

1.

**BEFORE THE NATIONAL GREEN TRIBUNAL,
(EASTERN ZONE BENCH), KOLKATA**

ORIGINAL APPLICATION NO. 157 OF 2024/EZ

EARLIER ORIGINAL APPLICATION NO. 771 OF 2024/PB

BETWEEN

**News item titled "Odisha 9 hospitalized
after suspected gas leak at Rourkela Steel Plant"
appearing in the Times of India dated 01.07.2024.**

- Vs. -

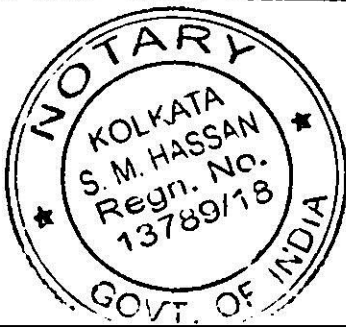
..... APPLICANT

Central Pollution Control Board & ORS.

..... RESPONDENTS

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C 6 JAN 2025

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..... APPLICANT

- Vs. -

Central Pollution Control Board & ORS.

..... RESPONDENTS

Counter Affidavit on behalf of the respondent No. 5.

I, Hiralal Mohapatra, Chief General Manager (Utilities & Env.), son of Late A Mohapatra, aged about 56 years by faith: Hindu, by occupation - Service, working for gain at Rourkela Steel Plant, Steel Authority of India, Rourkela, District: Sundargarh, State: Odisha, Pin Code: 769011, do hereby solemnly affirm and say as follows:

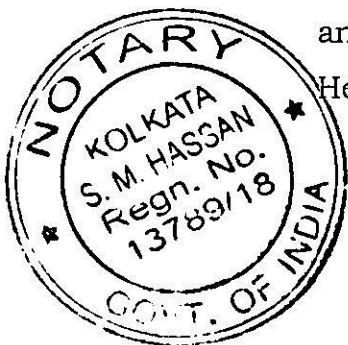
1. That I am the Chief General Manager (Utilities & Env.) of Rourkela Steel Plant, Steel Authority of India and I am well acquainted with the facts and circumstances of the case. I am also competent and duly authorized by the respondent no. 5 to make sign and affirm this affidavit for and on behalf of the respondent no. 5.



C 6 JAN 2025

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2. That the respondent no. 5 received a notice, by way of an email dated 24.07.2024 from the Registrar, National Green Tribunal, Principal Bench, New Delhi along with the solemn order dated 09.07.2024 passed by the Hon'ble Tribunal, Principal Bench, New Delhi in the Original Application being O. A. No. 771 of 2024 in connection with the news item titled "Odisha 9 hospitalized after suspected gas leak at Rourkela Steel Plant" appearing in the Times of India dated 01.07.2024 (hereinafter referred as "said news item"). In the said solemn order, the aforesaid original application was transferred to the National Green Tribunal, Eastern Zone Bench, Kolkata and next date of hearing was fixed on 10.09.2024.
3. That the said original application was renumbered in the National Green Tribunal, Eastern Zone Bench, Kolkata as O. A. No. 157 of 2024/EZ and on 10.09.2024, the Hon'ble Tribunal was please to implead the Rourkela Steel Plant, Steel Authority of India, Odisha as Respondent No. 5 in the instant original application and also directed to issue notice upon the respondent no. 5.
4. It is stated that on 01.07.2024, at around 10:40 am, employees were working in Gas Cleaning Plant of Blast Furnace-5 (Scrubber & Clarifier Area) and suddenly it was found that 03 (Three) contractual employees of M/s Tata Projects Ltd were lying unconscious on the nearby road. Immediately ambulance was called on the spot by the Area In-Charge of the respondent no. 5 and the said 03 (Three) workmen were taken to Occupational Health & Service Center (OHSC) inside the plant premises for first

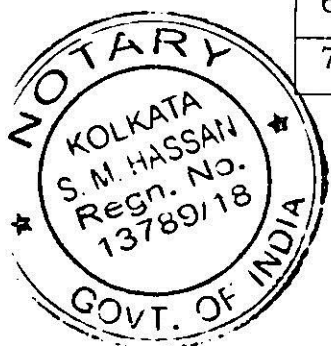


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aid and thereafter they were admitted to Ispat General Hospital, Rourkela for further treatment.

5. It is further stated that 06 (Six) workmen, who involved in rescuing the said 03 (Three) workmen, were also affected and taken to Occupational Health & Service Center (OHSC). Out of said 06 (Six) workmen, 05 (Five) workmen were taken to Ispat General Hospital for treatment as a precautionary measure and 01 (One) female contractual employee was released after being provided first aid at plant OHSC. The said 05 (Five) workmen were admitted in Ispat General Hospital. Therefore, total 08 (Eight) workmen were admitted in Ispat General Hospital. Out of said 08 (Eight) workmen, one Sri Jairam Barik was discharged from the said hospital on same day evening and all the rest workmen were released from the said hospital on the very next day. It is pertinent to mention that all the workmen reported on duty on 03.07.2024 in the plant. The details of the affected workmen are as follows:-

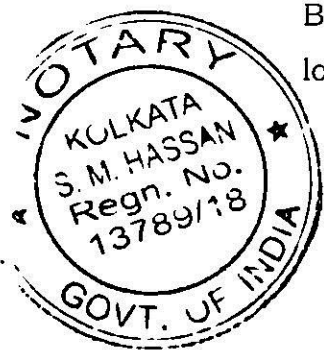
Sl. No.	Name of the injured person	Designation	Age
1.	Sri Jayram Barik	Sr. Manager, Blast Furnace(O)	36
2.	Sri Pradeep Kumar Sahoo	Sr. Operative, Blast Furnace	52
3.	Sri Dukshishyam Dash	Operative, Blast Furnace	36
4.	Sri Raju Ku. Maity	Contractual	38
5.	Sri Pradeep Kujur	Employees,	30
6.	Sri Santanu Nayak	M/S. Tata Projects Ltd.	33
7.	Sri Suraj Chhatri		26



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8.	Smt. Laxmi Singh	Contractual Employees, M/S S K Gouda	34
9.	Smt. Pano Soren		39

6. It is also stated that after adequate examination, Blast Furnace Gas leakage was observed from the drain of nearby U-Seal of Blast Furnace Gas Line and the U-Seal was immediately isolated. Measures put in place by the authorities of SAIL, Rourkela Steel Plant, to prevent incidents of gas leak, keeping in view of the precautionary principle which is in vogue in environmental matters.
7. It is stated that thereafter, the State Pollution Control Board, Odisha had inspected the plant of the respondent no. 5 on 01.07.2024, i.e. the date of occurrence. After the said inspection, the concerned authority of the State Pollution Control Board submitted the Preliminary Investigation Report on and the said report was forwarded to the respondent no. 5. It was recorded in the said report that at the time of inspection, it was observed that leakage was completely stopped by the respondent no. 5 and the concerned officers of the State Pollution Control Board, Odisha did not find any Carbon Monoxide (CO) leakage from the area during their visit. From the Continuous Ambient Air Quality Monitoring Stations (CAAQMS) installed by the respondent no. 5 at 04 (Four) locations inside the plant premises, it was further observed that concentration of Carbon Monoxide (CO) in the ambient area at respective locations did not exceed the prescribed standards of the Board. It was specifically recorded that the impact of leakage was local only. Photocopy of the said Preliminary Investigation Report



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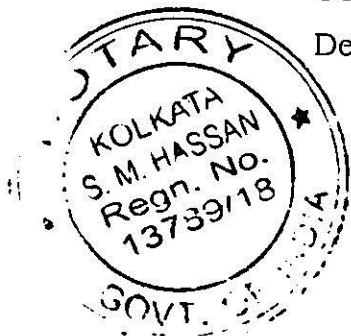
dated 01.07.2024 is annexed hereto and marked as "Annexure P-1".

