

**Joint Inspection Report regarding pollution caused by M/s NTPC in the villages Badkagaon, Keridari, Katakamdag Hazaribagh, Jharkhand -reg**

**1.0 Background:**

With reference to Hon'ble NGT order dated 03.05.2019 in the matter of O.A. No. 284 of 2019 (Principal Bench, New Delhi ) titled Rajeshwar Prasad Vs State of Jharkhand( copy enclosed as Annexure I), it was directed "*Let the Jharkhand State Pollution Control Board (State PCB) and Central Pollution Control Board look into the matter and take appropriate action in accordance with law and furnish a factual and action taken report to this Tribunal...*" In view of this a team consisting of the following members from Jharkhand State Pollution Control Board (JSPCB) and Central Pollution Control Board (CPCB) visited the area to look into the matter during 02.06.2019 to 04.06.2019:

| Sl No. | Name                   | Designation              | Organisation                       |
|--------|------------------------|--------------------------|------------------------------------|
| i.     | Dr. Gyan Prakash Singh | Scientist – 'C'          | CPCB, ERD, Kolkata                 |
| ii.    | Shri A. K. Yadav       | Regional Officer         | JSPCB, Regional Office, Hazaribagh |
| iii.   | Shri Ashok Kumar Singh | Asst. Scientific Officer | JSPCB, Regional Office, Hazaribagh |

**2.0 About the industrial activity:**

M/s NTPC has following industrial activities in the nearby area:

| Sl no. | Type of major activity          | Particulars  | Specific observation  |
|--------|---------------------------------|--|---|
| i.     | Mines                           | Pakri Barwadi is the only operating mines in the area.                         | Presently operating at 6.6 Million ton per annum with capacity upto 15 million ton per annum. |
| ii.    | Transport road (for Overburden) | All dumping within mining lease hold area with Maximum lead distance of 1.5 km | No public road used   |

| Sl no. | Type of major activity  | Particulars  | Specific observation   |
|--------|-------------------------|--|--|
| iii    | Transport road for coal | Mines to railway siding (Distance 23 km approx.)         | <ul style="list-style-type: none"> <li>o Coal is transported through dedicated road passing through forest land maintained by mining authority.</li> <li>o No public road is used by coal loaded dumpers, however only part of the public road (approx.5 km) is used by empty dumpers which are far away from the residential area.</li> <li>o One dedicated belt conveyor is being installed to transport the coal directly from the mine to the railway siding. Once it is operational, movement of dumpers for coal transportation will be totally stopped and the dust emission caused by dumpers will be completely avoided.</li> </ul> |
| iv     | Crusher                 | Primary as well as secondary crushers                    | All crushers inside mining lease area.   |
| v      | Power Plant             | Nearby NTPC power plant at Tandwa is under construction. | Far away ( approx 26-27 km)  |

### 3.0 Regulatory Compliance Status as required under Air, Water and Hazardous Waste Authorization:

The mine is running with valid consent to Operate and valid authorization as tabulated below:

| Sl no. | Regulatory Compliance  | Status of validity    | Copy enclosed as Annexure |
|--------|--|-----------------------|---------------------------|
| i.     | Consent to operate under Air (Prevention and Control of Pollution) Act 1981 & Water (Prevention and Control of Pollution) Act 1974 | Valid till 31.12.2023 | II                        |
| ii.    | Status of the Authorization under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016               | Valid till 16.05.2023 | III                       |

#### 4.0 Field Monitoring

Taking into account the complaints, it was decided to carry out the assessment of the ambient air quality and water quality in the nearby residential areas. The present monitored status is as follows:

#### 4.1 Ambient Air Quality and Surface & Ground Water quality

##### 4.1.1 Ambient Air Quality

The ambient air quality was monitored in four neighboring villages covering most of the complaint areas (location is shown in **Annexure IV**). Village Katkamsandi is reportedly more than 40 km from the mine hence it was not selected as monitoring station. The locations of water sampling station are shown in the map (enclosed as **Annexure IV**).

