification and validation of a substation solution
  - b. The use of IEC 61850 resources for testing in Edition 2.1
  - c. Recommended testing practices for different use cases
  - d. Definition of the process for testing of IEC 61850 based devices and systems using communications instead of hard wired system interfaces (ex. GOOSE and SV instead of hardwired interfaces)
  - e. Use cases related to protection and control functions verification and testing

This standard may be used as a guidelines for FAT & SAT for Substation Automation System (SAS) based on IEC 61850.

## List of designated laboratories for cyber security conformance testing

Table -A. Field Equipment /Operational Technology (OT)

Sl. No.	Equipment	Communication Protocol Conformance Standards	Protocol Security Conformance Standards	Designated Laboratories
1	Remote Terminal Units (RTUs) & PLCs with IEC communications protocols	IEC 60870-5 -101 / IEC 60870-5 -104 (Test Details Annexure 2)	IEC 60870-5-7 Security extension & IEC 62351 series (specifically IEC 62351-100 parts 1 & 3) ( Test Details Annexure-2	Central Power Research Institute (CPRI), Prof Sir C V Raman Road, Sadashivanagar P O, Bengaluru - 560080, Karnataka
2	Intelligent Electronic Equipment / Numerical Protection Relays / Bay Control Units / Bay Protection Units, Gateways, Transformer Tap controller/ changer, etc. with IEC 61850 communication protocol	IEC 61850 - 5 to IEC 61850 - 10  ( Test Details Annexure 2)		CPRI
3	Smart meters with IEC 62056 communication protocols	IEC 62056 series / DLMS & IS 15959 series and IS 16444 series ( Test details Annexure 2)	IEC 62056 series / DLMS & IS 15959 series and IS 16444 series (Test Details Annexure 2)	1. CPRI 2. Electrical Research and Development Association (ERDA), ERDA Road, GHDC, Makarpura, Vadodra - 390 010 Gujarat 3. Yadav Measurements Pvt. Ltd. (YMPL) 373-375, RHCO Bhamashah Industrial Area Kaladwas 313003 Udaipur - Rajasthan

**Information Technology (IT) Equipment (Main / Backup / Disaster recovery (DR) Control Centre / Substation control centre IT equipment)**

All IT products procured /supplied shall have a valid Certificate of Common Criteria as per ISO/IEC 15408 issued by signatories of the Common Criteria Recognition Agreement (CCRA) ([www.commoncriteriaportal.org](http://www.commoncriteriaportal.org)).

Import/procurement/supplied from vendors sourcing from prior reference countries, the Certificate for Common Criteria shall be from Government Laboratories in India according to the IC3S scheme operated by Ministry of Electronics and Information Technology, which is a signatory to CCRA.

<https://www.commoncriteria-india.gov.in/>

**Details of tests for various identified products****Remote Terminal Units (RTUs) (Sl. No: 1 of Table – A of Annexure – 1)****Test protocol:**

Utilities / manufacturers will submit the sample along with all the required technical documentation for taking up testing to the designated laboratory.

**Reference standards**

- 1) IEC 60870-5-101 & IEC 60870-5-104 as applicable
- 2) IEC 60870-5-7 Telecontrol equipment and systems - Part 5-7; Transmission protocols - Security extensions to IEC 60870-5-101 and IEC 60870-5-104 protocols (applying IEC 62351)
- 3) IEC 62351-100-1 & IEC 62351-100-3 and other cross referenced standards.

**Test cases****Extract from standard (IEC 62351-100-1)**

The conformance test cases are divided into four clauses:

- Clause 5: Verification of configuration parameters. This clause contains the configuration parameters affecting the message contents and/or the protocol behaviour.
- Clause 6: Verification of communication. The goal of this clause is to verify that Device Under Test (DUT) is able to implement the security extension messages as described in IEC TS 60870-5-7.
- Clause 7: Verification of procedures. The goal of this clause is to verify that DUT is able to execute the security extension procedures as described in IEC TS 62351-5.
- Clause 8: Test result chart. This clause contains the results of the test cases listed in Clauses 6 and 7 for each supported value of the configuration parameters listed in Clause 5.

The test cases are organized in tables. They are numbered; their numbering syntax is: Subclause number (where the Table is located) – test case number.

In the column 'reference' each test case has a direct reference to IEC TS 62351-5 or IEC TS 60870-5-7 where the clause under test is defined.

Test cases are mandatory depending on the description in the column 'Required'. The following situations are possible:

M= Mandatory test case. The test is referencing a clause that is mandatory in IEC TS 62351-5 or IEC TS 60870-5-7.

Protocol Information Conformance Statement (PICS) x, x = Mandatory test case if the functionality is enabled in the PICS (by marking the applicable check box), with a reference to the section number of the PICS (x.x).



### Conformance testing of security extension procedures

The security extension procedures can be summarized as follows:

- User management
- Update key maintenance
- Session key maintenance
- Challenge Reply authentication
- Aggressive Mode authentication

### Extract from standard (IEC 62351-100-3)

IEC 62351-3 defines the requirements related to the authentication/encryption protocol, procedures and methods to be implemented at TCP/IP (transport) level.

The conformance test cases are divided into three clauses:

- Clause 5: Verification of configuration parameters. This clause contains the parameters specified by the standards referencing IEC 62351-3 (see IEC 62351-3-2014/AMD1-2018, Clause 7) and affecting the protocol behaviour.
- Clause 6: Verification of IEC 62351-3 requirements. The goal of this clause is to verify that DUT is conformant to the requirements of the IEC 62351-3.
- Clause 7: Test result chart. This clause contains the results of the test cases listed in Clause 6 for each supported value of the configuration parameters listed in Clause 5.

The test cases are organized in tables. They are numbered, their numbering syntax is: Subclause number (where the table is located) + test case number.

In the column 'Reference' each test case has a direct reference to IEC 62351-3 where the clause under test is defined. PICS or Protocol Implementation eXtra Information for Testing (PIXIT) could be found in the "Reference" column for some test cases whenever the execution of the test case shall take into account specific parameter values declared in the PICS or PIXIT of the DUT.

Test cases are mandatory depending on the description in the column 'Required'. The following situations are possible:

M = Mandatory test case. The test is referencing to a clause that is mandatory in IEC 62351-3.

PICS

or

PIXIT = Mandatory test case if the functionality is enabled in the PICS or PIXIT by marking the applicable check box or declaring the applicable value.

### **Intelligent Electronic Devices (IEDs) (Sl. No. 2 of Table – A of Annexure – 1)**

Utilities/ manufacturers will submit the sample along with all the required technical documentation for taking up testing to the designated laboratory.

#### **Reference standards:**

IEC 61850 series

Specifically IEC 61850-5, IEC 61850-6, IEC 61850-7, IEC 61850-8, IEC 61850-9 and IEC 61850-10

#### **Test cases**

Communication protocol conformance as per IEC 61850 -10. This part of standard defines methods and abstract test cases for conformance testing of client, server and sampled values devices used in power utility automation systems, the methods and abstract test cases for conformance testing of engineering tools used in power utility automation systems, and the metrics to be measured within devices according to the requirements defined in IEC 61850-5. Further this part of standard specifies standard techniques for testing of conformance of client, server and sampled value devices and engineering tools, as well as specific measurement techniques to be applied when declaring performance parameters. The use of these techniques will enhance the ability of the system integrator to integrate IEDs easily, operate IEDs correctly, and support the applications as intended.

### **Smart Meters (Sl. No. 3 of Table – A of Annexure – 1)**

Utilities/ manufacturers will submit the sample along with all the required technical documentation for taking up testing to the designated laboratory.

IEC 62056 series of standards (Electricity metering data exchange – The DLMS/COSEM suite) specifies details of communication protocol requirements, conformance testing and security requirements. The Part 5-3 (DLMS/COSEM application layer) specifies the DLMS/COSEM application layer in terms of structure, services and protocols for DLMS/COSEM clients and servers, and defines rules to specify the DLMS/COSEM communication profiles. It defines services for establishing and releasing application associations, and data communication services for accessing the methods and attributes of COSEM interface objects, defined in IEC 62056-6-2 using either logical name (LN) or short name (SN) referencing.

Clause 5 and sub clauses specifies security requirements. It cover security concepts, Identification and authentication, Cryptographic algorithms, Cryptographic keys – overview, Key used with symmetric key algorithms, Keys used with public key algorithms and Applying cryptographic protection.

**Note:** All above referred standards shall be latest with amendments if any at the time of submission of sample(s) for testing.

**Testing Criteria**

**1) Supply from Trusted Sources**

The sample size shall be as specified by CEA as per the approved criteria for Trusted Vendors

**2) Supply from other than trusted vendors**

The sample size shall be shall be 5% of the supply lot / ordered quantity (minimum one). The manufacturer shall submit request to the Nodal agency along with vendor's / manufacturer's certifications for supply chain management system practices and secure product development process implementations based on any one or more of standards ISO / IEC 27036, ISO / IEC 20243, IEC 62443 for verification.

After scrutiny of vendor's / manufacturer's certifications the supplier / utilities shall be asked to submit product to the designated laboratory for communication and cyber security conformance testing.

The supply lot shall stand rejected on failure to comply with the test requirements.

**3) Supply from prior reference countries**

The utility shall obtain prior permission from the Government of India for importing the product / system from prior reference countries.

The sample size shall be shall be 10 % of the supply lot / ordered quantity (minimum one). The manufacturer shall submit request to the Nodal agency along with vendor's / manufacturer's certifications for supply chain management system practices and secure product development process implementations based on any one or more of standards ISO / IEC 27036, ISO / IEC 20243, IEC 62443 for verification.

After scrutiny of vendor's / manufacturer's certifications the supplier / utilities shall be asked to submit product to the designated Government / Government controlled Autonomous laboratory for type tests (Annexure –4) and communication & cyber security conformance testing.

The supply lot shall stand rejected on failure to comply with the test requirements.

**Type Tests**

Products imported from prior reference countries shall also undergo type testing as per following standards in addition to communication protocol and security conformance testing at the designated Government / Government controlled Autonomous laboratory:

**Type test standards for RTUs**

1. IEC 60870-1-2:1989 Telecontrol equipment and systems. Part 1: General considerations. Section Two: Guide for specifications.
2. IEC 60870-2-1:1995 Telecontrol equipment and systems - Part 2: Operating conditions - Section 1: Power supply and electromagnetic compatibility.
3. IEC 60870-2-2:1996 Telecontrol equipment and systems - Part 2: Operating conditions -Section 2: Environmental conditions (climatic, mechanical and other non-electrical influences)
4. IEC 60870-3:1989 Telecontrol equipment and systems. Part 3: Interfaces (electrical characteristics)

**Type test standard for IEDs / Numerical Protection Relays / Bay controls units:**

1. IEC 61850-3: 2013, Ed. 2 Communication networks and systems for power utility automation – Part 3: General requirements.

**Type test standards for Smart meters**

1. IS 16444: 2015 AC static direct connected watthour smart meter class 1 and 2 – Specification.
2. IS 16444 Part 2: 2017 AC static transformer operated watthour and var - Hour smart meters, class 0.2 S, 0.5 S and 1.0 S: Part 2 specification transformer operated smart meters.

**Note:**

1. All above referred standards shall be latest with amendments if any at the time of submission of sample(s) for testing.
2. Type tests generally covers functionality, environmental, mechanical, EMI/ EMC and electrical safety related tests.



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**From:** Sk, Samad <samad.sk@honeywell.com>  
**Sent:** Friday, May 24, 2024 1:39 PM  
**To:** MUKESH KUMAR BALIWAL <MKBALI WAL@NTPC.CO.IN>  
**Cc:** G V L N Rao <GVNRAO@NTPC.CO.IN>; Biswas, Subrato (IE07x) <Subrato.Biswas@Honeywell.com>; Chakravarty, Shreeraj <Shreeraj.Chakravarty@Honeywell.com>  
**Subject:** RE: [External] Honeywell make CCTV System obsolescence certificate required

Dear Sir,

We will check with our product team & let you know.

Thanks & Best Regards,

**Sk Samad**  
Honeywell | BUILDING AUTOMATION  
Kolkata, India  
Mobile: +91-9031302022  
Email: [Samad.Sk@Honeywell.com](mailto:Samad.Sk@Honeywell.com)

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**From:** MUKESH KUMAR BALIWAL [MKBALI WAL@NTPC.CO.IN](mailto:MKBALI WAL@NTPC.CO.IN)  
**Sent:** Friday, May 24, 2024 1:20 PM  
**To:** Sk, Samad [samad.sk@honeywell.com](mailto:samad.sk@honeywell.com)  
**Cc:** G V L N Rao [GVNRAO@NTPC.CO.IN](mailto:GVNRAO@NTPC.CO.IN)  
**Subject:** [External] Honeywell make CCTV System obsolescence certificate required

You don't often get email from [mkbaliwal@ntpc.co.in](mailto:mkbaliwal@ntpc.co.in). [Learn why this is important.](#)

**WARNING:** This message has originated from an External Source. This may be a phishing email that can result in unauthorized access to Honeywell systems. Please use proper judgment and caution when opening attachments, clicking links, scanning QR codes, or responding.

Dear Sir,

As discussed over phone, please find attached Data sheets and BOM of Honeywell make CCTV system.

May kindly confirm whether installed CCTV system at NTPC Barh site including Cameras, servers and software spares are available or not.



# Customer Communication

## Honeywell Commercial Video Products: End of Support Notification WEF 01.12.2020

Dear Customer,

Due to the introduction of newer products and the evolution of IP technologies, as of 1st December 2020, Honeywell will no longer provide support for the requirements of new features, integration and cyber security updates for the legacy commercial video products in the list enclosed below.

The IT industry has been evolving fast and most legacy kernels such as Open Source Software (OSS) and drivers have not been updated by the suppliers. This makes it difficult for Honeywell to provide further support for End of Life (EOL) products. With this announcement of End-of-Support on mentioned products, Honeywell will no longer provide support for the requirements of technical support, out of warranty repairs, new features, integration and cyber security updates.

Please contact Honeywell account managers, sales and/or technical engineers in respective regions, if you have any requirement for the replacement of legacy products from Honeywell. We offer a new generation of commercial video products and solutions delivering superior video quality performance, easy integration with other solutions, improved user experience, enhanced cyber security risk reduction, and lower installation, operation and maintenance costs.

Honeywell Video products within warranty will not be impacted by this End of Support notification. However, Honeywell will have no obligation for defects resulting from unauthorized modification, misuse, vandalism, alterations of serial number, or other causes unrelated to defective materials or workmanship, or failures related to batteries of any type used in connection with the products sold.

This discontinuation affects all part codes listed as per Annexure-1

Enclosed: Annexure-1: List of Honeywell Security Products Discontinued for Support w.e.f: 1<sup>st</sup> Dec 2020.



### Annexure-1

#### List of Honeywell Security Models Discontinued for Support w.e.f 1<sup>st</sup> Dec 2020

<b>Part Code</b>	<b>Description</b>
CABC600P	600TVL Bullet Camera
CABC600PD	600TVL Box Camera
CABC600PI30-W	600TVL Varifocal Bullet Camera
CABC600PI30-WC	600TVL Varifocal Bullet Camera
CABC600PI50-WC	600TVL Varifocal Bullet Camera
CABC600PT	600TVL Box Camera
CABC600PTW	600TVL Box Camera
CABC600PW	600TVL Box Camera
CABC700NIV100	700 TVL Box camera
CABC700P	700 TVL Box camera
CABC700PBW	700 TVL Box camera
CABC700PD	700 TVL Box camera
CABC700PI30-36	700 TVL Bullet camera
CABC700PIV30	700 TVL Bullet camera
CABC700PIV50	700 TVL Bullet camera
CABC700PT	700 TVL Box camera
CABC750MPI20-36	750 TVL Bullet camera
CABC750MPI20-60	750 TVL Bullet camera
CABC750MPI50-120	750 TVL Bullet camera
CABC750MPIV35	750 TVL Bullet camera
CADC600P38	750 TVL Bullet camera
CADC600PD-36	600TVL Bullet Camera
CADC600PD-38	600TVL Bullet Camera
CADC600PD-60	600TVL Bullet Camera
CADC600PI-36	600TVL Mini Dome Camera
CADC600PI-V36	600TVL Mini Dome Camera
CADC600PI-V36W	600TVL Bullet Camera
CADC600PIV-V	600TVL Dome Camera
CADC600PTV	600TVL Dome Camera
CADC600PTWV	600TVL Dome Camera
CADC600PV	600TVL Dome Camera

CADC600PWV	600TVL Dome Camera
CADC700P-25	700TVL Color Dome Camera
CADC700P-38	700TVL Color Dome Camera
CADC700PBWV	700TVL Color Dome Camera
CADC700PD-36	700TVL Color Dome Camera
CADC700PI30-36	700TVL IR Dome Camera
CADC700PIV30	700TVL IR Dome Camera
CADC700PIV30-V	700TVL IR Dome Camera
CADC700PTV	700TVL Color Dome Camera
CADC700PV	700TVL Color Dome Camera
CADC750MPI15-36	750TVL IR Dome Camera
CADC750MPIV25-V	750TVL IR Dome Camera
CADVR-04C1	4 Channel Digital Video Recorder 1 SATA
CADVR-04D	4 Channel Digital Video Recorder
CADVR-08C1	8 Channel Digital Video Recorder 1 SATA
CADVR-08D	8 Channel Digital Video Recorder
CADVR-1004C	4Channel Digital Video Recorder 1 SATA
CADVR-1004FD	4CH 1080P 1U Digital Video Recorder with 1SATA
CADVR-1004FD-H	4CH Full 1080P 1U Digital Video Recorder with 1SATA
CADVR-1004WD	4 Channel Digital Video Recorder
CADVR-1004WD-M	4 Channel Digital Video Recorder
CADVR-1008C	8CH Digital Video Recorder 1 SATA
CADVR-1008FD	8CH Digital Video Recorder 1 SATA
CADVR-1008WD	8CH Digital Video Recorder
CADVR-1008WD-M	8CH Digital Video Recorder
CADVR-1016C	16CH Digital Video Recorder 1 SATA
CADVR-1016WD	16CH Digital Video Recorder
CADVR-16C1	16 Channel Digital Video Recorder
CADVR-16C2	16 Channel Digital Video Recorder
CADVR-16D	16 Channel Digital Video Recorder
CADVR-2004FD	4CH Digital Video Recorder with 2SATA
CADVR-2004FD-H	4CH Digital Video Recorder with 2SATA
CADVR-2004WD	4CH Digital Video Recorder
CADVR-2008FD	8CH Digital Video Recorder with 2SATA
CADVR-2008FD-H	8CH Digital Video Recorder with 2SATA
CADVR-2008WD	8CH Digital Video Recorder with 2SATA
CADVR-2016FD	16CH Digital Video Recorder with 2SATA
CADVR-2016WD	16CH Digital Video Recorder with 2SATA
CADVR-4004D	4CH Digital Video Recorder with 4SATA