8. It is further stated that according to the aforesaid inspection and preliminary Investigation Report, the Member Secretary, State Pollution Control Board, Odisha, by way of letter dated 05.07.2024 under Memo No. 10200/IND-I-CON-01, issued directions under Section 31A of Air (P&CP) Act, 1981 and 33A of Water (P&CP) Act, 1974 thereby requesting the respondent no. 5 to comply certain directions within 15 days from the date of receipt of the said directions. The aforesaid directions are as follows:

- a) Deploy only trained workers in CO emission prone areas and provide portable CO detector.
- b) Upgrade the existing alarm systems and CO Detectors for any CO gas leakage U-Scal areas of Blast Furnace - 5.
- c) Ensure proper housekeeping in Gas Cleaning Plant (GCP) area.
- d) Clear the silt and sediments in the drains in GCP area.

Photocopy of the said letter dated 05.07.2024 is annexed hereto and marked as "Annexure P-2".

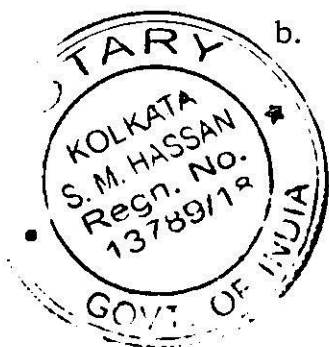
9. It is further stated that in terms of the aforesaid directions, the General Manager in charge Environmental Engineering Department, respondent no. 5, by way of a letter dated 15.07.2024



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under Ref. No. 691/EE/7/97, had submitted the Action Taken Report before the State Pollution Control Board, Odisha thereby intimating that the respondent no. 5 had duly complied the directions passed by the said State Board. Photocopy of the aforesaid letter dated 15.07.2024 is annexed hereto and marked as "Annexure P-3".

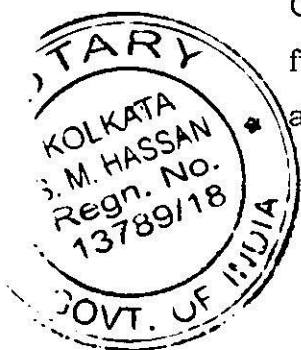
10. It is also stated that after receiving the said Action Taken Report, the State Pollution Control Board had further inspected in the plant of the respondent no. 5 on 27.08.2024 and the Regional Officer of the State Pollution Control Board, Odisha submitted the Inspection Report before the Member Secretary, State Pollution Control Board, Odisha on 03.09.2024. The said Inspection Report was duly forwarded to the respondent no. 5. It is needless to mention that in the said Inspection Report, it was specifically recorded that the respondent no. 5 has duly complied the said direction dated 05.07.2024. Photocopy of the aforesaid Inspection report is annexed hereto and marked as "Annexure P-4".
11. It is stated that the following adequate measures and/or steps have been taken and/or adopted by the respondent no. 5 for avoiding re-occurrence of such incident in future.
 - a. Locking arrangement provided in spindle of the flushing valve of all the 03 (Three) U-Seals to prevent accidental opening of the valve.
 - b. In the vicinity of each of the 03 (Three) U-seals, Carbon Monoxide (CO) Monitors with alarms have already been



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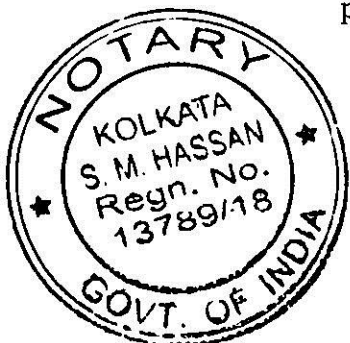
installed. In addition, 03 (Three) new Online Carbon Monoxide (CO) Monitors have been installed whose feedback is connected to Human Machine Interface (HMI) Operator Panel with an Audio Alarm at Main Emergency Control Room to ensure continuous online monitoring.

- c. In case of high CO concentration, the online CO monitor will activate the Public Announcement (PA) wherein emergency announcement in both languages being Odia and Hindi language has been provided to evacuate the area.
 - d. Emergency contact numbers, including OHSC, Ambulance, Safety and the plant control number have been displayed at all U-seals.
 - e. Closed Circuit television Camcras installed near all the U-seals of BF-5 for better monitoring.
 - f. Barbed Wire barricading has been provided at all the 03 (Three) U-Seals to restrict unauthorized entry into the area.
12. It is respectfully submitted that Standard safety protocols have been formulated and/or adopted by the respondent no. 5 in connection with the handling of fuel gases or operation of blast furnaces. There are 23 (Twenty Three) Nos. of Standard Operating Practices (SOP) have already been installed for Blast Furnace-5 Operation which includes Operation of various units of Blast furnace-5, Shutdown, Start-ups, handling of Hot-metal and Slag, and Water Sealing & Breaking in U-seals.



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13. It is respectfully submitted that the plant of the respondent no. 5 is the Integrated Steel Plant and the respondent no. 5 is operating the said steel plant with Certificate of "Consent to Operate" which will be valid upto 31.03.2025. There is no such functioning in the plant wherefrom the respondent no. 5 by reason of its activities could contribute to any form of environmental damage and no air, water and soil pollution have been made by the said plant of the respondent no. 5 and no complaint was filed before any authority by any other person of the locality. There has been no emission of smoke and/or any kind of pollution contributed by the said plant of the respondent no. 5. Photocopy of the aforesaid Certificate of "Consent to Operate" is annexed hereto and marked as "Annexure P-5".
14. It is respectfully submitted that the definition of 'workman' as found under the Workmen Compensation Act 1923 has been applied mutatis mutandis to the Public Liability Insurance Act 1991 (for the sake of brevity, hereinafter referred to as 'Act of 1991') in terms of Explanation (i) to Section 3(2) of the Act of 1991. Since the definition of 'workman' is an expansive one and the Act of 1991 does not apply to a workman, the Act of 1991 is not applicable in the facts and circumstances of the instant original application. Furthermore, in arguendo, if the Act of 1991 would be deemed to be applicable to the facts and circumstances, an application for claim for relief in terms of Section 6 of the Act of 1991 is conspicuously absent. As such, there arises no question of payment of relief contemplated under the Act of 1991, payable by



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the Rourkela Steel Plant authorities in favour of the workmen who suffered sickness.