The ambient air quality was monitored for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>2</sub>. The sampling stations have been decided taking into account the availability of power supply for continuous 24 hours.

| Sl no. | Village          | Approximate distance from mine (in km) | Location as indicated on map | Monitoring Results PM <sub>10</sub> (µg/Nm <sup>3</sup> )      |     |     |            | PM <sub>2.5</sub> (µg/m <sup>3</sup> )<br>Stipulated norm (60 µg/m <sup>3</sup> )<br>24 hour monitoring | SO <sub>2</sub> (µg/m <sup>3</sup> ) | NO <sub>2</sub> (µg/m <sup>3</sup> ) |
|--------|------------------|--|------------------------------|--|-----|-----|------------|---|--------------------------------------|--------------------------------------|
|        |                  |  |                              | Stipulated norm (100 µg/m <sup>3</sup> )<br>24 hour monitoring |     |     | Avg        |   |                                      |                                      |
|        |                  |  |                              | I  | II  | III |            |   |                                      |                                      |
| i.     | Katkamdag        | 12.5                                   | AA1                          | 54   | 64  | 87  | 68.33      | 26  | 6                                    | 48.33                                |
| ii.    | Barkagaon        | 5.5                                    | AA2                          | 103  | 40  | 80  | 74.33      | 5.9   | 4.33                                 | 34                                   |
| iii.   | Hazaribagh Sahar | 20                                     | AA3                          | 250  | 170 | 180 | <b>200</b> | <b>63</b>   | 3                                    | 37                                   |
| iv.    | Keridari         | 9                                      | AA4                          | 31   | 17  | --- | 24         | --  | 4.5                                  | 22.5                                 |

The ambient air quality is observed meeting the stipulated norms at all monitored points except Hazaribagh Sahar for both for PM<sub>10</sub> and PM<sub>2.5</sub>.

#### 4.1.2. Surface & Ground Water quality

The surface and ground water quality was monitored in the surrounding villages (location is shown in the **Annexure IV**). The results are tabulated below:

| Sl no. | Location     | Location as indicated on map    | Parameter (all values are in mg/L except pH) |      |     |    |
|--------|--------------|---------------------------------|--|------|-----|----|
|        |              |                                 | pH   | TSS  | O&G |    |
| i.     | Surface      | Adjacent to Pakri Barwadih mine | SW1  | 8.87 | 12  | <5 |
| ii.    | Water        | Jheel ( in Hazaribagh Shahar)   | SW2  | 9.45 | 36  | <5 |
| iii.   | Ground Water | Barkagaon                       | GW1  | 6.31 | 8   |    |
| iv.    |              | Keridari                        | GW2  | 6.53 | <5  |    |
| v.     |              | Katkamdag                       | GW3  | 6.47 | <5  |    |
| vi.    |              | DVC colony Hazaribagh           | GW4  | 7.05 | 13  |    |

#All values are in mg/l. Water quality in the area is within the stipulated norm.

#### 5.0 Over all Observation

- 5.1 The mine operated by M/s NTPC is running with valid consent to operate as required under air and water act.
- 5.2 Coal is transported through dedicated road passing through forest land maintained by M/s NTPC.
- 5.3 No public road is used by coal loaded dumpers of NTPC , however only part of the public road (approx.5 km) is used by empty dumpers which are far away from the residential area.
- 5.4 One dedicated belt conveyor is being installed to transport the coal directly from the mine to the railway siding. Once it is operational movement of dumpers for coal transportation will be totally stopped and the dust emission caused by dumpers will be completely avoided.
- 5.5 Public road (Hazaribagh to Tandwa) for coal transportation is used by coal mines of Coal India Limited (reportedly Amrapali mines) and not by M/s NTPC.

It needs to be submitted that in a similar complaint (VIP *reference received from Hon'ble MP Lok Sabha Sh Sunil Kumar Singh regarding pollution from Coal Mining Projects of Central Coal Field in Chatra District*) an investigation report (date of inspection 31.10.17-03.11.2017) was submitted with specific recommendations to improve the transportation system, prevent overloading & spillages on the public road which is being implemented by JSPCB.