CADVR-4008D	8CH Digital Video Recorder with 4SATA
CADVR-4008FD	8CH Digital Video Recorder with 4SATA
CADVR-4008FD-H	8CH Digital Video Recorder with 4SATA
CADVR-4008WD	8CH Digital Video Recorder with 4SATA
CADVR-4016FD	16CH Digital Video Recorder with 4SATA
CADVR-4016WD	16CH Digital Video Recorder with 4SATA
CADVR-8008FD	8CH Digital Video Recorder with 8SATA
CADVR-8008FD-H	8CH Digital Video Recorder with 8SATA
CADVR-8016FD	16CH Digital Video Recorder with 8SATA
CADVR-8016WD	16CH Digital Video Recorder with 8SATA
CAHBC1080PI25-36	IR Bullet Camera,1080P
CAHBC1080PI40-80	IR Bullet Camera,1080P
CAHBC1080PI40V	IR Bullet Camera,1080P
CAHBC1080PI60V	IR Bullet Camera,1080P
CAHDC1080PI-V36	Vandal IR Dome Camera,1080P
CAHDC1080PIV-V	Vandal IR Dome Camera,1080P
CAIPBC210T	HD IP box camera 2MP
CAIPBC210TI1-4	HD IP IR bullet camera 2MP
CAIPBC210T-P	HD IP box camera,720P
CAIPBC330T	HD IP box camera 3MP
CAIPBC330TI1WV	HD IP IR bullet camera 3MP
CAIPBC330TI3-12	HD IP IR bullet camera 3MP
CAIPBC330TI3-6	HD IP IR bullet camera 3MP
CAIPBC330TI3W-6	HD IP IR bullet camera 3MP
CAIPBC330TI3W-8	HD IP IR bullet camera 3MP
CAIPBC330TI5-12	HD IP IR bullet camera 3MP fixed
CAIPBC330TI5W-25	HD IP IR bullet camera 3MP fixed
CAIPBC330TW-P	HD IP IR bullet camera 3MP fixed
CAIPDC210T-4	HD IP dome camera 2MP CMOS Fixed
CAIPDC210T-4F	HD IP dome camera 2MP CMOS Fixed
CAIPDC210TI1-4	HD IP IR dome camera 2MP IR
CAIPDC210TV	HD IP dome camera 2MP Vari-focal
CAIPDC210TV-P	HD IP dome camera 2MP Vari-focal
CAIPDC330TI1-4	HD IP IR dome camera 3MP IR
CAIPDC330TI1W-4	HD IP IR dome camera 3MP IR
CAIPDC330TI1WV-P	HD IP IR dome camera 3MP
CAIPDC330TI1WV-V	HD IP IR dome camera 3MP
CAIPDC330TV	HD IP dome camera 3MP Vari-focal
CAIPDC330TV-P	HD IP dome camera 3MP Vari-focal

CAIPDC330TV-PV	HD IP dome camera 3MP Vari-focal
CAIPDC330TV-V	HD IP dome camera 3MP Vari-focal
CAIPDC330TWV-PV	HD IP dome camera 3MP Vari-focal
CAIPDC330TWV-V	HD IP dome camera 3MP Vari-focal
CAIPSD334T-OW	HD IP IR dome camera 3MP
CALIPB-1AI36-10P	1.3 Megapixel IP IR weatherproof camera
CALIPB-1AI36-20P	1.3 Megapixel IP IR weatherproof camera
CALIPB-1AIV-40P	1.3 Megapixel IP IR weatherproof camera
CALIPB-1AP	1.3 Megapixel IP Box camera
CALIPD-1AI36-VP	1.3 Megapixel IP IR vandal-proof dome camera
CALIPD-1AI40P	1.3 Megapixel IP IR dome camera
CALIPDF-1A36P	1.3 Megapixel IP dome camera
CALIPSD-1AI18WP	1.3 Megapixel 720P IP IR PTZ camera
CALIPSD-1AI18WW	1.3 Megapixel 720P IP IR PTZ camera
CALNVR-1004A	4CH NVR, 1 SATA
CALNVR-1004CP	4CH NVR, 1 SATA
CALNVR-1008A	8CH NVR, 1 SATA
CALNVR-1016A	16CH NVR, 1 SATA
CALNVR-2008CP	8CH NVR, 2 SATA
CALNVR-2016B	16CH NVR, 2 SATA
CALNVR-2024B	24CH NVR, 2 SATA
CALNVR-4024B	24CH NVR, 4 SATA
CAMDVR-AT-8CH	8CH Mobile DVR
CAMDVR-BT-4CH	4CH Mobile DVR
CAMDVRBTA4CH	4CH Mobile DVR
CAMDVR-BTA-4CH	4CH Mobile DVR
CAMDVR-BTM-4CH	4 Channel Mobile DVR with SD card
CAMDVR-CAM700P-28V	700TVL Indoor MINI IR Dome Camera
CAMDVR-CAM700P-28X	700TVL IR Outdoor Camera
CAMDVR-CAM700P-36V	700TVL Indoor MINI IR Dome Camera
CANVR-1004HS	4Channel Network Video recorder, 1SATA
CANVR-1004HSP	4Channel Network Video recorder, 1SATA
CANVR-2008H	8Channel Network Video recorder, 2SATA
CANVR-2008HSP	8Channel Network Video recorder, 2SATA
CAPHC700P	Pinhole camera, 700TVL
CASD120PTW-IF	Indoor mini PTZ, 600TVL, 12x
CASD120PTWIW	Indoor High speed Ball camera 600TVL
CASD120PTW-OW	Outdoor dome camera, 600TVL, 12X optical zoom lens
CASD250PTWA-OP	Indoor Dome camera 25X

CASD270PT-OW	Outdoor PTZ camera
CASD360PTWA-OP	28X Indoor Speed Dome, PAL
DVCS-16	HD DVR Video Management system 16 Client
DVCS-4	DVCS SOFTWARE KIT (4 CLIENT)
EXH220P-25	EX-PROOF Camera with 25X ZOOM
EXH220PW-365	EXPROOF fixed camera,PAL
H2D2PR1	H264 1080p NVR
H2D2PR1X	H264 1080P NVR
H2S1P6X	Dome Mini IP 720P Camera
H2S2P6X	Dome Mini IP 1080P Camera
H3D2SR2X	Dome Mini IP 1080P Camera
H4D2PRV2	H.264 1080P Vari-Focal Dome Camera PAL
H4D2PRV2X	IP IR Dome, 2 MP PoE Camera
H4D2S2X	DOME MINI IP Camera 1080P
H4W1F1X	DOME IP Camera 720P
HABC-1305PI	,960P AHD camera
HADC-1305PI	960P AHD camera
HA-DVR-1104	4 Channel , 720P DVR, 1 SATA
HA-DVR-1108	8 Channel , 720P DVR, 1 SATA
HAM9660M	1.3MP Fixed Box Camera
HAM9730M	Indoor 1.3 MP Fixed Dome Camera
HB75HD1X	Bullet camera 720p
HBD2FR1X	IP Bullet camera D/N IR 1080P 3-9mm
HBD2FR2X	IP Bullet camera D/N IR 1080P 10-23mm
HBD2PR1	IP Bullet camera IP IR TDN H264 1080p
HBD2PR2X	1080p Bullet camera,PAL
HBD2PRV2X	1080p Bullet camera,PAL
HBPC-7500P	700TVL pinhole camera
HBPC-7500PWS	650TVL pinhole camera
HBPC-7600P	700TVL pinhole camera
HCC484LX	Box camera 480TVL
HCC-5605TVI	600TVL IR bullet camera
HCC-6605P	CCD BOX CAMERA, 600 TV
HCC-6605PT	600TVL box camera
HCC-6605PVI	Outdoor box camera
HCC-685PT	Box camera 550TVL
HCC-690P	550TVL-Box camera
HCC-745P-VR-G	480TVL Box camera
HCC-8655PT	650TVL box camera

HCC-8655PTVI	650TVL IR Array camera
HCC-8655PTVI-C	650TVL vandal-proof IR bullet camera
HCC-8655PTW	650TVL box camera
HCC-8655PTWVI-C	650TVL vandal-proof IR bullet camera
HCC-960P-VR	Box camera, PAL
HCC-965P-VR	650TVL Box camera
HCD2FX	Box IP Camera 1080P
HCD484LX	Box camera 480L
HCD554IPX	4CIF box camera
HCD5MIHX	720p box camera,PoE
HCD80484X	480TVL Box camera
HCD890X	High Resolution iCore Box Camera
HCD-890X	Box camera
HCD895X	540TVL box cameras
HCD92534X	Bullet camera 530TVL
HCPB302	MARINE VISIBLE BULLET 30x 1080P
HCS554IPX	4CIF Mini dome camera
HCS890X	High Resolution iCore Box Camera
HCS895X	540TVL box cameras
HCU484X	480TVL Box camera
HD-16DVR-C	16-CHANNEL EMBEDDED DVR
HD-16DVR-D	16 CHANNEL DVR
HD30HD1X	Rugged Ball camera 720p
HD3MDIHX	Minidome indoor camera 720p
HD3MDIPX	Dome camera 720p
HD3VC4SAX	DOME INT COL Mini Dome
HD4CH	Color, Mini Dome Camera
HD4CHX	540L Dome camera
HD4D3SX	600TVL dome camera
HD4D3X	Mini Dome camera 540TVL
HD4D9SX	600TVL mini dome camera
HD4DIRSX	600TVL mini dome camera
HD4HDIHX	DOME IP camera1080p
HD4MDIHX	Vandal proof camera, 720p, MINIDOME
HD4MDIPX	720p Dome camera
HDC-505P-60	Interior Dome, 3.6mm fixed lens, 480TVL
HDC-505PI-36	Dome 480 TVL camera
HDC-505PI-60	Dome 480 TVL camera
HDC-505PV	480TVL Interior Dome Camera

HDC-515PI-60	480TVL Interior Dome Camera
HDC-5605TVI	600TVL IR Dome camera
HDC-605P-36	480TVL Interior Dome Camera
HDC-605P-60	480TVL Interior Dome Camera
HDC-605PV	COLOUR DOME CAMERA 530TVL
HDC-6600P-36	600TVL mini dome camera
HDC-6605P-28	600TVL fixed dome camera
HDC-6605P-36	600TVL fixed dome camera
HDC-6605P-60	600TVL fixed dome camera
HDC-6605PV	600TVL fixed dome camera
HDC-6605PVI	600TVL fixed dome camera
HDC-690PV	550TVL dome camera
HDC-8655PTV	650TVL fixed dome camera
HDC-8655PTVI	650TVL IR fixed dome camera
HDC-8655PTWVI	FIXED DOME, 600 TVL
HDC-8655PV	650TVL fixed dome camera
HDC-890P-36	Fixed dome camera
HDC-890P-60	Fixed dome camera
HDC-890PTV	Dome camera
HDC-890PV	Varifocal dome camera
HDC-890PVIA-E	540TVL dome camera
HDC-895PTV	580TVL dome camera
HDC-895PV	530TVL Dome Camera
HDC-960PV	1/3" DOME, VARIFOCAL
HD-DVR-1004	MOBILE ENABLED 4-CH DIGITAL VIDEO RECORD
HD-DVR-1008	Mobile Enabled 8 Channel Digital Video
HD-DVR-1016	Mobile Enabled 16 Channel Digital Video
HD-DVR-7016	16-CH EMBEDDED DVR, 400/480FPS, 8 PORTS,
HD-HDVR-6016	16Ch DVR
HD-JC-010	NETWORK JOYSTICK KEYBOARD
HD-NVR-1032	32Ch.NVR,800fps@D1 PAL,8 SATA,240VAC
HD-NVR-108	8 CHANNEL NVR
HD-NVR-116	16 CHANNEL NVR
HDPTZ218	18x PTZ
HDPTZ233	33x PTZ
HDR-FD927M	8 Ch 5DVR
HD-WDVR-1004	4-Channel Video/Audio Recording DVR
HD-WDVR-1008	8-Ch.DVR,200/240fps@960H,2 SATA
HD-WDVR-2008	8-Channel Video/Audio Recording DVR

HD-WDVR-2016	16-Channel Video/Audio Recording DVR
HDXGPPDCW	ACUIX IP-DOME.35X
HDXJPRASW	ACUIX DOME. 18X
HDZ20HDEX	PTZ DOME IP M/PIXEL EXT D/N 1080P 20x
HDZ22HDE	DOME FF IP-HDZ 22X 1080P T/WDN PTZ EX PD
HDZ22HDEX	DOME FF IP-HDZ 22X 1080P T/WDN PTZ EX PD
HDZ30HDE	PTZ DOME IP M/PIXEL EXT D/N 1080p 30x
HDZ36EX	PTZ DOME IP D/N 36x Ext WDR H.264 Clr
HE16SWL2	S/w & DVS Key for 16Encd.Ch & 4 IP Cam
HEICC-2301T-16	HD Explosion Proof IP camera, 1/3" CMOS,
HEIPSWL	ENTERPRISE NVR SERVER LIC
HEKYBL-01	Enterprise UltraKey License
HEL2R1	Performance Lite Series, Dome, 1080p, 3,
HEL2R2	Performance Lite Series, Dome, 1080p, VF
HEN04101BBX	Performance NVR Bundle, 4 Bullet + 1 NVR
HEN04101X	4CH 1080P NVR,2 SATA, 8 POE,PAL
HEN08101X	8CH 1080P NVR,2 SATA, 8 POE,PAL
HEN16101X	16CH 1080P NVR,2 SATA, 8 POE,PAL
HEN4EC8	Performance Focus 4K NVR Storage Expansion
HEW2PR2	1080p WDR MFZ IP EYEBALL
HF41640R2T0N	FUSION IV 16CH 480IPS
HF4HD2T0	STORAGE HARD DRIVE 2TB Upgrade Kit
HF4N1648B1T0N	16CH Fusion IV NVR & 1000GB
HFDCGR1	12M IR Fisheye IP Camera
HHPE32C16162	Maxpro Hybrid PE 32ch NVR 16TB 8x2TB SAS
HHXE16C1608T	MAXPRO NVR Hybrid XE, 8 TB, 16 ch 480fps
HICC-0100P	Box camera PAL
HICC-0600T	D1 box camera
HICC-100P	1/3" CCD IP Cam, 540 TVL, 12 VDC, PoE,PAL
HICC-100PT	1/3" CCD TDN IP Cam, 540 TVL, 12 VDC,PAL
HICC-1100P	VENTI,1/3" CMOS,720p,25fps,SDN,PoE,SD,PAL
HICC-1100PT	VENTI,1/3" CMOS,720p,25fps,TDN,PoE,SD,PAL
HICC-1300W	HD BOX CAMERA, 1/3" CMOS, 720P
HICC-1600T	720p box camera,PoE
HICC-1600TVI	720p IR bullet HUS IPC,TDN,IP66
HICC-2300	HD Box Camera, 1/3" CMOS,1080p, 25/30fp
HICC-2300T	HD Box Camera 1/3 CMOS 1080p
HICC-2500MI	Equip S2,IP 2MP Bullet camera,IP66
HICC-P-0100	D1 Box camera



HICC-P-0100E	Pioneer D1 box camera
HICC-P-0100EIRV	D1 vandal-proof IR bullet camera
<b>HICC-P-1100</b>	<b>IP BOX CAMERA</b>
HICC-P-1100E	IP BOX CAMERA
HICC-P-1100EIRV	IP VANDAL PROOF CAMERA
HICC-P-2100X	1080P@60fps IP box camera H.264
HICC-P-2100XIRV	1080P@60fps IP IR bullet camera H.264
HICC-P-3100	3MP WITH 30FPS BOX CAMERA
HICC-P-3100EIRV	3 Megapixel H.264 IR Bullet IP Camera
HICC-P-3100IRV	3MP with 30fps vandal-proof IR bullet
HIDC-0100PV	VENTI SERIES D1 25/20FPS IP FIXED DOME
HIDC-0600TV	Fix dome camera D1
HIDC-1100PTV	1/3" CMOS,720p@25fps,3-9mm,TDN,PoE,PAL
HIDC-1100PV	FIXED IP CAMERA 1100 PV
HIDC-1300V	HD FIXED DOME CAMERA, 1/3" CMOS, 720P, 2
HIDC-1300W	HD FIXED DOME CAMERA, 1/3" CMOS, 720P
HIDC-1600TV	720p dome HUS IPC,TDN,WDR,2.8-12mmVF,PoE
HIDC-1600TVI	720p IR dome HUS IPC,TDN,WDR,PoE
HIDC-2300V	HD Fixed Dome Camera, 1/3" CMOS, 1080p,
HIDC-P-0100-43	VGA 25fps-1.3MP 15fps Dome, 4.3mm lens
HIDC-P-0100EIRV	D1 IR DOME CAMERA, SUPPORT SVGA (800X600
HIDC-P-0100EV	H.264 VARI-FOCAL IP FIXED DOME
HIDC-P-0100V	VGA 25fps-1.3MP 15fps Dome,2.7-9 VF lens
HIDC-P-1100EIRV	720P WITH 60FPS IR DOME CAMERA,
HIDC-P-1100EV	IP INDOOR DOME CAMERA
HIDC-P-2100XIRV	1080P@60fps IP IR dome camera H.264
HIDC-P-2100XIRV	1080p Dome Camera
HIDC-P-2100XV	1080P@60fps IP dome camera H.264
HIDC-P-3100IRV	3MP with 30fps IR dome camera H.264
HIDC-P-3100V	3MP WITH 30FPS DOME CAMERA
HIPM-AT	Pole Mount Bracket
HIPTZ-0361W	IP PTZ camera, D1, 1/4 CCD, 36X, WDR, Ou
HIPTZ-1181W-IR	HD IP PTZ camera, 720P, 1/3 CCD, 18X, WD
<b>HISD-0371WE</b>	<b>D1 37X IP PTZ CAMERA</b>
HISD-0371WE-IR	D1 PTZ HUS IPC,37X,TDN,WDR,IR
HISD-1181W	HD Speed Dome Camera, 1/3" CCD, 720p, 25
HISD-1301WE	720p PTZ
HISD-1301WE-IR	720p PTZ with IR
HISD-2201W	HD Speed Dome Camera 1/3 CMOS 1080p