15. It is also submitted that in the given facts and circumstances, it would be clear as day that none of the workmen/employee suffered any injury causing total or partial disablement for a period exceeding three days and as such, in terms of the Employee's Compensation Act 1923 (for the sake of brevity, hereinafter referred to as 'Act of 1923') there would also not arise any question of payment of compensation in terms of the Act of 1923.
16. That the statements contained in paragraph nos. 1 to 6, 11 and 12 of the foregoing affidavit are true to my knowledge and those contained in paragraph nos. 7 to 10 and 13 are information derived from the records of the case and the rests are my humble submissions before the Hon'ble Tribunal.

Prepared in my office

Kelanjau Pal
Advocate

Hiralal Mohapatra

Signature of the Deponent
is known to me

हिरालाल महापात्र/HIRALAL MOHAPATRA
मुख्य महाप्रबंधक (उपयोगिता एवं पर्यावरण)
CGM (Utilities & Environment)
सेल, रा.उ.सं./ SAIL, RSP, Rourkela



10-11-

VERIFICATION

I, Hiralal Mohapatra, Chief General Manager (Utilities & Env.), son of Late A Mohapatra, aged about 56 years by faith: Hindu, by occupation - Service, working for gain at Rourkela Steel Plant, Steel Authority of India, Rourkela, District: Sundargarh, State: Odisha, Pin Code: 769011, do hereby verify that the contents of paragraphs 1 to 7, 10 to 12 are true to my knowledge and the rest are my submissions before the Hon'ble Tribunal and that I am the respondent No. 8 herein and I am the constituted attorney of the respondent nos. 6, 7 and 9 and I am also well acquainted with the facts and circumstances of the instant case. I am competent to verify the instant application on behalf of me and for the Respondent Nos. 6, 7, and 9.

Date : 06.01.2025

Place : Kolkata

Hiralal Mohapatra
Signature of Applicant

(HIRALAL MOHAPATRA)

हिरालाल महापात्र/HIRALAL MOHAPATRA
मुख्य महाप्रबंधक (उपयोगिता एवं पर्यावरण)
ICGN (Utilities & Environment)
सेल. रा. इ. सं./ SAIL, RSP, Rourkela

S. M. Hassan

Advocate



SOLEMNLY AFFIRMED AND DECLARED
BEFORE ME (NOTARY) IDENTIFICATION

S. M. Hassan
S. M. HASSAN
NOTARY

06 JAN 2025



-12- ~~##~~ Ameruxes P-1

E-mail: rospcb.rourkela@ospcboard.org
Website: www.ospcboard.org

OFFICE OF THE REGIONAL OFFICER
STATE POLLUTION CONTROL BOARD, ODISHA

(DEPARTMENT OF FOREST, ENVIRONMENT & CLIMATE CHANGE, GOVT. OF ODISHA)

At: Near Panposh Hockey Chowk, Panposh, Rourkela, Sundargarh, Odisha, Pin- 769004

Letter No.:- 3182

Date:- 02/07/2024

Dr. Anup Kumar Mallick
Regional Officer

To

The Member Secretary,
State Pollution Control Board, Odisha
Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII,
Bhubaneswar - 751 012

Sub: Inspection Report on Incidental Exposure of Carbon Monoxide (CO) in Blast Furnace-V of M/S. Rourkela Steel Plant (SAIL), Rourkela Dist: Sundargarh

Sir,

With reference to the above cited subject, please find enclosed herewith the inspection report of M/s. Rourkela Steel Plant (SAIL), Rourkela Dist: Sundargarh, Odisha which was inspected on dtd. 01.07.2024 in connection with exposure of Carbon Monoxide (CO) gas in scrubber & clarifier area (near U-Seal-1) of Blast Furnace-V.

This is for your kind information and necessary action.

Encl: As above

Yours faithfully,


Regional Officer

Memo No. 3183 Dt. 02/07/2024

Copy forwarded to the Chief Env. Engineer (C), State Pollution Control Board, Bhubaneswar, Odisha for kind information and necessary action.


Regional Officer

Memo No. 3184 Dt. 02/07/2024

Copy forwarded to the Executive Director (Works), M/s. Rourkela Steel Plant, Steel Authority of India Limited, Rourkela, Dist: Sundargarh - 769005, Odisha for information.


Regional Officer





Preliminary investigation Report on Incidental Exposure of Carbon Monoxide (CO) Blast Furnace-V of M/S. Rourkela Steel Plant (SAIL), Rourkela Dist: Sundargarh, Odisha

On receipt of information about incident through news and Member Secretary, SPCB, Odisha and Er. B. K. Behera, CEE, SPCB, Odisha, Bhubaneswar, Blast Furnace-V of Rourkela Steel Plant was inspected on dtd.01.07.2024 by RO, SPCB, Odisha, Rourkela with Er. C. S. Chauhan, DEE and Er. B. K. Bhoi, DEE in connection with exposure of Carbon Monoxide (CO) gas in scrubber & clarifier area (near U-Seal-1) of Blast Furnace-V. Sri Sumeet Kumar, GM (Blast Furnace), Mr. P.C Dash, GM-I/C (Env. Engineering Department), Mr. V. V. R Murty, GM (Env. Engg Dept.) & others of RSP were present during inspection.

Observations:

1. By the time we reach at the incident site, affected person were shifted to the Ispat General Hospital (IGH). Area (U-seal-1 of Blast Furnace-5) where leakage was occurred has been cordoned off by the RSP.
2. Leakage was completely stopped by the RSP. We didn't find any CO leakage from the area during our visit. Which was also ensured through the CO gas detectors both by online and portable.
3. It was observed from the Continuous Ambient Air Quality Monitoring Stations (CAAQMS) installed by the RSP at four (04) location inside plant premises that concentration of Carbon Monoxide (CO) in the ambient area at respective locations does not exceeds the prescribed standards of the Board. It reflects that impact of leakage was local only.
4. The matter was discussed with the Sri Sumeet Kumar, GM (Blast Furnace) and others at the site. Following information has been furnished by the RSP (SAIL) authority:
 - At around 10:40 AM on dt.01.07.2024, employees working in scrubber & clarifier area of BF-5 found 3 labour of M/s TPL lying unconscious on the road near U-Seal - 1. Immediately ambulance was called on the spot by the area I/C and the above 3 workmen were taken to first aid and then admitted to the Ispat General Hospital (IGH) for treatment.
 - Gas leakage was observed from the drain of nearby U-Seal-1 and the U-Seal was immediately isolated.
 - 6 workmen who rescued the affected were also taken to first aid and 5 of them were admitted in IGH as a precautionary measure. 1 lady contractual employee was released after being administered the first aid at OHSC.



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- Cause of the gas leakage is under investigation and details will be shared by the SAIL authority after a thorough enquiry.

Details of the injured person

Sl. No.	Name of the injured person	Designation	Age	Status
1.	Sri Jairam Barik	Sr Mgr, BF(O)	36	Bed-13, IGH
2.	Sri P. K. Sahu	MOMT, BF	52	Bed-14, IGH
3.	Sri Dikhisyam Das	MOMT, BF	36	Bed-11, IGH
4.	Sri Raju Ku. Maiti	Contractual Employees, M/S TPL	38	Bed-12, IGH
5.	Sri Pradip Kujur		30	Bed-3(B), IGH
6.	Sri Santanu Nayak		33	Bed-7, IGH
7.	Sri Suraj Chhatrī		26	Bed-4, IGH
8.	Smt. Laxmi Singh		34	Bed-10, IGH
9.	Smt. Pana Soren	Contractual Employees, M/s S K Gouda	39	Released after first aid

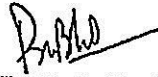
- All the eight persons admitted in IGH are in stable condition and will be released shortly.