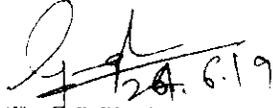
- 5.6 It was observed that the coal transportation in the area is fully outsourced and the vehicles are overloaded (in terms of volume). The spillages from these overloaded vehicles get crushed again and again till fines are generated and get air borne.
- 5.7 A proper safe free on board is not maintained to prevent any spillages from the vehicles on one hand and on the other hand there are no arrangements for collection of spillages from the road.
- 5.8 The ambient air quality is observed meeting the stipulated norms at all monitored points except Hazaribagh Sahar for both for PM<sub>10</sub> and PM<sub>2.5</sub>. PM<sub>10</sub> was monitored to be **200 µg/m<sup>3</sup>** against the stipulated norm of 100 µg/m<sup>3</sup> where as PM<sub>2.5</sub> was monitored to be **63 µg/m<sup>3</sup>** against the stipulated norm of 60 µg/m<sup>3</sup>. The poor condition of road in the city and movement of dumpers, spillages from these dumpers and crushing of spillages by vehicles in the city are responsible for it.
- 5.9 Water quality in the area is within the stipulated norm.

#### 6.0 Recommendations:

In view of the above observation, the competent authority may consider (if deemed fit) to issue necessary direction to ensure the following:

- 6.1 All the mines in the nearby area (particularly mines operated by CIL) using road for coal transportation should take necessary action to prevent any spillages from these vehicles. A minimum safe free on board (preferably not less than 5 cm) should be maintained in all the loaded vehicles (to prevent the spillages). The loaded material should be properly covered with impervious material to prevent the escape of fines from it under negative draft as well as percolation of rain water which may lead to seepage from it.
- 6.2 Though the mines operated by M/s NTPC are transporting its coal through forest land, the same condition of overloading prevails here and therefore NTPC should also take necessary action to prevent overloading and maintain a free on board in its vehicles.

- 6.3 The district administration should also be taken into confidence to ensure that there are no spillages on the public road (particularly in Hazaribagh city) and even if there are spillages on the public road it is removed at the earliest to prevent its crushing by the running vehicles.
- 6.4 The management of NTPC should ensure that the transportation of coal by belt conveyor is made operational at the earliest.

  
(Dr.G.P.Singh),

Scientist-C, ERD Kolkata

  
(A. K. Yadav),

Regional Officer, JSPCB, Hazaribagh

**List of enclosures**

| <b>Sl no.</b> | <b>Particulars</b>   | <b>Annexure no.</b> |
|---------------|--|---------------------|
| i.            | Copy of NGT Order( OA no. 284/2019)  | I                   |
| ii.           | Consent to Operate   | II                  |
| iii.          | Hazardous waste Authorization  | III                 |
| iv.           | Surface plan of the area showing the mines, villages transport roadway, public road way, sampling points( air and water) | IV                  |

Item No. 21

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 284/2019

Rajeshwar Prasad Raja, Ex. President,  
Koyala Khadan Sangharsh Samiti Labour Union,  
Badkagaon, Hazaribagh

Applicant(s)

Versus

State of Jharkhand

Respondent(s)

Date of hearing: 03.05.2019

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER  
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER  
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

**Application is registered based on a complaint received by post**

**ORDER**

Allegation in this letter, which has been treated as an application, relates to pollution caused by NTPC in villages Badakagaon, Keridari, Baanka (Katakamdag), Katakamsaandi, Hajaribagh Shahar, District Hajari bagh, Jharkhand, by not properly handling the coal and adversely affecting the health of the inhabitants.

Let the Jharkhand Pollution Control Board (State PCB) and Central Pollution Control Board look into the matter and take appropriate action in accordance with law and furnish a factual and action taken report to this Tribunal within two months from the date of receipt of copy of this order by e-mail at [ngt.filing@gmail.com](mailto:ngt.filing@gmail.com).

The State PCB will be the nodal agency for coordination and compliance.

A copy of this order, along with complaint, be sent to the State PCB by e-mail for compliance.

Needless to say that order of National Green Tribunal is binding as a decree of Court and non-compliance is actionable by way of punitive action including prosecution, in terms of the National Green Tribunal Act, 2010.

List for further consideration on 19.08.2019.