HISD-2201WE	1080p PTZ HUS IPC,20X,WDR,TDN,VR,IP66
HISD-2201WE-IR	1080P25/30fps 20X IR Network Speed Dome
HISD-2301WAT	1080P 30x Outdoor IP Auto Tracking PTZ
HISD-2301WE	1080P IP PTZ,30X,TDN,PoE,IP66,IK10,AC24V
HISD-P-0231P	PIONEER SERIES 23X OPTICAL ZOOM D1 25/30
HISD-P-0231P/N	23x D1 25/30fps IP PTZ,IP66, PAL/NTSC
HIVDC-0105PV	VENTI FIXED DOME CAMERA, 1/2.7" CMOS, D1
HIVDC-100P	FG,CAM,IP DOME,TDN,PAL,HIVDC-100P
HIVDC-1300W	HD FIXED DOME CAMERA 1/3" CAMERA
HIVDC-1600TVI	720p IR dome HUS IPC,VR,TDN,IP66
HIVDC-2300V	HD Fixed Dome Camera, 1/3" CMOS, 1080p,
HIVDC-2500MI	Equip S2,IP 2MP Dome,VR,IR,MFZ,TDN,IP66
HIVDC-P-0100EIRV	H.264 IP VANDAL-PROOF IR DOME CAMERA
HIVDC-P-0105V	FIXED DOME, VARI-FOCUS LENS
HIVDC-P-1100EIRV	720P with 60fps IR vandal-proof dome
HIVDC-P-2100XIRV	1080P@60fps IP IR vandal-proof dome
HIVDC-P-3100IRV	3MP with 30fps IR vandal-proof dome
HIVFC-P-3100	3MP Fisheye camera
HJZTPX	DVR KEYBOARD KBD For DVR and PTZ
HMC21X	MONITOR CRT COL 21" 450L Grey
HMLCD17LX	MONITOR LCD 17" LCD 1280x1024 Audio
HNDR-E824M-N-D-E	SCH DIGITAL VIDEO RECORDER
HNDR-EH1648L-N-D-E	DVR 16-CH (PAL), 400FPS DISPLAY, SATA, N
HNDR-EH412H-N-D-E	4ch,DVR,H.264,120ips@D1,No HDD,DVD,
HNM32N1T	MAXPRO NVR SE 32 Ch, NVR, 3U Rackmount,
HNM32N2T	MAXPRO NVR SE 32 Ch, NVR, 3U Rackmount,
HNM32N4T	MAXPRO NVR SE 32 Ch, NVR, 3U Rackmount,
HNMCAM1	1 Camera License for Maxpro
HNMC1CAL	1 SQL CAL per Client
HNMFO	MAXPRO VMS Recorder Failover feature
HNMPE32A041S	MAXPRO NVR PE 32 Ch, 4X1 TB SAS HDD, 10D
HNMPE32B243S	MAXPRO NVR PE 32 Channel
HNMPE32B324S	Maxpro PE 32ch NVR 16TB 8x4TB SAS
HNMPE64B486S	64CH, 8X6 TB SAS HARD DRIVE NVR
HNMSE32BP01T	32 CHANNEL NVR
HNMSE32BP02T	MAXPRO NVR SE 32 Channel
HNMSE32BP02TP	MAXPRO NVR SE,32 Ch.,2TB,1x2TB HDD
HNMSE32BP03T	MAXPRO NVR SE 32 Channel
HNMSE32BP18T	MAXPRO NVR SE 32 Channel

HNMSE32BP24T	MAXPRO NVR SE 32 Channel
HNMSEBHD3T	STORAGE HDD 3TB for MAXPRO NVR SE AND XE
HNMSWR210	R210 Base Software (Includes 4 camera license)
HNVE1	1Ch Encoder Mpeg4 2way Audio
HP5M-180P	180 DEGREE PARASCAN CAMERA
HPSQ-502B	IMAGE MIXER WITH 5-CH VIDEO INPUT
HRESR10D1T0	RAPID EYE LT V9 8-CH WITH 100IPS, 1TB HD
HRHH1161X	HD-OVER-COAX 960H ANALOG HYBRID DVR,16CH
HRHH2040X	4ch 1080p hybrid DVR
HRHT4160	DVR 16ch 4MP 400fps HQA/SD/IP No HDD
HRLT1040	Performance Lite Series, DVR, 4ch, 1SATA
HRLT1080	Performance Lite Series, DVR, 8ch, 2SATA
HRLT1160	Performance Lite Series, DVR, 16ch, 2SAT
HRRH8	MAXPRO Cloud Appliance
HRX-2000	RECEIVER DRIVER
HS10PIT	MEGAPIT PORT EXPANDER AND CHANGEOVERUNIT
HSB-100A	BRACKETS WALL MOUNT 10 KGS - 300 MM
HSD-261P	ANALOG OUTDOOR PTZ CAMERA
HSD-261P-NET	26X OPTICAL ZOOM D1 25FPS IP PTZ
HSD-261P-NETS	26x Optical Zoom D1 25fps IP PTZ, outdoor
<b>HSD-261PW</b>	<b>OUTDOOR PTZ NON-IP CAMERA</b>
HSD-361P	6" SPEED DOME,TDN,OPTICAL 36X.
HSD-361PW	SPEED DOME CAMERA
HSD-361PW-NET	36X OPTICAL ZOOM D1 25FPS IP PTZ WITH AD
HSD-361PW-NETS	36X OPTICAL ZOOM D1 25FPS IP PTZ WITH AD
HSD-371WE	700TVL analogue PTZ 1/4 Sony 960H
HSD-371WE-IR	700TVL IR PTZ, 37X
HSDC-252PA-E	SCAN DOME camera
HSDC-351PE	4.8" DOME, TDN, OPTICAL 35X, DIGITAL
HSDC-351PXE	4.8" DOME, OPT 25X, DIGITAL 10X, 470TVL
HSDC-352PXE	4.8"WDR,TDN35X,530TVL,EX-VIEW,DSS
HSDC-362PA-E	Analog dome Camera
HSDC-363P	Analog Dome camera, Optical x36 (Max 576x)
HSDC-363PA	ICORETM ISP, OPTICAL X36 (MAX 576X)
HSVR-04	Mobile Enabled 4 Channel Digital Video
HSVR-08	Mobile Enabled 8 Channel Digital Video
HSVR-16	Mobile Enabled 16 Channel Digital Video
HSW2G1	1080P Exit View IP Camera
HTMZ160T302W	DUAL SENSOR PTZ WITH WIPER 60mm THERMAL

HTX-5000	CONTROL KEYBOARD,SUPPORT UPTO 64SCANDOME
HUS-D4-E-PRO	4 Channels Intelligent Digital Decoder
HUS-D4X	4-channel HD network decoder
HUS-HDD-2TB	Ent. HDD:2TB, Hitachi, HUA722010CLA330
HUS-HDD-3TB	HUS Storage System HardDisk: enterprise
HUSS-D1	SINGLE CHANNEL NETWORK VIDEO DECODER
HUSS-E1	1-Ch. Encoder, H.264,compatible with HUS
HUSS-E1E	SINGLE CHANNEL NETWORK VIDEO ENCODER
HUSS-E2X	DUAL CHANNEL ENCODER SUPPORTING H.264
HUSS-E4E	4CH NETWORK VIDEO ENCODER / STREAMER
HUSS-E4V	D1 4-channel encoder
HUSS-E4X	VIDEO STREAMER 4 Channel
<b>HUSS-E8X</b>	<b>8 Channel D1/D1 network encoder, H.264,</b>
HVAE-0400	4 Channel D1 video analytic encoder, MPE
HVB16M16	MATRIX 16Ch Video Input Card 16 Output
HVB16TOX	MATRIX 16Ch Titled Video Output Card
HVB4UX	MATRIX 4u Videoblox Chassis Upto 7 Cards
HVBBLANK	MATRIX Single Slot Blank Plate
HVBGPIO	MATRIX General Purpose I/O Card
HVBNET16CPU	MATRIX CPU Module 16 Titled Ouputs
HVBNET16TO	MATRIX 16Ch Titled Video Output Card
HVBPI44	TELEMETRY MISC RS422-RS422 Convertor
HVD-505P	480TVL Dome camera
HVD-515PI-36	Vandal proof camera
HVD-735PW	480TVL Dome Camera
HVD-890PI	540TVL,Dome camera
HVD-890PT	Vandal proof Dome camera
HVD-890PV	Vandal proof Dome camera
HVE1X	Encoder 1Ch H.264 PoE
HVE4X	Encoder 4Ch H.264 PoE
HVE8	8 channel Audio/Video Encoder
HVE8X	Encoder 8Ch H.264 PoE
HZC-252P-VR	X25 OPTICAL ZOOM CAMERA
HZC-363P-VR	X25 Optical Zoom Camera, 520TVL, TDN,
HZC-371W	Zoom Cam.37X,700TVL,TDN,WDR
HZC-371WE	HIGH Resolution X36 optical ZOOM Camera
HZC-855PX-VR	35x optical zoom Box camera
<b>MAXPRONET5</b>	<b>MAXPRO-Net System Server &amp; Appl. S/W</b>
<b>MAXPRONET6</b>	<b>MAXPRO-Net System Server and Application</b>

MDVR-AT-4CH	4CH D1 live recording, playback.12V@2A DVR
VBC-800PI	IR Outdoor Vari-Focal Bullet Camera, 540 TVL
VBC-800PI50-WC	Outdoor varifocal bullet camera, 540TVL
VCC-600P	Box camera, 540TVL
VDC-350PI	Indoor Fix dome camera, 540 TVL
VDC-350PI-V	Vandal-proof IR fixed dome camera, 540TVL
VDC-350PIV-V	Vandal-proof IR fixed dome camera, 540TVL
VDC-600P-36	540TVL Fixed Dome
VDC-600P-60	540TVL Fixed Dome
VDC-600PV	540TVL Fixed Dome
VSD-100P	Vista Indoor PTZ Dome Camera
VSD-101P	10x High Speed PTZ
VSD-181P	18x Weather Proof High Speed PTZ
VSD-261P	6" PTZ.TDN.26.480TVL.PAL
VSD-361P	6" PTZ.TDN.36x.480TVL.PAL

# ANNEXURE - 5

## Discontinuation of SF6 Circuit breaker spares (145kV,245kV & 420kV )- Reg

tsrikanth <tskanth@bhel.in>

Sat 23/07/2022 14:20

To: josephananda@bhel.in <josephananda@bhel.in>

Cc: M Israel Raju, Addl GM/Switchgear/203\_SGPROD/HPEP <israelraju@bhel.in>; L V RAMA KRISHNA <ramakrishnalingala@bhel.in>; V Raghu, Sr Dy GM/Production/SG/203\_SGPROD/HPEP <rghu@bhel.in>; shekharec@bhel.in <shekharec@bhel.in>; sjreddy@bhel.in <sjreddy@bhel.in>

Dear Sir

SG Division is not in a position to take Breaker spare work orders anymore due to the following reasons:

1. Switchgear is not receiving main orders for the last 10 years with the available design, as existing design cannot cater to customer requirement. Efforts were made to revive the technology but results were not fruitful.
2. Expertise in assembly & testing of circuit breaker is lost due to retirements, transfers and diversification of products.
3. Vendor base has drastically declined due to insufficient order quantity and new vendors not showing interest due to low volume business.
4. Purchasing of import items become cumbersome due to Make in India concept (requires GTE approval) and also expected to be expensive.
5. Tender quantity is also very low for the received bids, for which vendors are not responding, giving delayed response, leading to delay in PO Placement.
6. The liquidation of spares is getting delayed and affecting the customer delivery time, and closure of customer PO's.

With the above scenario, issue was discussed in the last operations review, dated 14.07.2022 and Unit Head HPEP directed AGM Spare Management not to quote any future enquiries for breaker spares.

However, SG division confirms to liquidate all the outstanding spare work orders as on 14.07.2022 as per the commitments given in the operations review.

Regards

T.Srikanth

Manager/MPC-SG

Ph:040-23183640



## HEALTH REPORT

This is refer to the health report of your existing 2X100TR water cooled reciprocating chiller for your Switchyard plant at NTPC Barh.

We have observed that due to normal wear & tear the aforesaid machines has outlived its efficiency. Capacity of each machine is also reduced to around 67-70TR and now it is running at around 1.35 kw/TR power rating which result in huge electricity cost. We have found leakage in evaporator tube. Moreover this type of machine used old technology and become obsoleted couple of years ago. Spare parts availability is also a big concern now a days for this type of Chiller. Therefore as per our recommendation the existing system need to be replaced by new technology energy efficient chiller to achieve better efficiency and huge savings in terms of power consumption.

In view of above, we have offered a new energy efficient 100TR water cooled screw chiller which will run at 0.68kw/TR power rating. This will result a substantial power savings of minimum 20% as compare to your existing system and ROI will be very much attractive. Moreover, the chiller can run uninterruptedly without any major failure.

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**MEMORANDUM OF UNDERSTANDING (MoU) BETWEEN NTPC BARH AND BUIDCo FOR SUPPLY OF TREATED SEWAGE WATER FOR NTPC's BARH PLANT**

This MoU is made into this 27<sup>th</sup> Day of March 2023.

**ANNEXURE-7**

**BETWEEN**

Bihar Urban Infrastructure Development Corporation Ltd, the governing body of the city of Patna in the state of Bihar, having its registered office at Rajapur Pul, West Boring Canal Road, Patna 800001, Bihar (hereinafter referred to as the "**BUIDCo**"), which expression shall, unless the context otherwise requires, include its legal successors, successors in business, successors in governance and permitted assigns and substitutes of the **FIRST PART**;

**AND**

NTPC- Barh Super Thermal Power Project, (Address) P.O. NTPC-Barh, Distt-Patna, Bihar, PIN 803215, a Unit of NTPC Ltd., a company incorporated under provisions of the Companies Act, 1956, having its registered office at NTPC Bhawan, SCOPE Complex Institutional Area, Lodhi Road, New Delhi - 110003 (hereinafter referred to as the "**NTPC Barh**"); and which expression shall, unless the context otherwise requires, include its successors / successors in business and permitted assigns and substitutes of the **SECOND PART**;

"**BUIDCo**" and "**NTPC Barh**" are collectively referred to as "**Parties**" and individually as "**Party**".

Whereas Government of India, through Tariff Policy dated 28.01.2016 has mandated that Thermal Power Plant(s) (TPPs) including the existing plants located within 50 Kms radius of sewage treatment plant (STP) of Municipality/local bodies/similar organisation shall in the order of their closeness to the STP, mandatorily use treated sewage water produced by these bodies and the associated cost on this account be allowed as a pass through in the tariff. Such thermal plants may also ensure back-up source of water to meet their requirement in the event of shortage of supply by the STP. The associated cost on this account shall be factored into the fixed cost so as not to disturb the merit order of such thermal plant.

Whereas Government of India, through Gazette notification dated 07.12.2015 and revised notification dated 28.06.2018, has mandated that the thermal power plants installed after 01.01.2017 shall have to meet specific water consumption up to maximum 3.0 m<sup>3</sup>/MWh and achieve zero wastewater discharged.

Whereas Government of India has established National Mission for Clean Ganga, as an Authority, under Environment Protection Act 1986, through River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 for implementation of Namami Gange programme- Integrated Ganga river rejuvenation Mission.

Whereas this MoU is signed for use of treated sewage water in NTPC Barh from STP at Barh.

**RECITALS**

- A. BUIDCo desires to deliver treated sewage water from sewage treatment plant (STP) at Barh to NTPC Barh for its Barh Super Thermal Power Plant for Non-potable application after treatment of raw municipal sewage through its STP. The secondary treated sewage water at STP outlet shall meet the NGT norms. Any upgradation required in the STP to meet the NGT norms shall be carried out by BUIDCo at their own cost.

3-03-2023  
3-03-2023  
3-03-2023



- B. NTPC Barh desires to accept treated sewage water for its Barh Thermal Power Plant for Non-potable application by construction of pumping system, Tertiary Treatment Plant (as applicable to Thermal power plant requirement) and pipe conveying system up to power plant, to be executed by BUIDCo on deposit work basis.

## DEFINITIONS

- 1.1 "Emergency" means an unanticipated event, which causes a malfunction of either Party's facilities, preventing either the delivery or the acceptance of water.
- 1.2 "Joint Oversight Committee" (JOC) means that committee comprised of four members, two (02) representatives each from – BUIDCO/NTPC Barh (as given in Annexure-III) established to share information and coordinate to fulfil each Party's interest as per agreement.
- 1.3 "Point-of-Delivery" means the point at which BUIDCo delivers water at the doorstep (forebay of Stage-II circulating water system) of NTPC Barh.
- 1.4 "Project completion" means that point in time when the Project (STP, Pumping System, Pipeline conveying system and Tertiary Treatment System (as applicable)) has been constructed, tested and commissioned successfully in accordance with Project specifications, the facilities are put under full operation, and the Project has been accepted in writing by the JOC.
- 1.5 "Third Party" means any person or entity (governmental, semi government or private) other than BUIDCo or NTPC Barh.
- 1.6 "Raw Sewage" means sewage water received at inlet of STP for treatment.
- 1.7 "Secondary Treated Sewage" means output from STP, which are input to pumping system or TTP (as applicable) meeting quality requirement as per Annexure-I & II.
- 1.8 "Sewage Treatment Plant" (STP) means Sewage Treatment constructed by BUIDCo at Barh.
- 1.9 "Tertiary Treatment Plant" (TTP) means Tertiary Treatment facility, to treat the secondary treated sewage water, constructed by BUIDCo.
- 1.10 "BUIDCo" means Bihar Urban Infrastructure Development Corporation Ltd.
- 1.11 "Power Plant" means Barh Super Thermal Power Plant, St-II (2x660MW) of NTPC Ltd.
- 1.12 "MLD" means Million Litre per day.
- 1.13 "Capex charges (NTPC Barh's scope)" shall mean the capital cost of facilities defined under NTPC Barh scope (price bid of the successful Bidder in Open Tender, mutually agreed upon and subject to approval of respective Managements).
- 1.14 "Opex charges (NTPC Barh's Scope)" shall mean the O&M charges of the facilities defined under NTPC Barh's scope (price bid of the successful Bidder in Open Tender, mutually agreed upon and subject to approval of respective Managements) payable on per cubic meter basis.