Recommendation


1. RSP shall ensure to deploy only trained workers in CO emission prone areas and they must have portable CO detector.
2. Industry shall upgrade existing alarm systems in the U-Seal areas.
3. Industry shall ensure proper housekeeping in Gas Cleaning Plant (GCP) area.
4. Industry shall clear the siltation in the drains in GCP area.

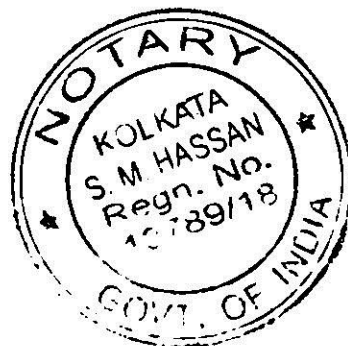
Note:

By the time report is prepared, it is informed by the RSP authority that all affected persons have been released from the Ispat General Hospital (IGH).


Er. B. K. Bhoi
Dy. Env. Engineer


Er. C. S Chauhan
Dy. Env. Engineer


Dr. A. K. Mallick
Regional Officer & ACES



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-15-

" Annexure P-2 "



STATE POLLUTION CONTROL BOARD, ODISHA

(DEPT. OF FOREST, ENVIRONMENT & CLIMATE CHANGE, GOVT. OF ODISHA)

A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012

Phone-2561909/ EPABX : 2561909/2562847

E-mail: cto17category@ospcbboard.org / Website: www.ospcbboard.org

No. 10200 /IND-I-CON - 01

Dt. 05.07.2024

By - Speed Post/E-Mail:

DIRECTION UNDER SECTION 31A OF AIR (P&CP) ACT, 1981 AND 33A OF WATER (P&CP) ACT, 1974 AMENDED THEREAFTER

WHEREAS, you are operating an Integrated Steel Plant in the name & style of M/s. Rourkela Steel Plant (SAIL), At-Rourkela, Dist - Sundargarh with Consent of the Board valid up to 31.03.2025, subject to strict compliance to Consent conditions;

AND WHEREAS, your unit was inspected by the officials of Regional Office, SPC Board, Rourkela on 01.07.2024 in connection with leakage of Carbon Monoxide (CO) gas in scrubber & clarifier area (near U-Seal-1) of Blast Furnace-5 which occurred at around 10:40 AM on dt. 01.07.2024. (Copy of the inspection report is enclosed). From the inspection report, following observations are made;

1. There was CO gas leakage in scrubber & clarifier area of Blast Furnace-5 at around 10:40 AM on dt.01.07.2024, causing exposure to about 9 no. of workers engaged in the proximity of the U-Seal-1 of Blast Furnace-5 area.
2. The existing alarm systems and CO Detectors for CO gas leakage in the U-Seal area was not functional.

AND WHEREAS, the above non-compliances establish that you have failed to comply with certain Consent conditions, under the provisions of the Air (P&CP) Act, 1981 & Water (P&CP) Act, 1974 and the rules framed there under;

NOW THEREFORE, by virtue of the power conferred under section 31A of the Air (P&CP) Act, 1981 & U/s. 33A of Water (P&CP) Act, 1974 as amended thereafter, the competent authority in the State Pollution Control Board, Odisha do hereby directed to comply the followings;

- Deploy only trained workers in CO emission prone areas and provide portable CO detector.
- Upgrade the existing alarm systems and CO Detectors for any CO gas leakage U-Seal areas of Blast Furnace - 5.
- Ensure proper housekeeping in Gas Cleaning Plant (GCP) area.
- Clear the silt and sediments in the drains in GCP area.

Contd.//



OSPCB-CTO-IND-0015-2022/10/2024



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You are required to furnish action taken report in compliance to the above direction to the Board within 15 days, failing which appropriate action shall be taken against your unit without giving any further opportunity.

Encl: As above

[Signature]
~~MEMBER SECRETARY~~

To,

The Executive Director (Works),
M/s. Rourkela Steel Plant (SAIL)
Rourkela - 769011
Dist - Sundargarh, Odisha

Memo No. 10201 /Dt. 05-07-2024 / By Email

Copy forwarded to the Regional Officer, Rourkela for information and necessary action.

[Signature]
CHIEF ENV. ENGINEER

[Signature]



~~#6~~ -17-

Preliminary investigation Report on Incidental Exposure of Carbon Monoxide (CO) Blast Furnace-V of M/S. Rourkela Steel Plant (SAIL), Rourkela Dist: Sundargarh, Odisha

On receipt of information about incident through news and Member Secretary, SPCB, Odisha and Er. B. K. Behera, CEE, SPCB, Odisha, Bhubaneswar, Blast Furnace-V of Rourkela Steel Plant was inspected on dtd.01.07.2024 by RO, SPCB, Odisha, Rourkela with Er. C. S. Chauhan, DEE and Er. B. K. Bhoi, DEE in connection with exposure of Carbon Monoxide (CO) gas in scrubber & clarifier area (near U-Seal-1) of Blast Furnace-V. Sri Sumeet Kumar, GM (Blast Furnace), Mr. P.C Dash, GM-I/C (Env. Engineering Department), Mr. V. V. R Murty, GM (Env. Engg Dept.) & others of RSP were present during inspection.

Observations:

1. By the time we reach at the incident site, affected person were shifted to the Ispat General Hospital (IGH). Area (U-seal-1 of Blast Furnace-5) where leakage was occurred has been cordoned off by the RSP.
2. Leakage was completely stopped by the RSP. We didn't find any CO leakage from the area during our visit. Which was also ensured through the CO gas detectors both by online and portable.
3. It was observed from the Continuous Ambient Air Quality Monitoring Stations (CAAQMS) installed by the RSP at four (04) location inside plant premises that concentration of Carbon Monoxide (CO) in the ambient area at respective locations does not exceeds the prescribed standards of the Board. It reflects that impact of leakage was local only.
4. The matter was discussed with the Sri Sumeet Kumar, GM (Blast Furnace) and others at the site. Following information has been furnished by the RSP (SAIL) authority:
 - At around 10:40 AM on dt.01.07.2024, employees working in scrubber & clarifier area of BF-5 found 3 labour of M/s TPL lying unconscious on the road near U-Seal - 1. Immediately ambulance was called on the spot by the area I/C and the above 3 workmen were taken to first aid and then admitted to the Ispat General Hospital (IGH) for treatment.
 - Gas leakage was observed from the drain of nearby U-Seal-1 and the U-Seal was immediately isolated.
 - 6 workmen who rescued the affected were also taken to first aid and 5 of them were admitted in IGH as a precautionary measure. 1 lady contractual employee was released after being administered the first aid at OHSC.