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

May 3, 2019  
Original Application No. 284/2019  
A



## JHARKHAND STATE POLLUTION CONTROL BOARD

TOWNSHIP ADMINISTRATION BUILDING, HEC COMPLEX, DHURWA, RANCHI 834004  
Telephone: 0651-2400850 (Fax)/ 2400851/2400852/2401847/2400979/2400139

Ref No. JSPCB/HO/RNC/CTO-3036797/2018/2054

Dated : 2018-12-22

**Consent to operate (CTO) under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981**

1. Application (s) dated 2018-08-16 of NTPC LIMITED PAKRIBARWADIH COAL MINING PROJECT, Occupier Name :PARTHA MAZUMDER for consent under section 25 (1)(b)/25 (1) (c)/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21(1) of the Air (Prevention & Control of Pollution) Act, 1981.
2. Documents Relied Upon:
  - (a) The content of Environmental Clearance [Environmental Clearance] issued by MoEF, New Delhi vide, Ref No. J-11015/692/2007-IA.II(M) Dated 19.05.2009.
  - (b) The content of Forest Clearance (FC), issued by MoEF, New Delhi for an area of 1026.438 Ha, Ref. No. F No.- 8-56/2009-FC, dated. 17.09.2010.
  - (c) The content of Consent to Establish (CTE), Ref No. 4763 Dated 18.12.2007.
  - (d) The content of Consent to operate (CTO), Ref. No. 1034 dated 21.12.2016 of this office.
  - (e) The content of Inspection Report (I/R), Ref No. 1001 dated 21.08.2018 of R O, R O-Cum-Lab, Hazaribagh.
  - (f) The content of letter issued by Department of Revenue and Land Reforms for acquisition of land i.e. in lease, Ref. No. 2322, dated. 19.07.2013.
3. The consent is granted under section 25 / 26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 to operate the project in Mauza -thana 47,48,49,51,52,55,56 , P S -BARKAGAON BLOCK HAZARIBAG , District - HAZARIBAGH , as follows:

| Project          | Site-Area  |            | Investment (Rs) | Product & Capacity | Period of CTO            |
|------------------|--|------------|-----------------|--------------------|--------------------------|
|                  | Plot Nos.  | Area       |                 |                    |                          |
| Before Expansion | 47, 48, 49, 51, 52, 55, 56, Khata No. 47, 48, 49, 51, 52, 55, 56 | 3319.42 Ha | 102413.64 Lacs  | Coal- 15 MTPA      | 01.01.2019 to 31.12.2023 |

**(A) Specific Conditions:**

- (1) That, the occupier shall continuously transmit the online monitoring data of ambient air quality, stack emission and effluent quality to the server of the Board, if any time transmission of data is found discontinued consent to operate shall be revoked.
  - (2) That, the occupier shall establish and operate well equipped environmental laboratory with facilities to monitor at least all regulatory parameters and duly accredited by NABL.
  - (3) That, the occupier shall make proper arrangement for disposal of fly ash instead of its casual disposal in low lying area of own lease lands; In this regard unit shall submit concrete proposal to the Board within the consent period.
  - (4) That, the occupier shall submit monthly report of evacuation of Ash pond to the Board and transport vehicle carrying Fly Ash must be fully covered and in no case there should be any spillage of Fly Ash.
  - (5) That, the occupier shall submit the monthly report on compliance of CREP responsibility to the Board.
  - (6) That, the occupier shall obtain Authorization under Hazardous Wastes Management Rules, 2016 and dispose of all Hazardous Waste as per the Rules.
  - (7) That, the occupier shall ensure that no Fly ash laden air should go to the nearby village. There must be proper protection to villagers from fly ash laden air like three tier tree plantation, fine mesh net etc. Unit must report to the Board in this regard within two months.
  - (8) That, the occupier shall submit effluent analysis report quarterly to the Board.
  - (9) That, the occupier shall investigate the way of proper utilization of Fly ash and in this process he(they) shall make system of dry collection in place of wet collection. He (they) shall submit a proposal to the Board within the consent period with time bound programme.
  - (10) That, the occupier shall complete the installation of online monitoring system in the effluent discharge line with its monitored data transmission to JSPC Board Server, failing which Consent to Operate order shall be revoked.
  - (11) That, the occupier shall if be found violating the Consent to Operate at any point of time during inspection of the plant by the competent authority, the Consent to Operate shall be revoked as per provision of the acts.
  - (12) That, the occupier shall provide Fly Ash for road construction projects / Public Works Department / manufacturing of ash based products/ use of soil conditioner in agriculture activity within a radius of three hundred kilometers.
  - (13) That, the occupier shall upload on their website the details of stock of types of ash available with them along with the quantity of Fly Ash utilized at least once a month and shall install dedicated dry ash silos.
  - (14) That, the occupier shall ensure utilization of Fly Ash as per the time frame fixed in the rule.
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(15) That, the occupier shall submit annual implementation report/compliance report (for the period 1st April to 31st March) providing information about the compliance of provision in the notification by the 30th day of April, every year to SPCB, CPCB and the Concerned Regional Office of MOEF.