## 2. QUANTITY

### 2.1 "Demand by NTPC Barh and Supply by BUIDCo"

BUIDCo has constructed STP of 11 MLD capacity at Barh. The incepted amount at the time of completion of TTP project 9 MLD and the rated capacity of 11 MLD likely to be achieved by the year 2033. NTPC Barh agrees to accept treated sewage water from the STP at Barh. The transmission piping system shall be designed to deliver Treated Sewage Water to the Power Plant. BUIDCo agrees to supply treated sewage water at a steady uniform rate (allowable variation of (+/-) 15%) which is vital for NTPC Barh's process requirements, and accordingly BUIDCo shall provide adequate storage facility at STP premises to take care and dampen the peak and off-peak flows of

incoming raw sewage. TTP (as applicable), Pumping & Piping shall be designed & erected by the BUIDCo on deposit work basis on behalf of NTPC Barh. The tertiary treatment (as applicable), water supply system for delivery of treated water at doorstep of NTPC Barh shall be operated & maintained by BUIDCo and the charges for this shall be payable by NTPC Barh as O&M charges on per cubic meter basis, at a mutually agreed rate.

### 3. "QUALITY"

NTPC Barh shall use treated sewage water for non-potable purposes in its power plant. Physical, biological, chemical characteristics and other characteristics of Secondary Treated Sewage Water shall be of NGT order quality as per Annexure-I. Additional parameters (TDS, Chloride and Total Hardness) are also annexed at Annexure-II, which are required for use of treated STP water in TPPs. BUIDCo is required and bound to meet NGT Norms (Annexure-I) for secondary treated sewage water. Further, BUIDCo shall also ensure that parameters like TDS, Chloride & Total Hardness of the raw sewage shall be kept within (+) 5% variation for the design of the TTP, to meet the Additional quality parameters (Annexure-II) at the outlet of TTP. If the parameters are exceeded, it will attract penal action towards BUIDCo (on mutually agreed charges).

In case of disagreement on treated water quality, the same shall be tested in an accredited third-party laboratory mutually agreed and through the joint sampling. The water quality results obtained out of such process shall only be considered for the operation of any quality related clauses in this MoU.

### 4. "DIVISION OF SCOPE"

BUIDCo scope shall include construction of intercepting weirs, Raw Sewage pumping stations in the city, pipelines carrying Raw Sewage from pumping stations to STP, Sewage treatment plant (STP) at Barh. Any upgradation required to meet the NGT norms, treated water sump etc. shall be in the scope of BUIDCo.

BUIDCo will be responsible to supply treated sewage water at NTPC Barh Doorstep (the point of delivery).

NTPC Barh scope shall include TTP (as applicable) and pumping system, to be located in the premises of STP, supply and laying of conveying cross-country pipeline to TPP, to be executed by BUIDCo on deposit work basis (Open tender basis). The price discovered through transparent open tender basis by BUIDCo shall be mutually agreed upon, subject to approval of respective Managements.

### 5. "COST & PAYMENT"

The secondary treated sewage water shall be supplied by BUIDCo free of cost. The charges for facilities in NTPC Barh's scope shall be defined as the Capex Charges and the O&M charges. The Capex Charges shall be payable to BUIDCo for the entire facility installed, defined under the scope of NTPC Barh. The Opex charges for O&M of TTP (as applicable), pumping & piping system defined under the scope of NTPC Barh shall be payable by NTPC Barh on per cubic meter basis, at a mutually agreed rate.

Detailed payment terms shall be finalized between NTPC Barh and BUIDCo, with the price discovered through transparent Open Tendering process and before the Award of the contract. An Agreement in this regard, subject to approval of respective managements, shall form an integral part of this MoU.

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NTPC Barh shall pay the Opex charges on calendar month basis based on actual drawl subject to Treated Sewage Water meeting the effluent quality as indicated in Annexure-I & II. The bill shall be raised by 7th of the month for the quantity supplied in the previous calendar month. The same shall be paid within 25 days from the receipt of the bill by hard copy or by e-mail.

If BUIDCo is unable to deliver Treated Sewage Water, then NTPC Barh shall not be liable to make any payment in such case.

#### 6. "PERIOD OF AGREEMENT"

The minimum period of agreement for supply of Treated Sewage Water shall be for 15 years, from the date of start of operation & commencement of supply of treated sewage water to NTPC Barh from BUIDCo, or remaining power plant life whichever is earlier. Renewal of agreement shall be upon mutually agreed terms.

#### 7. "END USE OF TREATED SEWAGE WATER"

NTPC Barh will have all the rights for end use of Treated Sewage Water of agreed quantity at specified quality for any non-potable application. BUIDCo shall discharge/utilise surplus treated sewage water, if any, meeting quality level as per prevalent norms of concerned statutory authority (ies). BUIDCo shall keep the provision of discharging/utilising treated sewage water due to less/no drawl of Treated Sewage Water by Power Plant, based on the operational requirement of the Power Plant.

NTPC Barh will have the right to refuse drawl of treated sewage water in case BUIDCo fails to deliver water of agreed quality and/or quantity as per JOC's findings.

#### 8. "RIGHTS, PERMISSIONS, STATUTORY OBLIGATIONS"

BUIDCo shall be responsible for all the rights permissions and statutory obligations, the norms of state or central pollution control board or water right issues with water resources department or any other government department related to the treatment and disposal of effluent of the sewage treatment plant.

#### 9. DELIVERY AND ACCEPTANCE OF WATER

9.1 Upon commencement of operations, BUIDCo shall deliver to NTPC Barh at the point of delivery as agreed in this document except for supply interruption as set forth in clause-14 or excused as provided in Clause-13.

9.2 For the purpose of measuring the Parties' compliance with this section, the day shall be the twenty-four hours period commencing on 12:00 noon on the first day of the month following Commencement of Operations. Quality parameter and quantity delivered shall be measured at the point of delivery and shall be considered for acceptance. JOC will maintain all records related to quality and quantity of treated sewage water supplied to NTPC Barh. The instruments for measurements of quantity and quality shall be regularly checked for correct calibration once in every month by JOC or as desired.

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## 10. QUALITY OF WATER

10.1 NTPC Barh along with Joint Oversight Committee (JOC) shall have access to BUIDCo facilities and records for the purpose of either testing or verifying the quality of the Treated Sewage Water.

10.2 If the Treated Sewage Water quality do not meet the quality performance set at the point of delivery for whatsoever reason then NTPC Barh shall not accept the water to be supplied to the Power Plant & will not have any obligation of payment in such case.

10.3 The quality parameters declared at the time of signing the MoU, as attached at Annexure-I & II, shall be considered final and binding throughout the period of agreement. If the parameters are exceeded, it will attract penal action towards BUIDCo (on mutually agreed charges).

## 11. JOINT OVERSIGHT COMMITTEE (JOC)

11.1 The Parties shall establish the JOC. The goal of the JOC shall be to achieve maximum efficiency of the overall work. The representative of BUIDCo and NTPC Barh shall occupy the position of Chairman of JOC by rotation after each period of one calendar year.

11.2 Each Party shall designate its two (2) representatives within 10 days following execution of this Agreement and each Party shall provide notice to the others pursuant to clause 31.

11.3 The JOC shall keep written minutes of its meetings.

11.4 Each party may, by written or oral notice to the other Party, designate an alternate or substitute to act as its representative in the absence of any of its regular members or to act on specified occasions with respect to specific matters.

## 12. DUTIES OF JOINT OVERSIGHT COMMITTEE (JOC)

12.1 Each Party shall have two members in JOC. At least one authorized representative each from BUIDCo & NTPC Barh shall be present at all meetings.

12.2 The JOC shall share information between the Parties and coordinate the operations of the Parties in order to achieve the objectives of this agreement and resolve disputes between the Parties. However, JOC will not have any right to verify the design and supervise the quality of construction works.

12.3 The JOC shall be responsible for the periodic review of the water quality parameters as given in Annexure-I & II. Sampling protocol shall be established by the JOC.

12.4 The JOC shall meet whenever requested by a member of the JOC.

12.5 If the JOC is unable to act on any issue raised by a member of the JOC, the issue shall be dealt as per provisions of Clause 17.

## 13. FORCE MAJEURE

13.1 No Party shall be considered to be in default in the performance of any of its obligations when a failure to perform is due to or materially contributed to by an act of God, war, fire, earthquake, windstorm, flood, and other natural catastrophe, civil disturbance or disobedience, labour disputes, vandalism, sabotage, terrorism, restraint by order of a court or administrative agency with jurisdiction, which such Party could not reasonably have been expected to avoid and which by exercise of due diligence has been unable to overcome.

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13.2 The Party whose performance is affected by force majeure shall, as soon as practicable, but in any event no later than 14 days thereafter, give written notice of the event of force majeure to the other Party.

13.3 The Parties shall use their best efforts and cooperate with each other to mitigate the effects of force majeure.

#### 14. SUPPLY INTERRUPTIONS

14.1 To allow maintenance or in an Emergency, the JOC may authorize an interruption of delivery and acceptance of water. The Party who is in emergency situation shall inform the other immediately over mail/phone/SMS and tackle the emergency situation expeditiously and shall not wait till formal meeting of JOC. The Parties' respective duty to deliver and accept water under this Agreement is temporarily suspended during a supply/acceptance (use) interruption authorized by the JOC.

14.2 The Parties shall use their best efforts to minimize the length of supply/acceptance (use) interruption.

#### 15. OBLIGATIONS AND RELATIONSHIP OF THE PARTIES

##### A) Obligations of BUIDCo

- i. BUIDCo shall be responsible for timely execution of the complete scope of work for supplying the treated sewage water at the doorstep of NTPC Barh.
- ii. BUIDCo shall be responsible for arranging all permissions, right of use, right of way, land acquisition etc as required, for executing and laying of treated sewage water supply pipeline up to point of delivery at NTPC Barh power plant.
- iii. BUIDCo shall be responsible for maintaining the quality and quantity of the Treated Sewage water at the inlet & outlet of TTP and at the point of delivery.
- iv. Pumping system, TTP (as applicable) shall be in the premises of STP and the reject (from TTP) handling shall be the responsibility of BUIDCo.
- v. BUIDCo shall be responsible for O&M of the facilities (under NTPC Barh's scope) on chargeable basis.

##### B. Obligations of NTPC Barh

- i. NTPC Barh shall make payments regularly to BUIDCo on the date and manner agreed in this Agreement.
- ii. NTPC Barh shall be the lawful owner of the assets (under NTPC Barh's scope).
- iii. NTPC Barh shall use the Treated Sewage Water for its power plant for non-potable purpose.

##### C. General Obligations

- i. Each Party shall use its best efforts and work diligently, in good faith, and in a timely manner to carry out the duties and obligations imposed by this Agreement.
- ii. Each Party shall provide to the other Party services to permit efficient and reliable operations under this Agreement as follows:
- iii. The obligations, rights and liabilities of the Parties under this Agreement are intended to be several and not joint or collective, and nothing herein is intended to create an association, joint venture, trust, or partnership, or to impose a trust or partnership obligation or liability on or with regard to BUIDCo or NTPC Barh.

- iv. Except as expressly provided for in this Agreement or any other agreements, no Party shall be deemed the agent of or have the right or power to bind any other Party.
- v. This MoU will hold subject to approval from CERC, for which necessary assistance and justification for the queries raised by CERC shall be provided by BUIDCo.

## 16. DEFAULT

If either Party to this Agreement defaults in respect to any of its obligations or under any of the clauses of this Agreement, the non-defaulting Party may notify the defaulting Party in writing, setting out in what respects the non-defaulting Party deems the defaulting Party to be in default. If within thirty (30) days or such other period as agreed to by the Parties in writing after receipt of notice, the defaulting Party has corrected the default alleged by the non-defaulting Party, the defaulting Party shall no longer be in default. In the event of failure by the Party to mitigate the default(s), the other Party may resort to the dispute resolution procedure under Cl.17 for resolution of the said dispute(s).

## 17. DISPUTE RESOLUTION

17.1. At the first instance the disputes should be resolved through mutual consultations between the Parties.

17.2. If the Parties fail to resolve such a dispute or difference by mutual consultation within a period of forty-five (45) days from the date of reference of such dispute or within such extended period as the Parties shall agree in writing, such dispute or difference shall be taken up by either Party for resolution through Administrative Mechanism for Resolution of CPSEs Disputes (AMRCD) as mentioned in DPE OM No-05/0003/2019-FTS-10937 dated 14th December, 2022 issued by Department of Public Enterprises, Ministry of Finance, Government of India and any clarifications/modifications/amendments thereof and the decision of AMRCD on the said dispute will be binding on both the Parties.

## 18. NO COMPENSATION

The representatives of each Party to this Agreement shall serve without compensation except for reimbursements made in accordance with this Agreement or as expressly agreed to, in writing, by both Parties.

## 19. ASSIGNMENTS

No Party shall assign, either in whole or in part, any of the rights, duties or obligations created or imposed under this Agreement without the prior written consent of the other Party, except to another Party to this Agreement or to a subsidiary, affiliate or any other entity succeeding to all or substantially all of the affected interests and assets of the Party provided that such subsidiary, affiliate or succeeding Party shall assume the assigning Party's obligations hereunder in writing.

No delegation of any obligation owed, or of the performance of any obligation, by any Party, may be made without the prior written permission of the other Party. Any attempted assignment or delegation shall be wholly void and totally ineffective for all purposes unless made in conformity with this clause-19. Consent may be withheld, refused, or conditioned if the economic viability of the other Party is a concern; provided, however, that consent may not be unreasonably withheld, conditioned or delayed.

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पिन- 802215 / Pina-802215

## 20. INDEMNITY

20.1 **BUIDCo Responsibilities:** BUIDCo shall, to the fullest extent permitted by law, defend, indemnify and hold harmless NTPC Barh, its present and future members, officers, directors, employees and agents from and against

(a) any and all liabilities and losses resulting from claims or causes of action by any third party to the extent that claims or causes of action arise out of, or are in any way related to, BUIDCo's active negligence or wilful misconduct in the performance of BUIDCo's responsibilities under this Agreement, and

(b) the consequences of BUIDCo's violation or alleged violation of permits, statutes, ordinances, orders, rules or regulations of any government entity to the extent that a violation or alleged violation arises out of, or is in any way related to, BUIDCo's responsibilities.

20.2 **NTPC Barh's Responsibilities:** NTPC Barh shall, to the fullest extent permitted by law, defend, indemnify and hold harmless BUIDCO, their present and future members, officers, directors, employees and agents from and against

(a) any and all liabilities and losses resulting from claims or causes of action by any third party, to the extent that claims or causes of action arise out of, or are in any way related to, NTPC Barh's active negligence or wilful misconduct in the performance of NTPC Barh's responsibilities under this Agreement, and

(b) the consequences of NTPC Barh's violation or alleged violation of permits, statutes, ordinances, orders, rules or regulations of any governmental entity to the extent that a violation or alleged violation arises out of or is in any way related to NTPC Barh's responsibilities.

20.3 Notwithstanding anything contained herein, neither Party shall be responsible to the other for consequential or indirect damages.

## 21. NO DEDICATION OF FACILITY

Any undertaking by a Party under any provision of this Agreement is rendered strictly as an accommodation and shall not constitute the dedication of any facility by the undertaking Party to the public, to the other Party or to any Third Party. BUIDCo shall have no interest in any facility owned or operated by NTPC Barh and shall not be responsible for any shutdown, abandonment or clean-up of any facility. NTPC Barh shall have no interest in BUIDCo's facilities and shall not be responsible for any repairs, shutdown, abandonment or clean-up of any BUIDCO facilities.

## 22. NO THIRD-PARTY BENEFICIARIES

None of the promises, rights or obligations contained in this Agreement shall inure to the benefit of any person or entity not a Party to this Agreement.

## 23. GOVERNING LAW

This Agreement shall be governed by the laws of the Bihar state & Union of India without reference to its conflict of laws rules.

## 24. ENTIRE AGREEMENT

This Agreement represents and contains the entire agreement and understanding between the Parties with respect to the subject matter hereof and supersedes any and all prior oral and written agreements and understandings. No promises, agreements, or warranties additional to this

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बिहार न्यायिक सेवा  
बिहार न्यायिक सेवा

अमित प्रसाद / AS  
अधीक्षक निदेशक / Executive Director  
एनटीपीसी लि., बाई / NTPC Ltd, Barh  
पटना-803215 / Patna-803215

Agreement shall be deemed to be a part hereof, nor will any alteration, amendment or modification hereto be effective unless confirmed in writing by both Parties.

## 25. TERMINATION OF AGREEMENT AND TERMINATION PAYMENT

### 25.1 NTPC Barh may terminate this Agreement if:

25.1.1 BUIDCo fails to deliver treated sewage water of specified quality and quantity as reduced pursuant to Section 9.1 in any continuous 36-month period, and in such case, the depreciated value of the cost borne by NTPC Barh, towards use of treated sewage water, will be recovered from BUIDCo;

### 25.2 BUIDCo may terminate this agreement if:

25.2.1 NTPC Barh defaults in accepting the treated sewage water meeting the specified quality parameters for a period more than 3 months continuously.

25.3 Procedure for termination – The Parties may mutually agree to terminate this Agreement in the above events (25.1.1 & 25.2.1) on the terms and conditions acceptable to them as on the date of termination.

## 26. COMPLIANCE WITH LAWS

Both Parties shall comply with all applicable laws and the rules and regulations of Govt, state, local or other government agency having jurisdiction over the activities and operations conducted pursuant to this Agreement.

## 27. SEVERABILITY

This agreement shall be irreversible in general, however, in case of any change of law/notification/MoP guidelines, the agreement shall be mutually discussed and updated/amended. In the event that any term, covenant or condition of this Agreement or the application of any such term, covenant or condition shall be held invalid as to any person, entity or circumstance by any court or agency having jurisdiction, such term, covenant or condition shall remain in force and effect to the extent not held invalid, and all other terms, covenants and conditions of this Agreement and their application shall not be affected thereby but shall remain in full force and effect unless a court holds that such provisions are not severable from the other provisions of this Agreement.

## 28. WAIVER

Any waiver at any time by a Party of its rights with respect to any matter arising in connection with this Agreement shall not be deemed a waiver with respect to any subsequent matter. Any waiver must be in writing.