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-18-

- Cause of the gas leakage is under investigation and details will be shared by the SAIL authority after a thorough enquiry.

Details of the injured person

Sl. No.	Name of the injured person	Designation	Age	Status
1.	Sri Jairam Barik	Sr Mgr, BF(O)	36	Bed-13, IGH
2.	Sri P. K. Sahu	MOMT, BF	52	Bed-14, IGH
3.	Sri Dikhisyam Das	MOMT, BF	36	Bed-11, IGH
4.	Sri Raju Ku. Mañti	Contractual	38	Bed-12, IGH
5.	Sri Pradip Kujur	Employees,	30	Bed-3(B), IGH
6.	Sri Santanu Nayak	M/S TPL	33	Bed-7, IGH
7.	Sri Suraj Chhatrì		26	Bed-4, IGH
8.	Smt. Laxmi Singh	Contractual	34	Bed-10, IGH
9.	Smt. Pana Soren	Employees, M/s S K Gouda	39	Released after first aid


- All the eight persons admitted in IGH are in stable condition and will be released shortly.

Recommendation

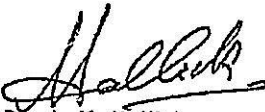
1. RSP shall ensure to deploy only trained workers in CO emission prone areas and they must have portable CO detector.
2. Industry shall upgrade existing alarm systems in the U-Seal areas.
3. Industry shall ensure proper housekeeping in Gas Cleaning Plant (GCP) area.
4. Industry shall clear the siltation in the drains in GCP area.

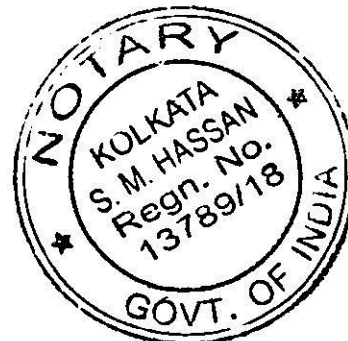
Note:

By the time report is prepared, it is informed by the RSP authority that all affected persons have been released from the Ispat General Hospital (IGH).


Er. B. K. Bhoi
Dy. Env. Engineer


Er. C. S Chauhan
Dy. Env. Engineer


Dr. A. K. Mallick
Regional Officer & ACES



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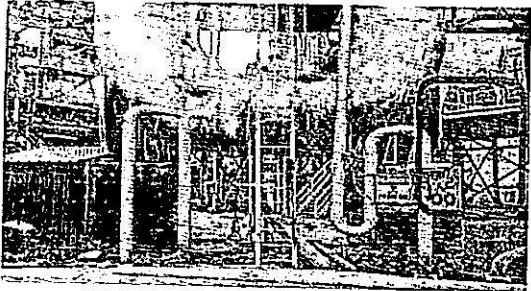

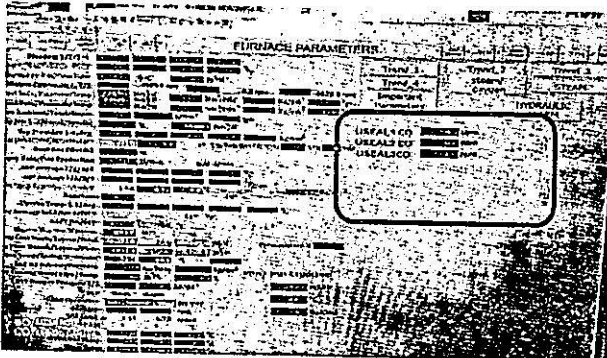
Steel Authority of India Limited
Rourkela Steel Plant
Rourkela – 769011
Fax : 0661-2510183

Ref.No. : 691/EE/7/97
 Date : 15/07/2024.

Respected Sir,

Sub. : Action taken report in compliance to the direction no. 10200 dated 05.07.2024 issued by State Pollution Control Board in connection with leakage of Gas in Blast Furnace-V of RSP.-reg.

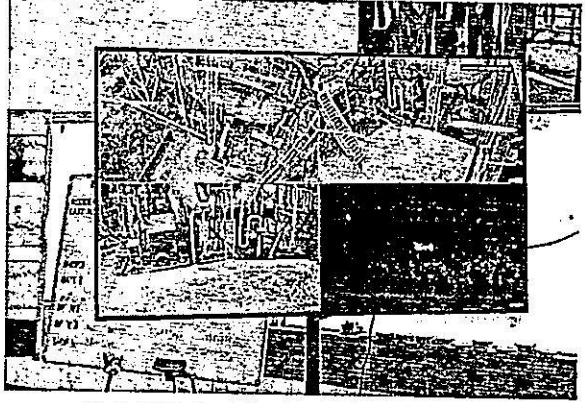
This has reference to Board's letter no. 10200 dated 05/07/2024 regarding submission of Action taken report in compliance to the above direction. As directed , we are submitting the Action taken report.

Sl no.	SPCB Condition	Compliance Status
1.	Deploy only trained workers in CO emission prone areas and provide portable CO detector.	Deployment of trained workers along with portable CO detector is being ensured.
2.	Upgrade the existing alarm systems and CO detectors for any CO gas leakage U-Seal areas of Blast Furnace-5	<p>A new Online CO Monitor alarm system has been installed, whose alarm and reading can be monitored in Main Control Room in Computer. In addition, the alarm system (with Hindi. Oriya) has been provided.</p>  <p>Fig1 : CO Detector near U - Seal</p>
		 <p>Fig 2: CO Detector reading in HMI along with audio alarm system</p>

-20-19-



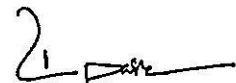
Steel Authority of India Limited
Rourkela Steel Plant
Rourkela – 769011
Fax : 0661-2510183

3.	Ensure proper housekeeping in Gas Cleaning Plant (GCP) Area	Proper cleaning of GCP Area has been ensured and will be continuously ensured.
4.	Clean the slit and sediments in the drains in GCP Area	Slit and Sediments has been cleaned regularly.
5.	Additional Monitoring System	<p>CCTV has been installed near 3 (three) U –Seals of BF Gas line for effective monitoring.</p>  <p>Fig3: CCTV Installation and Monitor</p>

Thanking you Sir,

With kind regards,

Yours faithfully
for Rourkela Steel Plant,



(P C Dash)
General Manager I/c
Environmental Engg. Department

To: Member secretary,
State Pollution Control Board, Odisha,
Bhubaneswar.



Office of General Manager I/c (Environment)
1st Floor of Occupational Health Service Centre
Rourkela Steel Plant, Rourkela Phone : 0661-2510395 Fax : 0661-2510183
Regd. Office : Ispat Bhawan, Lodi Road, New Delhi – 110 003



OFFICE OF THE REGIONAL OFFICER
STATE POLLUTION CONTROL BOARD, ODISHA

(DEPARTMENT OF FOREST, ENVIRONMENT & CLIMATE CHANGE, GOVT. OF ODISHA)

At: Near Panposh Hockey Chowk, Panposh, Rourkela, Sundargarh, Odisha, Pin- 769004

Letter No.: - 4105

Date: - 03/09/2024

Dr. Anup Kumar Mallick
Regional Officer

To

The Member Secretary,
State Pollution Control Board, Odisha
Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII,
Bhubaneswar - 751 012

Sub: Inspection Report of M/S. Rourkela Steel Plant (SAIL), Rourkela Dist: Sundargarh

Ref: HO letter No.10200, dt.05.07.2024

Sir,

With reference to the above cited subject, please find enclosed herewith the inspection report of M/s. Rourkela Steel Plant (SAIL), Rourkela Dist: Sundargarh; Odisha which was inspected on dtd. 27.08.2024 in connection with verification of compliance status of directions issued by the Board vide letter No. letter No.10200, dt.05.07.2024.