(16) That, the occupier shall this CTO is valid subject to validity of source of raw material, plan Eco friendly/environmental clearance, if applicable. In case of not obtaining/violating the applicable norms this CTO shall be treated as revoked automatically.

(17) That, this CTO is issued on the basis of information submitted by the unit. The CTO may automatically be revoked, if any wrong information will be found after that.

(18) That, the occupier shall construct ETP in servicing and maintenance of vehicle workshop and STP with residential area.

(19) That, the occupier shall submit half yearly compliance report of CTO and EC to the JSPC Board.

(20) That, the occupier shall do arrangement for water sprinkling and do tree plantation as per the requirement.

(21) That, the occupier shall submit online applications for renewal of consent under section 25 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 again 120 days prior to the date of expiry of this consent i.e. 31.12.2023 with documents showing compliance of all of the above conditions.

**(B) General Conditions :**

(1) That, the occupier shall maintain the **National Ambient Air Quality Standard** given below:

| S N | Pollutant   | Time Weighted Average | Concentration in Ambient Air                  |   |
|-----|---|-----------------------|---|---|
|     |   |                       | Industrial, Residential, Rural and Other Area | Ecologically Sensitive Area (notified by Central Govt.) |
| (1) | (2)   | (3)                   | (4)   | (5)   |
| 1.  | Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>                               | Annual<br>24 hours    | 50<br>80                                      | 20<br>80  |
| 2.  | Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>                              | Annual<br>24 hours    | 40<br>80                                      | 30<br>80  |
| 3.  | Particulate Matter (size less than 10 µm) or PM <sub>10</sub> , µg/m <sup>3</sup>   | Annual<br>24 hours    | 60<br>100                                     | 60<br>100   |
| 4.  | Particulate Matter (size less than 2.5 µm) or PM <sub>2.5</sub> , µg/m <sup>3</sup> | Annual<br>24 hours    | 40<br>60                                      | 40<br>60  |
| 5.  | Ozone(O <sub>3</sub> ), µg/m <sup>3</sup>   | 8 hours<br>1 hour     | 100<br>180                                    | 100<br>180  |
| 6.  | Lead (Pb) µg/m <sup>3</sup>   | Annual<br>24 hours    | 0.50<br>1.0                                   | 0.50<br>1.0   |
| 7.  | Carbon Monoxide (CO) mg/m <sup>3</sup>  | 8 hours<br>1 hour     | 02<br>04                                      | 02<br>04  |
| 8.  | Ammonia (NH <sub>3</sub> ) µg/m <sup>3</sup>  | Annual<br>24 hours    | 100<br>400                                    | 100<br>400  |
| 9.  | Benzene (C <sub>6</sub> H <sub>6</sub> ) µg/m <sup>3</sup>                          | Annual                | 05  | 05  |
| 10. | Benzo(a) Pyrene(BaP) Particulate Phase only ng/m <sup>3</sup>                       | Annual                | 01  | 01  |
| 11. | Arsenic (As) ng/m <sup>3</sup>  | Annual                | 06  | 06  |
| 12. | Nickel (Ni) ng/m <sup>3</sup>   | Annual                | 20  | 20  |