## 29. AMENDMENT AND MODIFICATION

This Agreement may be amended or modified in any way at any time by an instrument in writing signed by the Parties hereto.

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पुस्तक संख्या १०००००००



30. NOTICES

30.1 Any and all notices or other communications required or permitted by this Agreement or by law to be delivered to, served on by mail or fax, or given to either Party to this Agreement shall be dated and in writing and shall be deemed properly delivered, served, or given when personally delivered or faxed to the Party to whom it is directed or, five business days after postal mail, first-class postage prepaid, addressed to the Parties as follows:

Party	Address
BUIDCO, Barh	Attn.: MD
NTPC, Barh	Attn. Business Unit Head

30.2 Any Party hereto may change its address for the purpose of Section 30.1 by giving written notice of such change in the manner prescribed herein to the other Party to this Agreement.

IN WITNESS WHEREOF, both Parties hereto through their duly authorized representatives have executed this Agreement the day and year first above written.

~~Handwritten signature~~  
27/3/2023  
गुरुम लिलारंजन  
निम्नर चडरी कामगारुय संस्थान  
मिशनर लिनर लिमिटेड  
BUIDCO

Asit Dutta  
27/3/2023  
असित दुत्ता / ASIT DUTTA  
NTPC Barh Super Thermal Power Project  
असित दुत्ता / असित दुत्ता  
एग्जिकुटिव डायरेक्टर  
एनपीसी लि., बारह / NTPC Ltd., Barh  
पिन-803211 / फोन-803211

Witnesses

1. Ambarajon  
27-3-23 GM (HR), BUIDCO
2. Shilashw  
27-3-23  
Manager Legal, BUIDCO.

1. [Signature] = SUBRATA DE  
GM (TS), NTPC-Barh
2. [Signature]  
27/3/2023  
K. NAYAK  
AGM (PE-MECH)

# ANNEXURE-8

**FORM- 15 : Details of Fuel for Computation of Energy Charges**

Name of the Petitioner:  
Name of the Generating Station:

NTPC Limited  
Barh Stage-II

S. No.	Month	Unit	Apr-23		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
<b>A) OPENING QUANTITY</b>					
1	Opening Quantity of Coal	(MT)	43247.48	29498.44	9274.58
2	Value of Stock	(Rs.)	127924716.35	100117280.92	162852431.64
<b>B) QUANTITY</b>					
3	Quantity of Coal supplied by Coal Company	(MT)	73002.34	51100.78	11965.40
4	Adjustment (+/-) in quantity supplied made by Coal Company	(MT)	12.16	0.00	0.00
5	Coal supplied by Coal Company (2+4)	(MT)	73014.50	51100.78	11965.40
6	Normative Transit & Handling losses (For Coal based Project)	(MT)	140.17	8098.10	0.00
7	Net Coal supplied (5-6)	(MT)	72874.33	50292.68	11965.40
<b>C) PRICE</b>					
8	Amount charged by the Coal Company	(Rs.)	179677280.00	201550106.36	288576033.81
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	40197616.00	16491706.15	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	182082.39	1279635.51	0.00
11	Total amount Charged (8+9+10)	(Rs.)	179859168.39	203130447.02	288576033.81
<b>D) TRANSPORTATION</b>					
12	Transportation charges by rail/road/air/transport	(Rs.)			
	by Rail		7611171.90	75820971.35	0.00
	by Road		0.00	6140578.76	0.00
13	Adjustment (+/-) in amount charged made by Railways/transport Company	(Rs.)			
14	Insurance Charges, if any	(Rs.)			
15	Cost of diesel in transacting Coal through MGT system, if applicable	(Rs.)	82541.07	2250781.37	0.00
16	Total Transportation Charges (12+13+14+15)	(Rs.)	7611171.90	78071762.72	0.00
17	Other Charges	(Rs.)			
18	Total amount Charged on Coal supplied including Transportation (11+16)	(Rs.)	245970840.29	248002610.74	288576033.81
<b>E) TOTAL COST</b>					
19	Landed cost of Coal (11+16+17)	(Rs./MT)	3322.80	4872.99	24473.89
20	Blending Tax (Domestic Production)		1.00%	38.52%	6.71%
20	Weighted average cost of Coal	(Rs./MT)		3360.81	
<b>F) QUALITY</b>					
GCV of Domestic Coal of the opening stock as per bill of Coal Company					
21	Company	(KCal/Kg)	4588	4625	
22	GCV of Domestic Coal supplied as per bill of Coal Company	(KCal/Kg)	4584	4663	
23	GCV of imported Coal of the opening stock as per bill Coal Company	(KCal/Kg)			5459
24	GCV of imported Coal supplied as per bill Coal Company	(KCal/Kg)			5459
25	Weighted average GCV of coal as billed	(KCal/Kg)		4783	
26	GCV of Domestic Coal of the opening stock as received at Station	(KCal/Kg)	3391	3956	
27	GCV of Domestic Coal supplied as received at Station	(KCal/Kg)	3368	3826	
28	GCV of imported Coal of opening stock as received at Station	(KCal/Kg)			4966
29	GCV of imported Coal supplied as received at Station	(KCal/Kg)			5048
30	Weighted average GCV of coal as Received	(KCal/Kg)		3911	

Sanjay  
Sinha

Sanjay Sinha  
Sanjay Sinha  
Sanjay Sinha

Ankit  
Tiwari

Ankit Tiwari  
Ankit Tiwari  
Ankit Tiwari

AMIT  
Bhawani  
K. N. Prasad & Co.  
Chartered Accountants

**FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges**

Name of the Petitioner:

NTPC Limited

Name of the Generating Station:

Barh Stage-II

S. No.	Month	Unit	Apr-23
			LHD
<b>A) OPENING QUANTITY</b>			
1	Opening Stock of Oil	(KL)	3092.88
2	Value of Opening Stock	(Rs.)	177911305
<b>B) QUANTITY</b>			
3	Quantity of LDO supplied by Oil company	(KL)	219.82
4	Adjustment (+/-) in quantity supplied made by Oil Company	(KL)	0.00
5	LDO supplied by Oil company (3+4)	(KL)	219.82
6	Normative transit & Handling losses	(KL)	0.00
7	Net Oil supplied (5-6)	(KL)	219.82
<b>C) PRICE</b>			
8	Amount charged by Oil Company	(Rs.)	14068363
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00
10	Headline, Seepage and such other debit charges	(Rs.)	0.00
11	Total amount charged (8+9+10)	(Rs.)	14068363
<b>D) TRANSPORTATION</b>			
12	Transportation charges by rail/ship/road transport:	(Rs.)	Inclusive
	By Rail		
	By Road		
	By Ship		
13	Adjustment (+/-) in amount made by railways/Transport Company	(Rs.)	
14	Demurrage Charges, if any	(Rs.)	
15	Total Transportation Charges (12+13+14+15)	(Rs.)	
16	Other Charges	(Rs.)	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	14068363
<b>E) TOTAL COST</b>			
18	Weighted average cost of Oil	(Rs./KL)	118326.29
<b>F) QUALITY</b>			
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9560
20	Weighted average GCV of Oil	Kcal/KL	9371

Sanjay Sinha  
Chartered Accountant  
 No. 100, Park Road  
 New Delhi - 110002

Ankit Tiwari  
Chartered Accountant  
 No. 100, Park Road  
 New Delhi - 110002

Chartered Accountant  
 No. 100, Park Road  
 New Delhi - 110002

ANIT  
 Chartered Accountant  
 No. 100, Park Road  
 New Delhi - 110002

For NTPC (Barh Stage II & C)  
 Chartered Accountant(s)

**FORM- 15 : Details of Fuel for Computation of Energy Charges**

Name of the Petitioner:  
Name of the Generating Station:

NTPC Limited  
Barh Stage-II

S. No.	Month	Unit	May 21		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
<b>A) OPENING QUANTITY</b>					
1	Opening Quantity of Coal	(MT)	4947.805	211767.64	400.52
2	Value of Stock	(Rs.)	25,105,374.91	95,221,820.01	4,150,158.12
<b>B) QUANTITY</b>					
3	Quantity of Coal supplied by Coal Company	(MT)	179820.39	119669.72	2402.70
4	Adjustment (+/-) in quantity supplied made by Coal Company	(MT)	417.29	0.00	0.00
5	Coal supplied by Coal Company (3+4)	(MT)	180237.68	119669.72	2402.70
6	Warehouse Transit & Handling losses (For Coal Level Receipts)	(MT)	1324.28	8505.91	46.11
7	Net Coal Supplied (5-6)	(MT)	181561.96	118818.81	2356.59
<b>C) PRICE</b>					
8	Amount charged by the Coal Company	(Rs.)	15922776.14	1167790789.23	44327416.80
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	-2,10329.35	71473295.70	0.00
10	Handling, Stacking and other similar charges	(Rs.)	4805091.22	29493411.41	0.00
11	Total Price Charged (8-9-10)	(Rs.)	41695468.01	2232008096.34	44327416.80
<b>D) TRANSPORTATION</b>					
12	Freight/transport charges by rail/air/road transport	(Rs.)			
	By Rail		176215810.00	46447547.60	0.00
	By Road		1271312.20	794569.00	0.00
	Adjustment (+/-) in amount charged made to Railways/Transport				
13	Company	(Rs.)			
14	Interstate Charges, if any	(Rs.)			
15	Coal or if not available, Coal through BGR system, if applicable	(Rs.)	74969.66	2068733.48	0.00
16	Total Transportation charges (12-13-14-15)	(Rs.)	18,144,461.86	57,70,60,00.08	0.00
17	Other Charges	(Rs.)			
18	Total amount charged for coal supplied including Transportation (12+15)	(Rs.)	60,20,54,65.79	2,27,30,24,73.21	44,32,74,16.80
<b>E) TOTAL COST</b>					
19	Weighted cost of Coal (18/16/17)	(Rs./MT)	3329.44	4843.71	16371.51
20	Freight Rate (Domestic/Imported)		25.00%	20.00%	0.58%
21	Weighted average cost of Coal	(Rs./MT)		5000.77	
<b>F) QUALITY</b>					
22	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(Kcal/Kg)	5018	4757	
23	GCV of Domestic Coal supplied as per bill of Coal Company	(Kcal/Kg)	0	4550	
24	GCV of Imported Coal of the opening stock as per bill Coal Company	(Kcal/Kg)			5850
25	GCV of Imported Coal supplied as per bill Coal Company	(Kcal/Kg)			5850
26	Weighted average GCV of coal as received	(Kcal/Kg)		3728	
27	GCV of Domestic Coal of the opening stock as received at Station	(Kcal/Kg)	3371	3888	
28	GCV of Domestic Coal supplied as received at Station	(Kcal/Kg)	3522	4725	
29	GCV of Imported Coal of opening stock as received at Station	(Kcal/Kg)			5018
30	GCV of Imported Coal supplied as received at Station	(Kcal/Kg)			4901
31	Weighted average GCV of coal as received	(Kcal/Kg)		3746	

Sanjay Sinha  
Chartered Accountant  
Firm No. 200-12/13  
1100240000

Ankit Tiwari  
Chartered Accountant  
Firm No. 200823-1  
1100240000

ANIT  
BISWAS  
Chartered Accountant  
Firm No. 200-12/13  
1100240000

For MCA, Anandpur & Co.  
Chartered Accountants

**FORM-15 : Details of Secondary Fuel for Computation of Energy Charges**

Name of the Petitioner:  
Name of the Generating Station

NTPC Limited  
Barh Stage-II

S. No.	Month	Unit	May-23
			<b>LDO</b>
<b>A)</b>	<b>OPENING QUANTITY</b>		
1	Opening Stock of Oil	(KL)	3129.18
2	Value of Opening Stock:	(Rs.)	108547325
<b>B)</b>	<b>QUANTITY</b>		
3	Quantity of LDO supplied by Oil company	(KL)	3762.92
4	Adjustment (+/-) in qty supplied made by Oil Company	(KL)	0.00
5	LDO supplied by Oil company (3+4)	(KL)	3762.92
6	Normalive transit & handling losses	(KL)	0.00
7	Net Oil supplied (5-6)	(KL)	3762.92
<b>C)</b>	<b>PRICE</b>		
8	Amount charged by Oil Company	(Rs.)	109543913
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00
10	Handling, sampling and such other similar charges	(Rs.)	000
11	Total amount Charged [(8)+10]	(Rs.)	109543913
<b>D)</b>	<b>TRANSPORTATION</b>		
12	Transportation charges by rail/wh/road transport	(Rs.)	inclusive
	By Rail		
	By Road		
	By Ship		
13	Adjustment (+/-) in amount made by rail/wh/ Transport Company	(Rs.)	
14	Overcharge Charges, if any	(Rs.)	
15	Total Transportation Charges (12+13+14+15)	(Rs.)	
16	Other Charges	(Rs.)	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	109543913
<b>E)</b>	<b>TOTAL COST</b>		
18	Weighted average cost of Oil	(Rs./KL)	89035.47
<b>F)</b>	<b>QUALITY</b>		
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9371
20	Weighted average GCV of Oil	Kcal/KL	9326

**Ankit Tiwari**  
Director  
 11000000000  
 11000000000

**AMIT BISWAS**  
11000000000  
 11000000000  
 11000000000  
 H- MC (R)-DHR & Co  
 Chartered Accountants

**FORM- 15 : Details of Fuel for Computation of Energy Charges**

Name of the Petitioner:

NTPC Limited

Name of the Generating Station:

Bath Stage-II

S. No.	Month	Unit	Jun-23		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
<b>A) OPENING QUANTITY</b>					
1	Opening Quantity of Coal	(MT)	61441.41	338118.55	18495.97
2	Value of stock	(Rs.)	707632028.04	1044677320.25	29154711.41
<b>B) QUANTITY</b>					
3	Quantity of Coal supplied by Coal Company	(MT)	280114.52	455004.74	22,720
4	Adjustment (+/-) in quantity supplied made by Coal Company	(MT)	394.40	0.00	0.00
5	Coal supplied by Coal Company (A+B)	(MT)	283108.92	455004.74	22720
6	Normalised quantity as per design capacity from Coal based Project	(MT)	1915.32	4775.29	7.71
7	Net Coal Supplied (A+B)	(MT)	283503.32	455480.03	28007
<b>C) PRICE</b>					
8	Amount charged by the Coal Company	(Rs.)	466578130.32	1414017670.88	56429444.10
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	753076.16	24862490.15	0.00
10	Handling, Sampling and Stockpile joint charges	(Rs.)	4761465.11	12550162.20	0.00
11	Total amount charged (A+B+C)	(Rs.)	474610371.59	1452374263.23	56429444.10
<b>D) TRANSPORTATION</b>					
12	Transportation charges for 21 MT/ load (transport)	(Rs.)			
	By Rail		76671185.50	451164120.88	0.00
	By Road		1646586.80	2380172.14	0.00
13	Adjustment (+/-) in amount charged/ made by Railways/transport company	(Rs.)			
14	Insurance Charges, if any	(Rs.)			
15	Cost of storage in transporting Coal through MTR system, if applicable	(Rs.)	77612.54	1915068.27	0.00
16	Total Transportation Charges (12+13+14+15)	(Rs.)	17003898.24	494811461.37	0.00
17	Other Charges	(Rs.)			
18	Total amount charged for Coal supplied including transportation (11+16)	(Rs.)	644649359.83	2247185724.60	56429444.10
<b>E) TOTAL COST</b>					
19	Landed cost of Coal (18/20)(Rs./MT)	(Rs./MT)	3421.11	4900.11	24432.05
20	Blending Ratio (Domestic/Imported)		22.00%	75.82%	2.18%
21	Weighted average cost of Coal	(Rs./MT)		4675.93	
<b>F) QUALITY</b>					
GCV of Domestic Coal of the opening coal stock as per bill of coal					
22	Company	(KCal/Kg)	4803	3601	
23	GCV of Domestic Coal supplied as per bill of Coal Company	(KCal/Kg)	4518	4053	
GCV of imported Coal of the opening stock as per bill of Coal Company					
24	Company	(KCal/Kg)			4630
25	GCV of imported Coal supplied as per bill of Coal Company	(KCal/Kg)			4630
26	Weighted average GCV of coal as billed	(KCal/Kg)		4153	
GCV of Domestic Coal of the opening stock as received at Station					
27	Company	(KCal/Kg)	3490	3762	
28	GCV of Domestic Coal supplied as received at Station	(KCal/Kg)	3350	3538	
GCV of imported Coal of the opening stock as received at Station					
29	Company	(KCal/Kg)			4761
30	GCV of imported Coal supplied as received at Station	(KCal/Kg)			4761
31	Weighted average GCV of coal as Received	(KCal/Kg)		3590	

**Ankit Tiwari**  
Digitally signed by Ankit Tiwari  
DN: cn=Ankit Tiwari, o=Ankit Tiwari

**AWT**  
SRSWAS  
For M2, Khandwa, NCP  
Electrical Associates

**FORM-15 : Details of Secondary Fuel for Computation of Energy Charges**

Name of the Petitioner:

NTPC Limited

Name of the Generating Station:

Barh Stage-II

S. No.	Month	Unit	Jun-23
			LDO
<b>A)</b>	<b>OPENING QUANTITY</b>		
1	Opening Stock of Oil	(KL)	4814.31
2	Value of Opening Stock	(Rs.)	428591032
<b>B)</b>	<b>QUANTITY</b>		
3	Quantity of Oil supplied by Oil Company	(KL)	3928.11
4	Adjustment (+/-) in amt supplied made by Oil Company	(KL)	0.00
5	LDO supplied by Oil company (3+4)	(KL)	3928.11
6	Alternative transit & Handling losses	(KL)	0.00
7	Net Oil supplied (5-6)	(KL)	3928.11
<b>C)</b>	<b>PRICE</b>		
8	Amount charged by Oil Company	(Rs.)	251398092
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00
11	Total amount charged (8+9+10)	(Rs.)	251398092
<b>D)</b>	<b>TRANSPORTATION</b>		
12	Transportation charges by rail/air/road transport	(Rs.)	Inclusive
	By Rail		
	By Road		
	By Ship		
13	Adjustment (+/-) in amount made by Railways/ Transport Company	(Rs.)	
14	Demurrage Charges, if any	(Rs.)	
15	Total Transportation Charges (12+13+14+15)	(Rs.)	
16	Dishes Charges	(Rs.)	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	251398092
<b>E)</b>	<b>TOTAL COST</b>		
18	Weighted average cost of Oil	(Rs./KL)	77785.75
<b>F)</b>	<b>QUALITY</b>		
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9326
20	Weighted average GCV of Oil	Kcal/KL	9486