This is for your kind information and necessary action.

Encl: As above

Yours faithfully,

Regional Officer

Memo No. 4106 Dt. 03/09/2024

Copy forwarded to the Chief Env. Engineer (C), State Pollution Control Board, Bhubaneswar, Odisha for kind information and necessary action.

Regional Officer

Memo No. 4107 Dt. 03/09/2024

Copy forwarded to the Executive Director (Works), M/s. Rourkela Steel Plant, Steel Authority of India Limited, Rourkela, Dist: Sundargarh - 769005, Odisha for information.

Regional Officer





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Report on
M/s. Rourkela Steel Plant (SAIL),
Rourkela Dist: Sundargarh, Odisha

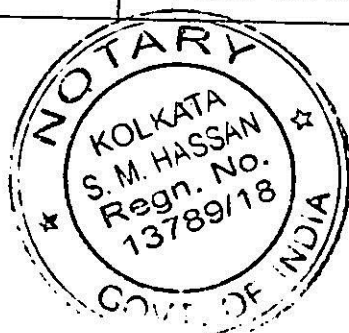
Blast Furnace-V of Rourkela Steel Plant was inspected on dtd.27.08.2024 by Er. C. S. Chauhan, DEE in connection with verification of compliance status of directions issued by the Board vide letter No. letter No.10200, dt.05.07.2024. Mr. P.C Dash, GM-I/C (Env. Engineering Department & others of RSP were present during inspection.

Background

There was CO gas leakage in scrubber & clarifier area of Blast Furnace-5 at around 10:40 AM on dt.01.07.2024, causing exposure to about 9 no. of workers engaged in the proximity of the U-Seal-1 of Blast Furnace-5 area. Based on the report of the inspection conducted by Regional Office on 01.07.2024, Board has issued direction to the industry vide letter No.10200, dt.05.07.2024

Compliance to the direction given by the Board vide letter No. 10200, dt.05.07.2024

S.N.	Directions	Compliance Status
1.	Deploy only trained workers in CO emission prone areas and provide portable CO detector.	It was reported by the plant authority that they are deploying trained workers along with portable CO detector in CO emission prone areas.
2.	Upgrade the existing alarm systems and CO Detectors for any CO gas leakage U-Seal areas of Blast Furnace - 5.	Industry has three (03) U-Seal areas in the Blast Furnace - 5 area. Each area had one offline CO detector and alarm system. Now industry has installed one new online CO detector and alarm system at each U-Seals. Online CO detectors are connected with the server of control room for central monitoring. Public Announcement (PA) in Odia and Hindi has been provided in the area for warning. CCTV have been installed near all 3 U-Seals for visual monitoring of the respective areas from control room. All three U-seals have been barricaded to prevent un-authorized entry into the area.
3.	Ensure proper housekeeping in Gas Cleaning Plant (GCP) area.	Housekeeping in the Gas Cleaning Plant (GCP) area was observed to be improved.
4.	Clear the silt and sediments in the drains in GCP area.	Cleaning of silt and sediments from the drains in GCP area was being carried out.



S. Chauhan
Er. C. S Chauhan
Dy. Env. Engineer



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Ameswara P-5

CONSENT ORDER

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STATE POLLUTION CONTROL BOARD, ODISHA
[DEPT. OF FOREST ENVIRONMENT & CLIMATE CHANGE, GOVT. OF ODISHA]

A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012

Phone-0674- 2561909

E-mail: cto17category@ospcboard.org Website: www.ospcboard.org

CONSENT ORDER

No. 4537 / IND-I-CON-01 Dt. 30.03.2024

Sub : Consent for Existing / New operation of the plant 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.

Ref : Your application ID No. 5200279, dtd. 14.12.2023

Consent to operate is hereby granted under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act, 1981 and rules framed thereunder to

Name of the Industry: M/s. Rourkela Steel Plant, (SAIL) (Steel & CPP)

At- Rourkela Steel Plant, SAIL, Rourkela, Dist-Sundargarh

Name of the Occupier & Designation: Shri S. R. Suryawanshi, Executive Director (Works)

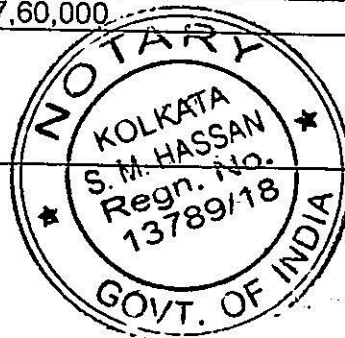
Address: At- Rourkela Steel Plant, SAIL, Rourkela, Dist-Sundargarh- 769011

This consent order is valid for the period from 01.04.2024 to 31.03.2025

This consent order is valid for the product quantity, specified outlets, discharge quantity and quality, specified chimney/stack, emission quantity and quality of emissions as specified below. This consent is granted subject to the general and special conditions stipulated therein.

A. Details of Products Manufactured

Sl No	Plant unit	Production quantity (TPA)
1.	<ul style="list-style-type: none"> • Coke ovens (1-6) & gross coke (including newly installed coke oven -VI) • Steam from 4nos. of boilers of Coke Oven Battery no. 6 	21,70,000 4 x25 Tons/hr = 100Tons/hr.
2.	Sinter Plant - I, II,III(Sinter)	67,60,000



P.T.O

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CONSENT ORDER

Page 2

3.	Blast furnace –Hot metal <ul style="list-style-type: none"> • Steam from the HP Boilers of Power blowing station of Blast Furnace no.5 : • HP Boiler # 1 • HP Boiler # 2 • HP Boiler # 3 • Electric Energy from Turbo Alternators (TA) connected to HP Boilers • Electric Energy from Top Recovery Gas Turbine (TRGT) of Blast Furnace no.5 	45,00,000 100 Tons/hr. 100 Tons/hr. 100 Tons/hr. 2 T Sa x 18MW=36MW 14 MW
4.	Steel Melting Shops- Crude Steel (SMS I & SMS II)	42,00,000
5.	Rolling Mills- Total Saleable Steel	38,80,000
6.	Hot Strip Mill – Hot Rolled Steel	18,50,000
7.	Hot Strip Mill (New)	30,00,000
8.	Plate Mill-Plates	15,30,000
9.	Cold Rolling Mill-Cold Rolled Steel CR coils CR sheets Galv. Sheets Tin plates	3,45,000 25,000 1,96,000 75,000
10.	Silicon Steel Mill-CRNO steel	2,55,000
11.	Pipe Plant Spiral welded pipes ERW pipes	55,000 75,000
12.	LDBP	Lime: 4,14,900 Dolo : 1,30,000
13.	TOP	Oxygen : 2,52,000 Nitrogen: 2,91,600 Argon : 10,032
14.	Special Plate Mill	0.15 LTPA
15.	Sulphuric Acid Plant	125 Ton/Day
Captive Power plant -100 MW		
Steam from High Pressure Boilers		
16.	Electric Energy /steam in HP boilers (Boiler No. I,II,III,IV, V & VI)	Electric Energy /steam in HP boilers (Boiler No. I,II,III,IV, V & VI)
17.	Electricity / Steam from MP Boilers (Boiler No. I, II & III)	Electricity / Steam from MP Boilers (Boiler No. I, II & III)