**Note : Serial no. 1 to 4 – Mandatory  
Serial no. 5 to 12 As applicable for specific type of industry.**

- (2) That, the occupier shall maintain the emission quality within the standard and the quantity, as follows:

| S N | Parameter          | Standard               |
|-----|--------------------|------------------------|
| 1   | Particulate Matter | 150 mg/Nm <sup>3</sup> |

- (3) That, the occupier shall keep process effluent in close-circuit and the quality of effluent from other sources in conformity with the standard (s) and the discharge quantity as below:

| S N | Parameter              | Standard |
|-----|------------------------|----------|
| 1   | Total Suspended Solids | 100 mg/L |
| 2   | BOD                    | 30 mg/L  |
| 3   | COD                    | 250 mg/L |
| 4   | Oil & Grease           | 10 mg/L  |

- (4) That, the occupier shall dispose of solid wastes as follows:

| S N | Waste Type  | Mode of Disposal                                       |
|-----|---|--|
| 1   | Hazardous Carbonaceous Wastes                                 | In co-processing in high temperature furnaces or kilns |
| 2   | Hazardous Non-Carbonaceous Wastes                             | In TSDF  |
| 3   | Non-Carbonaceous Non-Hazardous solid wastes/ Mine Over Burden | As a substitute of Soil or Mineral                     |

- (5) That, the occupier shall keep D G Set(s) within acoustic enclosure and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm.

- (6) That, the occupier shall install and maintain Central Ground Water Board/ State Ground Water Directorate approved system of rain water harvesting-cum-ground water recharge and submit the photographic view of the structures within a month.

- (7) That, the occupier shall grow and maintain greenery of the project in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity.

- (8) That, the occupier shall submit environmental statement with supporting stoichiometric calculations analyses reports, every year latest by 30th September of the next financial year.

- (9) That, the occupier shall submit report(s) duly monitored and issued by an NABL accredited / ISO 9001:2008 and OHSAS 18001:2007 certified laboratory in compliance sub-para (2), (3), (4) and (5) of paragraph 3 of this CTO yearly at required periodicity.

- (10) That, this CTO is valid subjected to the validity of mining Lease/Mining Plan/Ecofriendly/Environmental Clearance, if applicable. In case of no renewal of Mining Lease/Mining Plan, this consent shall be treated as revoked automatically.
- (11) That, this CTO is issued from the environmental angle only and does not absolve the occupier from other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ occupier.
- (12) That, this CTO shall not in any way, adversely affect or jeopardize the legal proceeding , if any, instituted in the past or that could be , instituted against you by the State Board for violation of the provisions of the Act or the Rules made there under.
- (13) That, the occupier shall comply with all applicable provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Water (Prevention & Control of Pollution) Cess Act, 1977; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and Rules made there under.
4. That, this CTO shall not absolve the occupier from making compliance of other statutory prescribed under any law or direction of courts or any other instrument for the time being in force.
5. That, this CTO is being issued on the basis of information/ documents/ certificate submitted by the unit. This CTO will be revoked if any of the information/documents/certificates/undertaking given by the occupier is found false/fictitious/forged in future.
6. The Order shall be valid subject to compliance of all other legal requirements applicable to the unit.
7. The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alteration in conditions of this consent.

This is issued with the approval of the Competent authority

RAJEEV  
LOCHAN  
BAKSHI

Digitally signed by  
RAJEEV LOCHAN  
BAKSHI  
Date: 2018.12.22  
12:16:58 +05'30'

[Rajeev Lochan Bakshi]

Member Secretary

Memo No. : JSPCB/HO/RNC/CTO-  
3036797/2018/2054

Dated : 2018-12-22.

Copy to: M/s NTPC Limited, Pakribarwadih Coal Mining Project, Distt Hazaribagh, Jharkhand/ Chief Inspector of Factories, Ranchi/ Director of Industry, Government of Jharkhand, Ranchi/ Director of Mines, Government of Jharkhand, Ranchi/ Deputy Commissioner, Hazaribagh/ DFO, Hazaribagh/ DMO, Hazaribagh/ R O, Hazaribagh for information & ensuring compliance of the above.