Sanjay  
Sinha

Chartered Accountant  
Firm Name:  
MCA 2011-12/11824  
11/02/2023

**Ankit  
Tiwari**

Chartered Accountant  
Firm Name:  
MCA 2011-12/11824  
11/02/2023

**AMIT  
BISWAS**  
Chartered Accountant  
Firm Name:  
MCA 2011-12/11824  
11/02/2023  
MCA 2011-12/11824  
11/02/2023

**FORM- 15 : Details of Fuel for Computation of Energy Charges**

Name of the Petitioner:  
Name of the Generating Station

NTPC Limited,  
Bark Stage-II

S. No.	Month	Unit	1st Q3		
			Domestic (NTPC Minus)	Domestic (Other Sources)	Imported
<b>A) OPENING QUANTITY</b>					
1	Opening Quantity of Coal	(T)	48045.60	150101.74	198147.34
2	Value of Stock	(Rs.)	11921551.99	37631071.52	49552623.51
<b>B) QUANTITY</b>					
3	Quantity of Coal supplied by Coal Company	(T)	177176.61	48720.51	225897.12
4	Adjustment (+/-) in quantity supplied made by Coal Company	(T)	0.00	0.00	0.00
5	Coal supplied by Coal Company (2+4)	(T)	177176.61	48720.51	225897.12
6	Remission Transit & Handling Charges (Per Coal Import Protocol)	(Rs.)	2825.51	3502.37	6327.88
7	Net Coal supplied (2+6)	(MT)	179002.12	52222.88	231225.00
<b>C) PRICE</b>					
8	Amount charged by the Coal Company	(Rs.)	\$21044595.00	1637212128.72	1658257123.72
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	-20000.00	-12675106.00	-12675106.00
10	Loading, Stacking and unloading & similar charges	(Rs.)	2180751.85	1554552.00	3735303.85
11	Total amount charged (8+9+10)	(Rs.)	\$23024546.85	1625096274.72	1670285527.57
<b>D) TRANSPORTATION</b>					
12	Transportation charges for rail/road/air/sea	(Rs.)			
	By Rail		28574475.00	476898601.30	505473076.30
	By Road		6177516.00	727071.00	6904587.00
	Adjustment (+/-) in amount charged made by Railroads/Inland Waterways				
13	Company	(Rs.)			
14	Demurrage Charges, if any	(Rs.)			
15	Cost of a coal in transit (i.e. Coal through NTPC system, if applicable)	(Rs.)	114410.00	1777521.00	1891931.00
16	Total Transportation Charges (12+13+14+15)	(Rs.)	24751971.00	484670873.30	509422844.30
17	Other charges	(Rs.)			
18	Total amount charged for Coal supplied including transportation (12+16)	(Rs.)	24751971.00	484670873.30	509422844.30
<b>E) TOTAL COST</b>					
19	Landed cost of Coal (11+18) (Rs.)	(Rs./MT)	1397.59	4851.87	12923.41
20	Efficiency Ratio (Domestic imported)		34.00%	18.16%	26.08%
21	Quantity: average cost of Coal	(Rs./MT)		4647.33	
<b>F) QUALITY</b>					
22	GV of Domestic Coal of the opening coal stock as per bill of Coal Company	(KCal/Kg)	4860	4779	
23	GV of Domestic Coal supplied as per bill of Coal Company	(KCal/Kg)	4474	4279	
24	GV of imported Coal of the opening stock as per bill of Coal Company	(KCal/Kg)			4660
25	GV of imported Coal supplied as per bill of Coal Company	(KCal/Kg)			4660
26	Weighted average GV of coal as billed	(KCal/Kg)		4368	
27	GV of Domestic Coal of the opening stock as received at Station	(KCal/Kg)	3305	3530	
28	GV of Domestic Coal supplied as received at Station	(KCal/Kg)	3276	3509	
29	GV of Imported Coal of opening stock as received at Station	(KCal/Kg)			4855
30	GV of Imported Coal supplied as received at Station	(KCal/Kg)			4855
31	Weighted average GV of coal as Applied	(KCal/Kg)		3577	

Sanjay Sinha

Chartered Accountant  
1174  
1174, Connaught Place  
New Delhi - 110028

Ankit  
Tiwari

Chartered Accountant  
1174  
1174, Connaught Place  
New Delhi - 110028

AMT  
3656/AS  
Chartered Accountant  
1174  
1174, Connaught Place  
New Delhi - 110028



**FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges**

Name of the Petitioner

NTPC Limited

Name of the Generating Station

Barh Stage-II

S. No.	Month	Unit	Jul-23
			100
<b>A)</b>	<b>OPENING QUANTITY</b>		
1	Opening Stock of Oil	(KL)	4833.62
2	Value of Opening Stock	(Rs.)	376002.00
<b>B)</b>	<b>QUANTITY</b>		
3	Quantity of LDO supplied by Oil company	(KL)	361.88
4	Adjustment (+/-) in qty. supplied made by Oil Company	(KL)	0.00
5	LDO supplied by Oil company (3-4)	(KL)	361.88
6	Normalive transit & Handling losses	(KL)	0.00
7	Net Oil supplied (5-6)	(KL)	361.88
<b>C)</b>	<b>PRICE</b>		
8	Amount charged by Oil Company	(Rs.)	27022752
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00
11	Total amount charged (8+9+10)	(Rs.)	27022752
<b>D)</b>	<b>TRANSPORTATION</b>		
12	Transportation charges by rail/Ship/Road transport	(Rs.)	Inclusive
	By Rail		
	By Road		
	By Ship		
13	Adjustment (+/-) in amount made by Railers/ Transport Company	(Rs.)	
14	Demurrage Charges, if any	(Rs.)	
15	Total Transportation Charges (12+13+14+15)	(Rs.)	
16	Other Charges	(Rs.)	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	27022752
<b>E)</b>	<b>TOTAL COST</b>		
18	Weighted average cost of Oil	(Rs./KL)	77742.41
<b>F)</b>	<b>QUALITY</b>		
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9486
20	Weighted average GCV of Oil	Kcal/KL	9362

Sunjay  
Sinha

Sanjay Kumar  
Sinha  
MCA 204327  
33104224

Ankit  
Tiwari

Sanjay Kumar  
Sinha  
MCA 204327  
33104224

ANIT  
BISWAS  
For MCA 204327 & Co  
Chartered Accountants

**FORM- 15 : Details of Fuel for Computation of Energy Charges**

Name of the Petitioner:

NTPC Limited

Name of the Generating Station:

Bath Stage-II

S. No.	Month	Unit	Aug-21		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
<b>A) OPENING QUANTITY</b>					
1	Opening Quantity of Coal	(MT)	61530.34	140225.27	24508.20
2	Value of stock	(Rs.)	159200947.79	641441131.00	180531867.51
<b>B) QUANTITY</b>					
3	Quantity of Coal supplied by Coal Company	(MT)	417175.62	617701.18	97542.80
4	Adjustment (+/-) in quantity supplied made by Coal Company	(MT)	3921.14	0.00	0.00
5	Coal supplied by Coal Company (3+4)	(MT)	421096.76	617701.18	97542.80
6	Normalise transit & Handling losses (For Coal based Project)	(%)	55.75	4441.01	128.77
7	Net Coal Supplied (5+6)	(MT)	426668.28	622142.19	97671.57
<b>C) PRICES</b>					
8	Amount charged by the Coal Company	(Rs.)	1103358048.20	2871047777.35	722421350.85
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	-9013638.60	197815717.76	0.00
10	Handling, Sampling, and such other similar charges	(Rs.)	1921408.23	24047777.19	0.00
11	Total amount charged (8+9+10)	(Rs.)	1107491717.83	3171141272.30	722421350.85
<b>D) TRANSPORTATION</b>					
12	Transportation charges by rail/road/air/sea transport	(Rs.)			
	By Rail		12694786.71	27271517.84	0.00
	By Road		7858900.00	14610011.00	0.00
	Adjustment (+/-) in amount charged made by rail/road/air/sea				
13	Company	(Rs.)			
14	Demurrage Charges, if any	(Rs.)			
15	Cost of fuel in case covering Coal through a bulk system, if applicable	(Rs.)	1380773.00	1005013.50	0.00
16	Total Transportation Charges (12+13+14+15)	(Rs.)	21740459.71	38832743.34	0.00
17	Other Charges	(Rs.)			
18	Total amount charged for fuel supplied including Transportation (11+16+17)	(Rs.)	1129648929.62	3259468715.64	722421350.85
<b>E) TOTAL COST</b>					
19	Total cost of the Coal (18+17)	(Rs./MT)	3116.55	4841.33	12441.29
20	Handling Loss (Domestic/Imported)		10.00%	27.00%	12.85%
21	Weighted average cost of Coal	(Rs./MT)		5635.01	
<b>F) QUALITY</b>					
22	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(KCal/Kg)	4865	4273	
23	GCV of Domestic Coal supplied as per bill of Coal Company	(KCal/Kg)	4526	4214	
24	GCV of Imported Coal of the opening stock as per bill Coal Company	(KCal/Kg)			5600
25	GCV of Imported Coal supplied as per bill Coal Company	(KCal/Kg)			5600
26	Weighted average GCV of coal as billed	(KCal/Kg)		4428	
27	GCV of Domestic Coal of the opening stock as received at Station	(KCal/Kg)	3245	3615	
28	GCV of Domestic Coal supplied as received at Station	(KCal/Kg)	3398	3410	
29	GCV of Imported Coal of opening stock as received at Station	(KCal/Kg)			4865
30	GCV of Imported Coal supplied as received at Station	(KCal/Kg)			5853
31	Weighted average GCV of coal as received	(KCal/Kg)		3598	

Sanjay  
Sinha

Chartered  
Accountant  
No. 2422002  
Lucknow

Ankit  
Tiwari

Chartered  
Accountant  
No. 2422002  
Lucknow

AMT  
BISWAS

Chartered  
Accountant

**FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges**

Name of the Petitioner:

NTPC Limited

Name of the Generating Station:

Barh Stage-II

S. No.	Month	Unit	Aug-23
			LDO
<b>A)</b>	<b>OPENING QUANTITY</b>		
1	Opening Stock of Oil	(KL)	2008.58
2	Value of Opening Stock	(Rs.)	2,25,737.83
<b>B)</b>	<b>QUANTITY</b>		
3	Quantity of LDO supplied by Oil Company	(KL)	2863.90
4	Adjustment(+/-) in qty. supplied made by Oil Company	(KL)	0.00
5	LDO supplied by Oil Company (3+4)	(KL)	2863.90
6	Normative transit & Handling losses	(KL)	0.00
7	Net Oil supplied (5-6)	(KL)	2863.90
<b>C)</b>	<b>PRICE</b>		
8	Amount charged by Oil Company	(Rs.)	219447.14
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00
11	Total amount Charged (8+9+10)	(Rs.)	219447.14
<b>D)</b>	<b>TRANSPORTATION</b>		
12	Transportation charges by rail/ship/road transport	(Rs.)	Inclusive
	By Rail		
	By Road		
	By Ship		
13	Adjustment(+/-) in amount made by Railways/ Transport Company	(Rs.)	
14	Demurrage Charges, if any	(Rs.)	
15	Total Transportation Charges (12+13+14+15)	(Rs.)	
16	Other Charges	(Rs.)	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	219447.14
<b>E)</b>	<b>TOTAL COST</b>		
18	Weighted average cost of Oil	(Rs./KL)	77455.93
<b>F)</b>	<b>QUALITY</b>		
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9784
20	Weighted average GCV of Oil	Kcal/KL	9457

Sanjay  
Sinha

Digitally signed  
by Sanjay Sinha  
DN: cn=Sanjay Sinha,  
o=NTPC, ou=Barh Stage-II

Ankit  
Tiwari

Digitally signed  
by Ankit Tiwari  
DN: cn=Ankit Tiwari,  
o=NTPC, ou=Barh Stage-II

AMT  
BISWAS  
For NTPC Limited & Co.  
Chartered Accountants

**FORM- 15 : Details of Fuel for Computation of Energy Charges**

Name of the Petitioner:  
Name of the Generating Station

NTPC Limited  
Barh Stage-II

S. No.	Month	Unit	Sep-23		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
<b>A) OPENING QUANTITY</b>					
1	Opening Quantity of Coal	(MT)	49388.65	112406.91	1718.73
2	Value of Stock	(Rs.)	127668974.54	107641380.30	21756751.97
<b>B) QUANTITY</b>					
3	Quantity of Coal supplied by Coal Company	(MT)	371102.69	449722.77	42221.40
4	Adjustment (+/-) in quantity supplied made by Coal Company	(MT)	4682.96	0.00	0.00
5	Coal supplied by Coal Company (3+4)	(MT)	375785.65	449722.77	42221.40
6	Shortage froms & Handling losses (Per Coal based industry)	(MT)	2518.10	3875.78	34.51
7	Net Coal Supplied (5-6)	(MT)	373267.55	445847.00	42186.89
<b>C) PRICE</b>					
8	Amount charged by the Coal Company	(Rs.)	92153857.50	101070674.50	92240788.87
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	17553038.57	110295027.35	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	7902141.00	3435821.00	0.00
11	Total amount charged (8+9+10)	(Rs.)	91255710.07	112435498.85	92240788.87
<b>D) TRANSPORTATION</b>					
12	Transportation charges by rail/road/air transport	(Rs.)			
	By Rail		318062444.00	410644110.00	0.00
	By Road		599444744	783188.00	0.00
	Adjustment (+/-) in amount charged made by Railways/air transport				
13	Consumption	(Rs.)			
14	Shortage Charges, if any	(Rs.)			
15	Cost of diesel in transporting Coal through T-OD systems, if applicable	(Rs.)	1226872.60	1674741.00	0.00
16	Total Transportation Charges (12+13+14+15)	(Rs.)	927651167.60	412489272.00	0.00
17	Other Charges	(Rs.)			
18	Total amount charged for Coal supplied including Transportation (11+16+17)	(Rs.)	129440816.78	208370690.15	44240788.87
<b>E) TOTAL COST</b>					
19	Amount cost of Coal (2+18) (+/-)	(Rs./MT)	3400.02	4714.10	1384.40
20	Handling Cost (Domestic/Imported)		18.00%	24.50%	0.00%
21	Weighted average cost of Coal	(Rs./MT)		5034.31	
<b>F) QUALITY</b>					
22	GRV of Domestic Coal of the opening and stock as per bill of Coal Company	(Cal./Kg)	4154	4226	
23	GRV of Domestic Coal supplied as per bill of Coal Company	(Cal./Kg)	4462	4102	
24	GRV of Imported Coal of the opening and stock as per bill of Coal Company	(Cal./Kg)			5650
25	GRV of Imported Coal supplied as per bill of Coal Company	(Cal./Kg)			5650
26	Weighted average GRV of coal as billed	(Cal./Kg)		4359	
27	GRV of Domestic Coal of the opening stock as received at Station	(Cal./Kg)	3203	3454	
28	GRV of Domestic Coal supplied as received at Station	(Cal./Kg)	3200	3564	
29	GRV of Imported Coal of opening stock as received at Station	(Cal./Kg)			6254
30	GRV of Imported Coal supplied as received at Station	(Cal./Kg)			6254
31	Weighted average GRV of coal as received	(Cal./Kg)		3808	

Sanjay Sinha

By Mr. Sanjay Sinha  
Date: 22/09/2023  
12:44

Ankit  
Tiwari

By Mr. Ankit Tiwari  
Date: 22/09/2023  
12:44

AMIT  
BISWAS

By Mr. Amit Biswas  
Date: 20/09/23  
15:28:12

The M.C. Bhambhani & Co  
Chartered Accountants

**FORM-15 : Details of Secondary Fuel for Computation of Energy Charges**

Name of the Petitioner:

NTPC Limited

Name of the Generating Station

Bairi Stage-II

S. No.	Month	Unit	Sep-23
			LDO
<b>A)</b>	<b>OPENING QUANTITY</b>		
1	Opening Stock of Oil	(Kg)	3503.42
2	Value of Opening Stock	(Rs.)	271961600
<b>B)</b>	<b>QUANTITY</b>		
3	Quantity of LDO supplied by Oil company	(Kg)	943.72
4	Adjustment (+/-) in qty. supplied made by Oil Company	(Kg)	0.00
5	LDO supplied by Oil company (3+4)	(Kg)	943.72
6	Normative transit & Handling losses	(Kg)	0.00
7	Net Oil supplied (5-6)	(Kg)	943.72
<b>C)</b>	<b>PRICE</b>		
8	Amount charged by Oil Company	(Rs.)	72000191
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00
11	Total amount charged (8+9+10)	(Rs.)	72000191
<b>D)</b>	<b>TRANSPORTATION</b>		
12	Transportation charges by rail/ship/road transport	(Rs.)	
	By Rail		
	By Road		
	By Ship		
13	Adjustment (+/-) in amount made by railway/ Transport Company	(Rs.)	
14	Demurrage Charges, if any	(Rs.)	
15	Total Transportation Charges (12+13+14)	(Rs.)	
16	Other Charges	(Rs.)	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	72000191
<b>E)</b>	<b>TOTAL COST</b>		
18	Weighted average cost of Oil	(Rs./Kg)	77393.97
<b>F)</b>	<b>QUALITY</b>		
19	GCV of Oil of the opening stock as per Oil Company	(Kcal/Kg)	9457
20	Weighted average GCV of Oil	(Kcal/Kg)	9471