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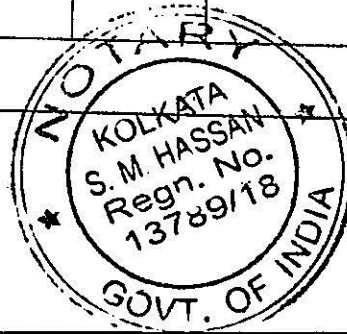
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CONSENT ORDER

Page 3

B. Discharge permitted through the following outlet subject to the standard

Outlet No.	Description of outlet	Point of discharge	Quantity of discharge	Prescribed Standard				
				PH	TSS mg/l	TDS mg/l	BOD mg/l	COD mg/l
1.	All outfalls as listed in Annexure-I	Discharge to Guradih nallah followed by lagoon	--	5.5-9.0	100	2100	30	250
2.	Overflow from lagoon	Discharge to river Brahmani	3,943 m ³ /Hr	O & G mg/l	Iron (as Fe) mg/l	Total Chromium mg/l		
				10	3.0	2.0		
3.	BOD Plant outlet	To be used fully for coke quenching after meeting the prescribed standard	--	PH	TSS mg/l	Phenol mg/l	BOD mg/l	COD mg/l
				6.0-8.0	100	1.0	30	250
				Cyanide mg/l	Ammonical Nitrogen (mg/l)	O&G mg/l		
				0.2	50	10		
4.	Domestic effluent from the Plant area	Treated in STP and reused for greenbelt development and dust suppression and excess shall be discharged to lagoon		pH-6.5 – 9.0 BOD- <30mg/l, TSS- <100 mg/l Fecal Coliform (FC) - MPN/100ml<1000				
5.	Industrial drain effluent from CPP	To be recycled completely	--					
6.	Ash Slurry	To be put into Ash ponds operated and managed by NSPCL	--					
7.	Spilled and leakage water from	Shall be treated in neutralization						



P.T.O

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CONSENT ORDER

Page 4

	Sulphuric Acid Plant	Pit and completely reused in floor washing and dust suppression.					
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C. Emission permitted through the following stack subject to the prescribed Standard

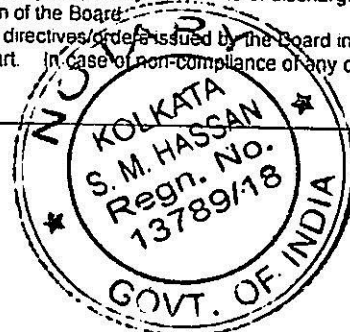
Chimney Stack No.	Description of Stack	Stack height (m)	Quantity of emission	Prescribed Standard		
				PM	SO ₂	NO _x
1	As per annexure-II			Enclosed in Annexure-III		

D. Disposal of solid waste permitted in the following manner

Sl.No.	Type of Solid waste	Description of disposal practice.
1.	Blast furnace slag	Total quantity shall be granulated and sold to cement plants
2.	Blast furnace sludge from ventury scrubber	Recycled back for making base mix.
3.	BF flue dust	Sold to SPCB authorized external parties
4.	SMS sludge	Partly sold to SPCB authorized external parties and balance quantity is utilized in base mix.
5.	Mill scale	Recycled back for making base mix
6.	Broken fire clay bricks	Sold to external parties
7.	Fly Ash	Utilization as per Fly Ash Notification dtd. 31.12.2021 of MoEF & CC
8.	Lime Fines	Used in sinter making

E. GENERAL CONDITIONS FOR ALL UNITS

1. The consent is given by the Board in consideration of the particulars given in the application. Any change or alternation or deviation made in actual practice from the particulars furnished in the application will also be the ground liable for review/variation/revocation of the consent order under section 27 of the Act of Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 and to make such variations as deemed fit for the purpose of the Acts.
2. The industry would immediately submit revised application for consent to operate to this Board in the event of any change in the quantity and quality of raw material / and products / manufacturing process or quantity /quality of the effluent rate of emission / air pollution control equipment / system etc
3. The applicant shall not change or alter either the quality or quantity or the rate of discharge or temperature or the route of discharge without the previous written permission of the Board.
4. The application shall comply with and carry out the directives/orders issued by the Board in this consent order and at all subsequent times without any negligence on his part. In case of non-compliance of any order/directives issued at any



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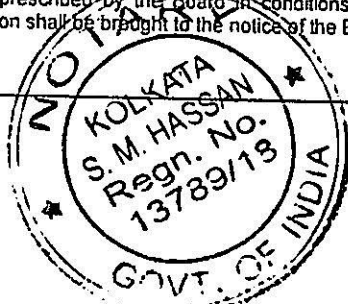
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CONSENT ORDER