RAJEEV  
LOCHAN  
BAKSHI

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by RAJEEV  
LOCHAN BAKSHI  
Date: 2018.12.22  
12:17:19 +05'30'

[Rajeev Lochan Bakshi]

Member Secretary



**JHARKHAND STATE POLLUTION CONTROL BOARD**  
 T. A. DIVISION BUILDING (GROUND FLOOR), H.E.C., DHURWA, RANCHI - 834004  
 Phone.: 2400852, 2400851, Fax: 0651- 2400850 www.jspcb.org

**FORM 2**

[See rule 6(2)]

**FORM FOR GRANT OR RENEWAL OF AUTHORIZATION BY STATE POLLUTION CONTROL BOARD TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER AND OPERATORS OF DISPOSAL FACILITIES**

1. No. of authorization and date of issue: JSPCB/HO/RNC/HWM-2129164/2018/41
2. Reference of application (No. and date): 2129164- 27/01/2018
3. NTPC LTD - PBCMP of GROUP GENERAL MANAGER is hereby granted an authorisation based on the enclosed signed inspection report for generation, collection, reception, storage, transport, reuse, recycling, recovery, pre-processing, co-processing, utilisation, treatment, disposal or any other use of hazardous or other wastes or both on the premises situated at GROUP GENERAL MANAGER, NTPC LTD - PBCMP, UJJWAL COMPLEX, PUGMILL ROAD, HAZARIBAGH JHARKHAND - 825301

**Details of Authorisation**

| Sl.No. | Category of Hazardous Waste as per the Schedules I, II and III of these rules | Authorised mode of disposal or recycling or utilisation or co-processing, etc. | Quantity (ton/annum)                    |
|--------|---|--|---|
| 1      | Schedule I  | PVC Drum   | Used/spent oil- 90 KL/Annum             |
| 2      | Schedule I  | PVC Drum   | Wastes/residues containing oil- 0.1 TPA |

(1) The authorisation shall be valid for a period of 5 years.

(2) The authorisation is subject to the following general and specific conditions (Please specify any conditions that need to be imposed over and above general conditions, if any):

**A General conditions of authorisation:**

1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.
3. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.

5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.
6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
7. It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12. An application for the renewal of an authorisation shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

**B Specific conditions:**

- (1) That, the occupier shall comply the provisions of the Environment Protection Act and Rules.
- (2) That, the authorization shall be produced at the time of inspection.
- (3) That, the occupier authorized shall not rent/sell or otherwise transport the H/W without obtaining prior permission of the Board.
- (4) That, any un-authorization change shall constitute a breach the authorization.
- (5) That, it is the duty of authorized person to take prior permission of the Board to close down the facility.
- (6) That, the renewal of authorization shall be made as laid down in the rules.
- (7) That, any other condition for compliance as per the guidelines issued by the MoEF for CPCB.
- (8) That, the occupier shall submit annual return for the financial year before 30th June, every year.
- (9) That, the occupier shall comply all the conditions.
- (10) That, the occupier shall submit quarterly and annual information on hazardous wastes consumed its source, products generated or resources conserved (specifying the details like type and quantity of resources conserved) to the concerned SPCB.
- (11) That, the occupier shall complied all directions given by standard operating and procedure.

Memo No:JSPCB/HO/RNC/HWM-  
2129164/2018/41  
Date: 16/05/2018

**RAM PRAVESH  
KUMAR**

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Section Head, Hazaribagh.