Sanjay Sinha  
 Chartered Accountant  
 11/11/2023

**Ankit Tiwari**  
 Chartered Accountant  
 11/11/2023

AMT  
 RSWAS  
 For M. C. Bhandari & Co.  
 Chartered Accountants

**FORM-15 : Details of Fuel for Computation of Energy Charges**

Name of the Petitioner:  
Name of the Generating Station

NTPC Limited  
Roh Stage-I

S. No.	Month	Unit	Oct-23		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
<b>A) OPENING QUANTITY</b>					
1	Opening Quantity of Coal	(MT)	91177.98	11465.66	1026.32
2	Value of Stock	(Rs.)	8,5014965.71	29251817.44	82843817.04
<b>B) QUANTITY</b>					
3	Quantity of Coal supplied by Coal Company	(MT)	344665.49	317136.73	5426.40
4	Adjustment (+/-) in quantity supplied, made by Coal Company	(MT)	5978.13	0.00	0.00
5	Coal supplied by Coal Company (1+4)	(MT)	350643.62	317136.73	5426.40
6	Maximise Transit & Handling Charges (for Coal based Projects)	(MT)	2761.47	2078.23	207.65
7	Total Coal supplied (5+6)	(MT)	353405.09	319214.96	5634.05
<b>C) PRICE</b>					
8	Amount charged by the Coal Company	(Rs.)	850734199.51	3258721058.04	596221876.01
9	Adjustment (+/-) in amount charged, made by Coal Company	(Rs.)	-11377588.74	39417182.71	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	8135381.26	6707358.74	0.00
11	Total amount charged (8+9+10)	(Rs.)	847490492.03	3304832500.49	606221876.01
<b>D) TRANSPORTATION</b>					
12	Transportation charges by rail/road/air/ship	(Rs.)			
	By Rail		12076446.65	14814491.180	0.00
	By Road		0.00	1830670.41	0.00
13	All other (+/-) in amount charged, made by Railways/transport company	(Rs.)			
14	Demurrage Charges, if any	(Rs.)			
15	Cost of chival in transporter Coal through MHT system, if applicable	(Rs.)	7423382.54	149162.62	0.00
16	TOTAL Transportation Charges (12+13+14+15)	(Rs.)	17704868.19	16950846.21	0.00
17	Other Charges	(Rs.)			
18	Total amount charged for Coal supplied including Transportation (11+16)	(Rs.)	1167778681.22	3321790946.70	606221876.01
<b>E) TOTAL COST</b>					
19	Graded cost of Coal (7+18)/(1+7)	(Rs./MT)	3493.28	4081.77	12320.21
20	Blending Ratio (Domestic/Imported)		70.00%	18.20%	11.80%
21	Weighted average cost of Coal	(Rs./MT)		4620.93	
<b>F) QUALITY</b>					
22	GV of Domestic Coal of opening coal stock as per bill of Coal Company	(KCal/Kg)	4854	4204	
23	GV of Domestic Coal supplied as per bill of Coal Company	(KCal/Kg)	4458	4447	
24	GV of Imported Coal of the opening stock as per bill of Coal Company	(KCal/Kg)			5650
25	GV of Imported Coal supplied as per bill of Coal Company	(KCal/Kg)			5650
26	Weighted average GV of coal as received	(KCal/Kg)		4578	
27	GV of Domestic Coal of the opening stock as received at station	(KCal/Kg)	3287	3561	
28	GV of Domestic Coal supplied as received at Station	(KCal/Kg)	3613	3571	
29	GV of Imported Coal of opening stock as received at Station	(KCal/Kg)			4854
30	GV of Imported Coal supplied as received at Station	(KCal/Kg)			4871
31	Weighted average GV of coal as received	(KCal/Kg)		3580	

Sanjay Srivastava  
Chartered Accountant  
FCA, Mumbai

**Ankit Tiwari**  
Chartered Accountant  
FCA, Mumbai

**AMIT BISWAS**  
Chartered Accountant  
FCA, Mumbai  
For M.C. Shandani & Co.  
Chartered Accountants

**FORM-15 : Details of Secondary Fuel for Computation of Energy Charges**

Name of the Petitioner:

NTPC Limited

Name of the Generating Station:

Barh Stage-II

S. No.	Month	Unit	Oct-23
			LDO
<b>A)</b>	<b>OPENING QUANTITY</b>		
1	Opening Stock of Oil	(KL)	2408.97
2	Value of Opening Stock	(Rs.)	194179218
<b>B)</b>	<b>QUANTITY</b>		
3	Quantity of LDO supplied by Oil company	(KL)	2258.72
4	Adjustment (+/-) in qty supplied made by Oil Company	(KL)	0.00
5	LDO supplied by Oil company (3+4)	(KL)	2258.72
6	Normal loss & Handling losses	(KL)	0.00
7	Net Oil supplied (5-6)	(KL)	2258.72
<b>C)</b>	<b>PRICE</b>		
8	Amount charged by Oil Company	(Rs.)	222013075
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00
11	Total amount charged (8+9+10)	(Rs.)	222013075
<b>D)</b>	<b>TRANSPORTATION</b>		
12	Transportation charges by rail/ship/road transport	(Rs.)	
	By Rail		
	By Road		
	By Ship		
	By Air		
13	Adjustment (+/-) in amount made by Railway/Transport Company	(Rs.)	
14	Demurrage Charges, if any	(Rs.)	
15	Total Transportation Charges (12+13+14+15)	(Rs.)	
16	Other Charges	(Rs.)	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	222013075
<b>E)</b>	<b>TOTAL COST</b>		
18	Weighted average cost of Oil	(Rs./KL)	76012.88
<b>F)</b>	<b>QUALITY</b>		
19	GCV of Oil of the opening stock as per Oil Company	(Kcal/KL)	9478
20	Weighted average GCV of Oil	(Kcal/KL)	9481

Sanjay  
Sinha

Partner and  
Chartered Accountant  
CIN: 271003  
1000442300

Ankit  
Tiwari

Partner and  
Chartered Accountant  
CIN: 271003  
11000148000

AMIT  
JISWAS  
Partner and  
Chartered Accountant  
CIN: 271003  
1000442300

**FORM- 15 : Details of Fuel for Computation of Energy Charges**

Name of the Petitioner: **NTPC Limited**  
 Name of the Generating Station: **Barh Stage-II**

S. No.	Month	Unit	Nov-23		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
<b>A) OPENING QUANTITY</b>					
1	Opening Quantity of Coal	(MT)	55027.80	13737.94	4071.78
2	Loss of Stock	(%)	19.24561.87	25.1720303.09	0.776740.46
<b>B) QUANTITY</b>					
3	Quantity of Coal supplied by Coal Company	(MT)	332784.72	413377.56	74891.40
4	Adjustment (+/-) in quantity as billed / made by Coal Company	(MT)	3741.01	0.00	0.00
5	Coal supplied by Coal Company (3+4)	(MT)	336525.73	413377.56	74891.40
6	Normative Trans & Handling Losses (For Coal based projects)	(MT)	2934.34	1917.78	20.57
7	Net Coal supplied (5-6)	(MT)	333591.39	411459.78	74870.83
<b>C) PRICE</b>					
8	Amount charged by the Coal Company	(Rs.)	810972578.77	1388053302.28	170534550.89
9	Adjustment (+/-) in amount charged / made by Coal Company	(Rs.)	-4071754.79	70506705.20	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	3080248.79	169307.57	0.00
11	Total amount charged (8+9+10)	(Rs.)	797082472.77	1404919315.05	170534550.89
<b>D) TRANSPORTATION</b>					
12	Transportation charges by rail/road/air transport	(Rs.)			
	By Rail		320526761.77	381774215.00	0.00
	By Road		0.00	3271354.50	0.00
13	Adjustment (+/-) in amount charged / made by Railways/Transport Company	(Rs.)			
14	Demurrage Charges, if any	(Rs.)			
15	Cost of diesel in transporting Coal through MGR systems, if applicable	(Rs.)	1707144.34	1575447.41	0.00
16	Total Transportation Charges (12+13+14+15)	(Rs.)	322049156.11	3833491.91	0.00
17	Other Charges	(Rs.)			
18	Total amount charged for Coal supplied including Transportation (11+16)	(Rs.)	1119530748.88	1408754206.96	170534550.89
<b>E) TOTAL COST</b>					
19	Landed cost of Coal (2-18)/(1+7)	(Rs./MT)	3428.72	4578.94	11084.29
20	Blending Ratio (Domestic/Imported)		75.10%	52.60%	2.55%
21	Weighted average cost of Coal	(Rs./MT)		4338.08	
<b>F) QUALITY</b>					
22	GCV of Domestic Coal of the opening stock as per bill of Coal Company	(KCal/Kg)	4870	4413	
23	GCV of Domestic Coal supplied as per bill of Coal Company	(KCal/Kg)	4282	4464	
24	GCV of Imported Coal of the opening stock as per bill of Coal Company	(KCal/Kg)			5050
25	GCV of Imported Coal supplied as per bill of Coal Company	(KCal/Kg)			5050
26	Weighted average GCV of coal as billed	(KCal/Kg)		4433	
27	GCV of Domestic Coal of the opening stock as received in Station	(KCal/Kg)	3387	3570	
28	GCV of Domestic Coal supplied as received in Station	(KCal/Kg)	3554	3320	
29	GCV of Imported Coal of opening stock as received in Station	(KCal/Kg)			4870
30	GCV of Imported Coal supplied as received in Station	(KCal/Kg)			4872
31	Weighted average GCV of coal as Received	(KCal/Kg)		3193	

Sanjay Sinha  
 Date: 11/01/2024  
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**Ankit  
 Tiwari**

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 DN: cn=Ankit Tiwari, o=NTPC, ou=Barh Stage-II, email=ankit.tiwari@ntpc.co.in

**ANET** Barh Stage-II  
**DISKAS** Barh Stage-II  
 144-2233444-2000  
 For NTPC, Barh Stage-II & Co.  
 Chartered Accountants



**FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges**

Name of the Petitioner:  
Name of the Generating Station:

NTPC Limited  
Barh Stage-II

S. No.	Month	Unit	Nov-23
			<b>LDO</b>
<b>A)</b>	<b>OPENING QUANTITY</b>		
1	Opening Stock of Oil	(KL)	4752.60
2	Value of Opening Stock	(Rs.)	52325.1814
<b>B)</b>	<b>QUANTITY</b>		
3	Quantity of LDO supplied by Oil company	(KL)	0.00
4	Adjustment (+/-) in qty supplied made by Oil Company	(KL)	0.00
5	LDO supplied by Oil company (3+4)	(KL)	0.00
6	Normal % transit & Handling losses	(KL)	0.00
7	Net Oil supplied (5-6)	(KL)	0.00
<b>C)</b>	<b>PRICE</b>		
8	Amount charged by Oil Company	(Rs.)	0
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00
10	Handling, Storing and such other similar charges	(Rs.)	0.00
11	Total amount charged (8+9-10)	(Rs.)	0
<b>D)</b>	<b>TRANSPORTATION</b>		
12	Transportation charges by rail/ship/road transport	(Rs.)	(Inclusive)
	By Rail		
	By Road		
	By Ship		
13	Adjustment (+/-) in amount made by Railway/ Transport Company	(Rs.)	
14	Demurrage Charges, if any	(Rs.)	
15	Total Transportation Charges (12+13+14+15)	(Rs.)	
16	Other Charges	(Rs.)	0
	Total Amount charged for Oil supplied including transportation	(Rs.)	
17	(11+16+16)	(Rs.)	0
<b>E)</b>	<b>TOTAL COST</b>		
18	Weighted average cost of Oil	(Rs./KL)	76012.88
<b>F)</b>	<b>QUALITY</b>		
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9481
20	Weighted average GCV of Oil	Kcal/KL	9500

Sanjay Sinha

Sanjay Sinha  
SHE  
JAMSHEDPUR  
0331

Ankit  
Tiwari

Sanjay Sinha  
SHE  
JAMSHEDPUR  
0331

AMIT  
BISWAS

Sanjay Sinha  
SHE  
JAMSHEDPUR  
0331  
For M.C. Bhattacharya & Co.  
Chartered Accountants

**FORM-15 : Details of Fuel for Computation of Energy Charges**

Name of the Position: Name of the Generating Station		NTPC Limited Rambhadracharya			
S. No.	Month	Unit	Dec-23		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
<b>A) OPENING QUANTITY</b>					
1	Closing Quantity of Coal	(MT)	10821.37	119501.68	2982.38
2	Value of Stock	(Rs.)	312712764.72	514450301.84	38817577.52
<b>B) QUANTITY</b>					
3	Quantity of Coal supplied by Coal Company	(MT)	455748.42	102071.20	8904.90
4	Adjustment (+/-) in quantity supplied made by Coal Company	(MT)	5726.55	2.00	0.00
5	Coal supplied by Coal Company (3+4)	(MT)	461474.97	102073.20	8904.90
6	Normative Transit & Handling Losses (For coal based projects)	(MT)	5035.99	8771.77	88.10
7	Net Coal Supplied (5-6)	(MT)	456438.98	101201.43	8901.78
<b>C) PRICE</b>					
8	Amount charged by the Coal Company	(Rs.)	1180558166.08	185471184.60	37374112.89
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	-1051174.46	1661941.34	0.00
10	Freight, Scripings and such other similar charges	(Rs.)	717457.52	622797.23	0.00
11	Total amount charged (8+9+10)	(Rs.)	1180152449.14	187259303.17	37374112.89
<b>D) TRANSPORTATION</b>					
12	Transportation charges by rail/air/road transport	(Rs.)			
	By Rail		42401880.08	331718151.78	0.00
	By Road		0.00	3215294.24	0.00
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)			
14	Demurrage Charges (if any)	(Rs.)			
15	Cost of diesel in transporting Coal through MGN system, if applicable	(Rs.)	1676016.94	1502218.37	0.00
16	Total Transportation Charges (12+13+14+15)	(Rs.)	42401880.08	332220370.15	0.00
17	Other Charges	(Rs.)			
18	Total amount charged for Coal supplied including transportation (11+16)	(Rs.)	552770889.77	176481267.42	37374112.89
<b>E) TOTAL COST</b>					
19	Ex-works cost of Coal (C-18)(11+17)	Rs./MT	3423.88	4494.15	22403.15
20	Freight Rate (Domestic Portent)		60.80%	81.50%	4.50%
21	Weighted average cost of Coal	Rs./MT		4178.30	
<b>F) QUALITY</b>					
22	GV of Domestic Coal of the opening rail stock as per bill of Coal Company	(KCal/Kg)	4871	4859	
23	GV of Domestic Coal supplied as per bill of Coal Company	(KCal/Kg)	4412	4168	
24	GV of Imported Coal of the opening stock as per Bill of Coal Company	(KCal/Kg)			5050
25	GV of Imported Coal supplied as per Bill of Coal Company	(KCal/Kg)			5450
26	Weighted average GV of coal as billed	(KCal/Kg)		4393	
27	GV of Domestic Coal of the opening Stock as received at Station	(KCal/Kg)	3359	3357	
28	GV of Domestic Coal supplied as received at Station	(KCal/Kg)	3214	3225	
29	GV of Imported Coal of opening stock as received at Station	(KCal/Kg)			4871
30	GV of Imported Coal supplied as received at Station	(KCal/Kg)			4576
31	Weighted average GV of coal as received	(KCal/Kg)		3317	

Sanjay  
Sinha

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by Sanjay Sinha  
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Ankit Tiwari

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by Ankit Tiwari  
Date: 2024.09.24  
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AMIT  
BISWAS  
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by AMIT BISWAS  
Date: 2024.09.24  
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**FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges**

Name of the Petitioner:  
Name of the Generating Station

NTPC Limited  
Barh Stage-II

S. No.	Month	Unit	Dec-23
			LDO
<b>A)</b>	<b>OPENING QUANTITY</b>		
1	Opening Stock of Oil	(Kg.)	1/12/02
2	Value of Opening Stock	(Rs.)	10/331322
<b>B)</b>	<b>QUANTITY</b>		
3	Quantity of LDO supplied by Oil company	(KL)	3987.50
4	Adjustment (+/-) in qty supplied made by Oil Company	(KL)	0.00
5	LDO supplied by Oil company (3+4)	(KL)	3987.50
6	Non-supply, break & Handling losses	(KL)	0.00
7	Net Oil supplied (5-6)	(KL)	3987.50
<b>C)</b>	<b>PRICE</b>		
8	Amount charged by Oil Company	(Rs.)	294112617
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00
11	Total amount charged (8+9+10)	(Rs.)	294112617
<b>D)</b>	<b>TRANSPORTATION</b>		
12	Transportation charges by air/road/rail transport	(Rs.)	inclusive
	By Rail		
	By Road		
	By Ship		
13	Adjustment (+/-) in amount made by railroads/Transport Company	(Rs.)	
14	Demurrage Charges, if any	(Rs.)	
15	Total Transportation Charges (12+13+14+15)	(Rs.)	
16	Other Charges	(Rs.)	0
17	Total Amount charged for Oil supplied including transportation (11+16)	(Rs.)	294112617
<b>E)</b>	<b>TOTAL COST</b>		
18	Weighted average cost of Oil	(Rs./KL)	75150.82
<b>F)</b>	<b>QUALITY</b>		
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9500
20	Weighted average GCV of Oil	Kcal/KL	9500

Sanjay  
Sinha

Deputy Engineer  
Energy Deptt  
Jalandhar  
151001-0101

**Ankit  
Tiwari**

Deputy Engineer  
Energy Deptt  
Jalandhar  
151001-0101

**AMIT  
Biswas**

Deputy Engineer  
Energy Deptt  
Jalandhar  
151001-0101

For M.C. Shandil & Co  
Chartered Accountants

Details of Sourcewise fuel for computation of Energy Charges

Company		NTPC Limited			
Name of the generating Station		Bath Super Thermal Power Plant-STAGE 02			
Month		January-2024			
Sl.	Particulars	Unit	COAL DOMESTIC (NTPC MINED)	COAL DOMESTIC	COAL-IMPORTED
<b>A) OPENING QUANTITY</b>					
1	Opening Stock of coal	MT	85432.00	34640.00	32.42
2	Value of Stock	Rs.	293092295.02	117446762.62	207973.06
<b>B) QUANTITY</b>					
3	Quantity of Coal Lignite supplied by Coal/Lignite Company	MT	36084.17	52433.34	6726.72
3.01	- Qty Received (In Hrs)	MT	0.00	0.00	2732.42
3.02	- Qty Received (non Hr Hrs)	MT	36084.17	52433.34	400
4	Quantity of Coal Lignite supplied from by Coal/Lignite Company	MT	36084.17	52433.34	0.00
5	Coal supplied by Coal/Lignite Company (In Hr)	MT	24027.22	52433.34	6726.72
6	Non-lignite carrier & Handling Charge for Coal Lignite stock (In Hr)	MT	3091.00	4155.71	15.17
6.01	Non-lignite Loss (In Hr)	MT	0.00	0.00	15.17
6.02	Non-lignite Loss (non Hr)	MT	3091.00	4155.71	0.00
7	Net Coal/Lignite supplied (3 + 5)	MT	35294.22	52433.34	6726.72
<b>C) PRICE</b>					
8	Amount charged by the Coal/Lignite Company	Rs.	100000000.00	171000000.00	12000000.00
9	Adjustment (+/-) in amount charged by coal/Lignite Company	Rs.	100000.00	100000.00	0.00
10	Handling charges and such other similar charges	Rs.	1184789.04	1500000.00	0.00
11	Total Amount charged (8 + 9 + 10)	Rs.	101184789.04	172100000.00	12000000.00
<b>D) TRANSPORTATION</b>					
12	Inter-Station charges by Rail/Ship/Road (In Hr)	Rs.	32575470.00	1000000.00	0.00
13	Adjustment (+/-) in amount charged by railways/ship/road company	Rs.	0.00	0.00	0.00
14	Inter-Station charges (In Hr)	Rs.	32575470.00	1000000.00	0.00
15	Cost of diesel in transporting coal through AGRH system (If applicable)	Rs.	150211.00	1000000.00	0.00
16	Total transportation charges (12 + 13 + 14 + 15)	Rs.	32725681.00	5000000.00	0.00
17	Total amount charged for Coal/Lignite including transportation (11 + 16)	Rs.	133910470.04	177100000.00	12000000.00
<b>E) TOTAL COST</b>					
18	Landed Cost of Coal (Rs) (2+17) (In Hr)	Rs./MT	3482.20	4388.92	12000.00
19	Blending Ratio (Domestic/Imported)	%	40.40	59.60	4.67
20	Weighted average cost of Coal (Rs/MT) (Including blending)	Rs./MT	4400.00	4400.00	4400.00
20.10	Weighted average cost of Coal (Rs/MT) (Excluding blending)	Rs./MT	4400.00	4400.00	4400.00
<b>F) QUALITY</b>					
21	GVV of Domestic coal supplied as per bill of coal company	kJ/kg	4155	4254	4
22	GVV of Domestic coal supplied as per bill of coal company	kJ/kg	4254	4254	0
23	GVV of imported coal supplied as per bill of coal company	kJ/kg	0	0	5650
24	GVV of imported coal supplied as per bill of coal company	kJ/kg	0	0	5650
25	Weighted average GVV of Coal/Lignite as billed (Including blending)	kJ/kg	4254	4254	4254
25.10	Weighted average GVV of Coal/Lignite as billed (Excluding blending)	kJ/kg	4254	4254	4254
26	GVV of Domestic coal supplied as received at station	kJ/kg	3200	3200	3
27	GVV of Domestic coal supplied as received at station	kJ/kg	3200	3200	3
28	GVV of imported coal supplied as received at station	kJ/kg	0	0	4000
29	GVV of imported coal supplied as received at station	kJ/kg	0	0	4000
30	Weighted average GVV of coal/Lignite as received (Including blending)	kJ/kg	3421	3421	3421
30.10	Weighted average GVV of coal/Lignite as received (Excluding blending)	kJ/kg	3421	3421	3421

Generated On: 16-04-2024

Ankit Tiwari  
Quality Control  
NTPC Limited  
GPO, Gandhinagar  
New Delhi-110002

ANIT  
ESWAS  
NTPC Limited  
Gandhinagar  
New Delhi-110002  
Phone: 011-26114474  
E-mail: anit@npsc.co.in

**FORM-15 : Details of Secondary Fuel for Computation of Energy Charges**

Name of the Petitioner:

NTPC Limited

Name of the Generating Station:

Barrh Stage-II

S. No.	Month	Unit	Jan-24
			LDO
A)	<b>OPENING QUANTITY</b>		
1	Opening Stock of Oil	(KL)	4458.92
2	Value of Opening Stock	(Rs.)	33500121
B)	<b>QUANTITY</b>		
3	Quantity of LDO supplied by Oil company	(KL)	0.00
4	Adjustment(+/-) in qty supplied made by Oil Company	(KL)	0.00
5	LDO supplied by Oil company (3+4)	(KL)	0.00
6	Normative break & Handling losses	(KL)	0.00
7	Net Oil supplied (3-6)	(KL)	0.00
C)	<b>PRICE</b>		
8	Amount charged by Oil Company	(Rs.)	0
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00
11	Total amount charged (8+9+10)	(Rs.)	0
D)	<b>TRANSPORTATION</b>		
12	Transportation charges by rail/ship/road transport:	(Rs.)	INCLUSIVE
	By Rail		
	By Road		
	By Ship		
13	Adjustment(+/-) in amount made by Railways/ Transport Company	(Rs.)	
14	Discount Charges, if any	(Rs.)	
15	Total Transportation Charges (12+13+14+15)	(Rs.)	
16	Other Charges	(Rs.)	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	0
E)	<b>TOTAL COST</b>		
18	Weighted average cost of Oil	(Rs./KL)	75150.32
F)	<b>QUALITY</b>		
19	SCV of Oil of the opening stock as per Oil Company	Kcal/KL	9500
20	Weighted average SCV of Oil	Kcal/KL	9510

Sanjoy Sinha

Chartered Accountant  
**Ankit Tiwari**

Chartered Accountant  
 Registered Office  
 11, Sector-14, Gurgaon  
 Haryana

ANIT  
 Chartered Accountant  
 Registered Office  
 11, Sector-14, Gurgaon  
 Haryana

Details of Sourcewise fuel for computation of Energy Charges

Part 1  
Form - 15 version 1

Company		NTPC Limited			
Name of the generating Station		Bath Super Thermal Power Plant-STAGE 02			
Month:		February-2024			
Sr.	Particulars	Unit	COAL DOMESTIC (MTPC BINS)	COAL DOMESTIC	COAL - IMPORTED
<b>A) OPENING QUANTITY</b>					
1	Opening Stock of coal	MT	32210.34	554374.97	33390.47
2	Value at stock	Rs.	21738543.41	2422050116.37	47204718.7
<b>B) QUANTITY</b>					
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	MT	81821.45	453465.11	162892.21
3.01	- Qty Received (MT Head)	MT	0.00	0.00	162892.21
3.02	- Qty Received (Non Pn Head)	MT	31217.45	419465.75	0.00
4	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	MT	1858.42	0.00	0.00
5	Coal supplied by Coal/Lignite Company (Gross)	MT	203201.22	453465.75	162892.21
6	Normative transit & handling losses for Coal/Lignite bins (provided)	MT	2408.28	3003.87	325.26
6.01	- Normative Loss (MT Head)	MT	0.00	0.00	325.26
6.02	- Normative Loss (Non Pn Head)	MT	2408.28	3003.87	0.00
7	Net Coal/Lignite supplied (C-6)	MT	200792.94	450461.78	162566.95
<b>C) PRICE</b>					
8	Amount charged by the Coal/Lignite Company	Rs.	813768236.21	1477531911.42	2982174232.36
9	Adjustment (+/-) in amount charged by coal/Lignite Company	Rs.	1311988.23	22331621.14	0.00
10	Handling, Sampling and audit other similar charges	Rs.	1620991.84	13461724.54	6.00
11	Total amount charged (8-9-10)	Rs.	816709116.28	1499869757.10	2982174238.36
<b>D) TRANSPORTATION</b>					
12	Transportation charges by Rail/Ship/Road/Airport	Rs.	211821865.76	44935971.21	0.00
13	Additional (+/-) amount charged by railways/road/railway	Rs.	0.00	0.00	0.00
14	Demurrage charges, if any	Rs.	0.00	0.00	0.00
15	Cost of diesel/transporting Coal through MCB system, if applicable	Rs.	185741.26	274299.41	3.21
16	Other miscellaneous charges (12+13+14+15)	Rs.	203673441.74	202788310.44	0.00
17	Total amount charged for Coal/Lignite loaded including transportation (12-16)	Rs.	1352665450.76	195411607.11	2082174241.57
<b>E) TOTAL COST</b>					
18	Weighted Cost of Coal/Lignite (C-17)/(C-7)	Rs./MT	281.74	432.95	1769.76
19	Handling Rate (Deducted)	Rs.	20.00	63.31	15.48
20	Weighted average cost of Coal/Lignite (including biomass)	Rs./MT	493.77		
21	Weighted average cost of Coal/Lignite (Excluding biomass)	Rs./MT	503.77	503.77	2037.24
<b>F) QUALITY</b>					
22	GCV of Domestic coal in the opening stock as per bill of coal company	kCal/kg	8814	4308	3
23	GCV of Domestic coal supplied as per bill of coal company	kCal/kg	4037	4014	0
24	GCV of imported coal of the opening stock as per bill of coal company	kCal/kg	0	0	1876
25	GCV of imported coal supplied as per bill of coal company	kCal/kg	6	0	3556
26	Weighted average GCV of Coal/Lignite as billed (including biomass)	kCal/kg	4763		
27	Weighted average GCV of Coal/Lignite as billed (Excluding biomass)	kCal/kg	1708	4208	4262
28	GCV of Domestic coal of the opening stock as received at station	kCal/kg	3808	3965	0
29	GCV of Domestic coal/biomass supplied as received at station	kCal/kg	3202	3807	0
30	GCV of imported coal of the opening stock as received at station	kCal/kg	0	0	4144
31	GCV of imported coal supplied as received at station	kCal/kg	0	0	4020
32	Weighted average GCV of Coal/Lignite as Received (including biomass)	kCal/kg	3480		
33	Weighted average GCV of Coal/Lignite as Received (Excluding biomass)	kCal/kg	3082	3963	3925

Revised On: 15.04.2024

Sanjay  
Sinha

Manager (Accounts)  
14220079  
14220082  
14220088

Ankit  
Tiwari  
Deputy General  
Manager (Accounts)  
14220078  
14220079  
14220080

AMT  
BIGWAS  
Company Code: 14220078  
Date: 15/04/2024  
14220079

For M.C. Prasad S.O.  
Deputed Manager

**FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges**

Name of the Petitioner:  
Name of the Generating Station:

NTPC Limited  
Barh Stage-II

S. No.	Month	Unit	Feb-24
			<b>LDO</b>
<b>A) OPENING QUANTITY</b>			
1	Opening Stock of Oil	(KL)	2378.19
2	Value of Opening Stock	(RS.)	253072.75
<b>B) QUANTITY</b>			
3	Quantity of LDO supplied by Oil Company	(KL)	0.00
4	Adjustment(+/-) in qty supplied made by Oil Company	(KL)	0.00
5	LDO supplied by Oil company (3+4)	(KL)	0.00
6	Normalive Inrisk & Handling losses	(KL)	0.00
7	Net Oil supplied (5-6)	(KL)	0.00
<b>C) PRICE</b>			
8	Amount charged by Oil Company	(RS.)	0
9	Adjustment (+/-) in amount charged by Oil Company	(RS.)	0.00
10	Headline, Sampling and such other similar charges	(RS.)	0.00
11	Total amount charged (8-9+10)	(RS.)	0
<b>D) TRANSPORTATION</b>			
12	Transportation charges by rail/ship/road transport	(RS.)	Inclusive
	By Rail		
	By Road		
	By Ship		
13	Adjustment(+/-) in amount made by railways/ Transport Company	(RS.)	
14	Demurrage Charges, if any	(RS.)	
15	Total Transportation Charges (12+13+14+15)	(RS.)	
16	Other Charges	(RS.)	0
17	Total Amount charged for Oil supplied (including transportation) (11+15+16)	(RS.)	0
<b>E) TOTAL COST</b>			
18	Weighted average cost of Oil	(RS./KL)	75150.32
<b>F) QUALITY</b>			
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9510
20	Weighted average GCV of Oil	Kcal/KL	9468

Sanjay Sinha  
B.Com, CA, Dip. Taxation  
1988-89  
1990-91  
1992-93

Ankit Tiwari  
B.Com, Dip. Taxation  
1988-89  
1990-91  
1992-93

ABHIJIT  
B.Com, Dip. Taxation  
1988-89  
1990-91  
1992-93  
For: M.C. Dhandar & Co.  
Chartered Accountants

Details of Sourcewise fuel for computation of Energy Charges

Company		NTPC Limited			
Name of the generating Station		Bark Super Thermal Power Plant-STAGE 02			
Month		March-2024			
Sl.	Particulars	Unit	COAL DOMESTIC (NTPC Mines)	COAL-DOMESTIC	COAL-IMPORTED
<b>A) OPENING QUANTITY</b>					
1	Opening Stock of coal	MT	14041.41	43774.11	10330.24
2	Value of Stock	Rs.	347203264.63	2007625525.18	194438044.21
<b>B) QUANTITY</b>					
3	Quantity of Coal/Lignite supplied by Coal/Lignite Company	MT	205482.70	540449.58	28107.48
3.1	- Qty Received (PH Head)	MT	0.00	0.00	28107.48
3.2	- Qty Received (Non PH Head)	MT	205482.70	540449.58	0.00
4	Adjusted (+/-) quantity supplied made by Coal/Lignite Company	MT	3141.21	0.00	0.00
5	Coal supplied by Coal/Lignite Company (SHA)	MT	300300.20	540240.58	28107.20
6	Non-ratite Inflow & Handling Inflow (for Coal/Lignite mined project)	MT	3392.81	4143.88	71.52
6.01	- Inflow Loss (PH Head)	MT	0.00	0.00	71.52
6.02	- Inflow Loss (Non PH Head)	MT	3392.81	4143.88	0.00
7	Net Coal/Lignite supplied (B+C)	MT	277300.18	636697.66	28278.72
<b>C) PRICE</b>					
8	Amount charged by the Coal/Lignite Company	Rs.	671470037.00	1837891029.25	146454019.30
9	Adjustment (+/-) in amount charged by coal/Lignite Company	Rs.	6998777.24	7180743.00	0.00
10	Handling, carting and such other Ancillary charges	Rs.	1518427.72	1022756.87	0.00
11	Total Amount charged (D+E+F)	Rs.	679155241.96	1849271229.12	146454019.30
<b>D) TRANSPORTATION</b>					
12	Transportation charges by Rail/Ship/Road Transport	Rs.	160259027.00	56004748.85	0.00
13	Adjustment (+/-) in amount charged by shipping/transport company	Rs.	0.00	0.00	0.00
14	Usage charge (Interim Fee)	Rs.	0.00	0.00	0.00
15	Coal or lignite in consignment Coal through MGB vessel, if applicable	Rs.	4412573.83	1070761.54	0.00
16	Total transportation charges (G+H+I+J+K)	Rs.	164676527.83	57082410.39	0.00
17	Total amount charged for Coal/Lignite supplied including transportation (D+L)	Rs.	1008227825.14	2417732591.14	146454019.30
<b>E) TOTAL COST</b>					
18	Landed Cost of Coal/Lignite (D+L) (11+17)	Rs./MT	3671.87	4730.22	5182.70
19	Blending Ratio (Domestic/Imported)	%	22.00	68.90	0.10
20	Weighted average cost of Coal/Lignite (Including biomass)	Rs./MT		4862.50	
21	Weighted average cost of Coal/Lignite (Excluding biomass)	Rs./MT	4102.00	4102.00	4102.00
<b>F) QUALITY</b>					
22	GCV of Domestic coal of the opening coal stock as per bill of material	kJ/kg	4325	4777	5
23	GCV of Domestic coal supplied as per bill of material	kJ/kg	4360	4667	5
24	GCV of imported coal of the opening coal stock as per bill of material	kJ/kg	5	0	5580
25	GCV of imported coal supplied as per bill of material	kJ/kg	5	0	5580
26	Weighted average GCV of Coal/Lignite as billed (Including biomass)	kJ/kg		4102	
27	Weighted average GCV of Coal/Lignite as billed (Excluding biomass)	kJ/kg	4602	4602	4602
28	GCV of Domestic coal of the opening stock as received at station	kJ/kg	3180	3570	6
29	GCV of Domestic coal/biomass supplied as received at station	kJ/kg	2555	3625	6
30	GCV of imported coal of the opening stock as received at station	kJ/kg	6	6	4041
31	GCV of imported coal supplied as received at station	kJ/kg	6	6	4041
32	Weighted average GCV of Coal/Lignite as received (Including biomass)	kJ/kg		3180	
33	Weighted average GCV of Coal/Lignite as received (Excluding biomass)	kJ/kg	2555	3603	3603

Sanjay Sinha 10/11/2024

AMIT Biswas  
BISWAS  
For M.C. Bhandari & Co.  
Chartered Accountants

Sanjay Sinha  
Digitally signed by Sanjay Sinha  
Date: 2024.09.14  
14:24:11+05'30'

Ankit Tiwari  
Digitally signed by Ankit Tiwari  
Date: 2024.09.14  
14:24:11+05'30'



**FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges**

Name of the Petitioner:  
Name of the Generating Station

NTPC Limited  
Barh Stage-0

S. No.	Month	Unit	Mar-24
			<b>LDG</b>
<b>A)</b>	<b>OPENING QUANTITY</b>		
1	Opening Stock of Oil	(Kl)	2654.50
2	Value of Closing Stock	(Rs.)	109162078
<b>B)</b>	<b>QUANTITY</b>		
3	Quantity of LDG supplied by Oil company	(Kl)	2567.80
4	Adjustment (+/-) in qty supplied made by Oil Company	(Kl)	0.00
5	LDG worked by Oil company (3-4)	(Kl)	2567.80
6	Normative transit & Handling losses	(Kl)	2.00
7	Net Oil supplied (5-6)	(Kl)	2565.80
<b>C)</b>	<b>PRICE</b>		
8	Amount charged by Oil Company	(Rs.)	745046810
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00
11	Total amount charged (8+9+10)	(Rs.)	745046810
<b>D)</b>	<b>TRANSPORTATION</b>		
12	Transportation charges by rail/high road transport	(Rs.)	
	By Rail		
	By Road		
	By Ship		
13	Adjustment (+/-) in amount made by railways/Transport Company	(Rs.)	
14	Demurrage Charges, if any	(Rs.)	
15	Total Transportation Charges (12+13+14+15)	(Rs.)	
16	Other Charges	(Rs.)	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	745046810
<b>E)</b>	<b>TOTAL COST</b>		
18	Weighted average cost of Oil	(Rs./Kl)	79066.04
<b>F)</b>	<b>QUALITY</b>		
19	GCV of Oil of the opening stock as per Oil Company	Kcal/Kl	9408
20	Weighted average GCV of Oil	Kcal/Kl	9499

Srinjay Sinha  
Srinjay Sinha  
Srinjay Sinha

**Ankit  
Tiwari**

POWER DIVISION  
Barh Stage-0  
NTPC Limited  
Barh Stage-0

AMT  
RISWAS  
The M.C. Wastan & Co.  
Chartered Accountants