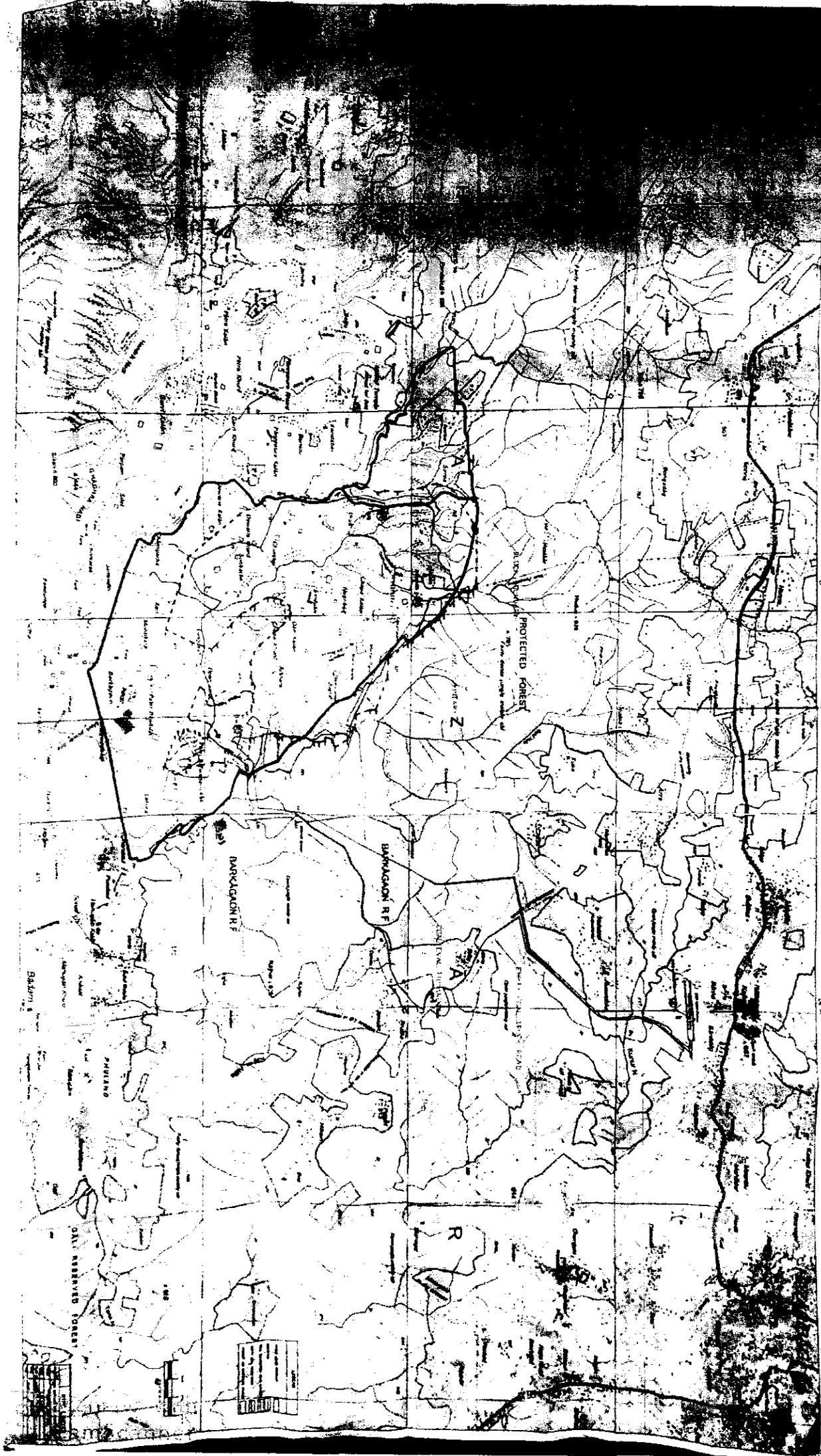
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**NTPC LTD - PBCMP, GROUP GENERAL MANAGER, M/S NTPC LTD - PBCMP, UJJWAL  
COMPLEX, PUGMILL ROAD,/ Regional Office, Hazaribagh for information & necessary action.**

**RAM PRAVESH  
KUMAR**

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**Ram Pravesh Kumar  
Section Head, Hazaribagh**



Map of the Province of Zamboanga del Sur, Mindanao, Philippines, showing the area around the town of Zamboanga del Sur. The map is oriented vertically on the page.

Scale: 1:50,000

Projection: UTM

Zone: 51N

Grid: UTM

Legend:

- 1:50,000
- 1:25,000
- 1:10,000
- 1:5,000
- 1:2,500
- 1:1,250
- 1:625
- 1:312.5
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