Page 5



- time and/or violation of the terms and conditions of this consent order, the applicant shall be liable for legal action as per the provisions of the Law/Act.
5. The applicant shall make an application for grant of fresh consent at least 90 days before the date of expiry of this consent order.
 6. The issuance of this consent does not convey any property right in either real or personal property or any exclusive privileges nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State laws or regulation.
 7. This consent does not authorize or approve the construction of any physical structure or facilities or the undertaking of any work in any natural water course.
 8. The applicant shall display this consent granted to him in a prominent place for perusal of the public and inspecting officers of this Board
 9. An inspection book shall be opened and made available to Board's Officers during their visit to the factory.
 10. The applicant shall furnish to the visiting officer of the Board any information regarding the construction, installation or operation of the plant or of effluent treatment system / air pollution control system / stack monitoring system any other particulars as may be pertinent to preventing and controlling pollution of Water / Air.
 11. Meters must be affixed at the entrance of the water supply connection so that such meters are easily accessible for inspection and maintenance and for other purposes of the Act provided that the place where it is affixed shall in no case be at a point before which water has been tapped by the consumer for utilization for any purposes whatsoever.
 12. Separate meters with necessary pipe-line for assessing the quantity of water used for each of the purposes mentioned below:
 - a) Industrial cooling, spraying in mine pits or boiler feed.
 - b) Domestic purpose
 - c) Process
 13. The applicant shall display suitable caution board at the place where the effluent is entering into any water-body or any other place to be indicated by the Board, indicating therein that the area into which the effluents are being discharged is not fit for the domestic use/bathing.
 14. Storm water shall not be allowed to mix with the trade and/or domestic effluent on the upstream of the terminal manholes where the flow measuring devices will be installed.
 15. The applicant shall maintain good house-keeping both within the factory and the premises. All pipes, valves, sewers and drains shall be leak-proof. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas
 16. The applicant shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems install or used by him to achieve with the term(s) and conditions of the consent.
 17. Care should be taken to keep the anaerobic lagoons, if any, biologically active and not utilized as mere stagnation ponds. The anaerobic lagoons should be fed with the required nutrients for effective digestion. Lagoons should be constructed with sides and bottom made impervious.
 18. The utilization of treated effluent on factory's own land, if any, should be completed and there should be no possibility of the effluent gaining access into any drainage channel or other water courses either directly or by overflow.
 19. The effluent disposal on land, if any, should be done without creating any nuisance to the surroundings or inundation of the lands at any time.
 20. If at any time the disposal of treated effluent on land becomes incomplete or unsatisfactory or create any problem or becomes a matter of dispute, the industry must adopt alternate satisfactory treatment and disposal measures.
 21. The sludge generated from treatment units shall be dried in sludge drying beds and the drained liquid shall be taken to equalization tank of treatment plant.
 22. The effluent treatment units and disposal measures shall become operative at the time of commencement of production.
 23. The applicant shall provide port holes for sampling the emissions and access platform for carrying out stack sampling and provide electrical outlet points and other arrangements for chimneys/stacks and other sources of emissions so as to collect samples of emission by the Board or the applicant at any time in accordance with the provision of the Act or Rules made therein.
 24. The applicant shall provide all facilities and render required assistance to the Board staff for collection of samples / stack monitoring / inspection.
 25. The applicant shall not change or alter either the quality or quantity or rate of emission or install, replace or alter the air pollution control equipment or change the raw material or manufacturing process resulting in any change in quality and/or quantity of emissions, without the previous written permission of the Board.
 26. No control equipments or chimney shall be altered or replaced or as the case may be erected or re-erected except with the previous approval of the Board.
 27. The liquid effluent arising out of the operation of the air pollution control equipment shall be treated in the manner to the meet the prescribed standards by the Board in accordance with the provisions of Water (Prevention and Control of Pollution) Act, 1974 (as amended).
 28. The stack and ambient monitoring system installed by the applicant shall be opened for inspection to this Board at any time.
 29. There shall not be any fugitive or episodal discharge from the premises.
 30. In case of such episodal discharge/emissions the industry shall take immediate action to bring down the emission within the limits prescribed by the Board in conditions/stop the operation of the plant. Report of such accidental discharge /emission shall be brought to the notice of the Board within 24 hours of occurrence.



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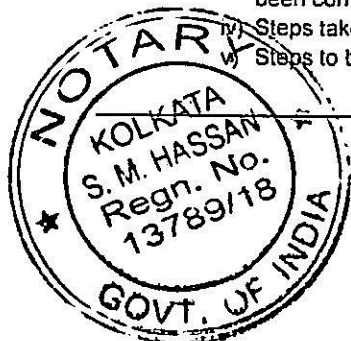
CONSENT ORDER

Page 6

- 31 The applicant shall keep the premises of the industrial plant and air pollution control equipments clean and make all hoods, pipes, valves, stacks/chimneys leak proof. The air pollution control equipments, location, inspection chambers, sampling port holes shall be made easily accessible at all times
- 32 Any upset condition in any of the plant/plants of the factory which is likely to result in increased effluent discharge/emission of air pollutants and / or result in violation of the standards mentioned above shall be reported to the Headquarters and Regional Office of the Board by fax / speed post within 24 hours of its occurrence.
- 33 The industry has to ensure that minimum three varieties of indigenous species of trees are planted at the density of not less than 1000 trees per acre. The trees may be planted along boundaries of the industries or industrial premises. This plantation is stipulated over and above the bulk plantation of trees in that area.
- 34 The solid waste such as sweeping, wastage packages empty containers residues, sludge including that from air pollution control equipments collected within the premises of the industrial plants shall be disposed off scientifically to the satisfaction of the Board, so as not to cause fugitive emission, dust problems through leaching etc., of any kind.
- 35 All solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by :
- i) Land fill in case of inert material, care being taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.
 - ii) Controlled incineration, wherever possible in case of combustible organic material.
 - iii) Composting, in case of bio-degradable material
- 36 Any toxic material shall be detoxicated if possible, otherwise be sealed in steel drums and buried in protected areas after obtaining approval of this Board in writing. The detoxication or sealing and burying shall be carried out in the presence of Board's authorized persons only. Letter of authorization shall be obtained for handling and disposal of hazardous wastes.
- 37 If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard, vary all or any of such condition and thereupon the applicant shall be bound to comply with the conditions so varied.
- 38 The applicant, his/heirs/legal representatives or assignees shall have no claim whatsoever to the condition or renewal of this consent after the expiry period of this consent.
- 39 The Board reserves the right to review, impose additional conditions or condition, revoke change or alter the terms and conditions of this consent.
- 40 Notwithstanding anything contained in this conditional letter of consent, the Board hereby reserves to it the right and power under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 to review any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Act by the Board.
- 41 The conditions imposed as above shall continue to be in force until revoked under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 and section 21 A of Air (Prevention & Control of Pollution) Act, 1981.
- 42 The industry shall comply to all the conditions stipulated under Charter on Corporate Responsibility for Environmental Protection (CREP) guidelines in a time bound manner as envisaged there in. (if applicable)
- 43 The industry shall comply to the conditions stipulated in CTE order issued by ODISHA State Pollution Control Board.
- 44 The industry shall abide by E(P) Act, 1986 and Rules framed there-under
- 45 In case the consent fee is revised upward during this period, the industry shall pay the differential fees to the Board (for the remaining years) to keep the consent order in force. If they fail to pay the adequate amount within the period stipulated by the Board the consent order will be revoked without prior notice.
- 46 The Board reserves the right to revoke/refuse consent to operate at any time during period for which consent is granted in case any violation is observed and to modify/ stipulate additional conditions as deemed appropriate

GENERAL CONDITIONS FOR UNITS WITH INVESTMENT OF MORE THAN Rs 50 CRORES, AND 17 CATEGORIES OF HIGHLY POLLUTING INDUSTRIES (RED A).

1. The applicant shall analyse the effluent / emissions and Ambient Air Quality every month through approved laboratory for the parameters indicated in TABLE- 'B', 'C' & Part -'B' as mentioned in this order and shall furnish the report thereof to the Board on monthly basis.
 2. The following information shall be forwarded to the Member Secretary on or before 10th of every month.
 - a) Performance / progress of the treatment plant
 - b) Monthly statement of daily discharge of domestic and/or trade effluent.
 3. Non-compliance with effluent limitations
 - a) If for any reason the applicant does not comply with or is unable to comply with any effluent limitations specified in this consent, the applicant shall immediately notify the consent issuing authority by telephone and provide the consent issuing authority with the following information in writing within 5 days of such notification.
 - i) Causes of non-compliance
 - ii) A description of the non-compliance discharge including its impact on the receiving waters.
 - iii) Anticipated time of continuance of non-compliance if expected to continue or if such condition has been corrected the duration or period of non-compliance.
- Steps taken by the applicant to reduce and eliminate the non-complying discharge and
Steps to be taken by the applicant too prevent the condition of non-compliance.



P.T.O

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CONSENT ORDER

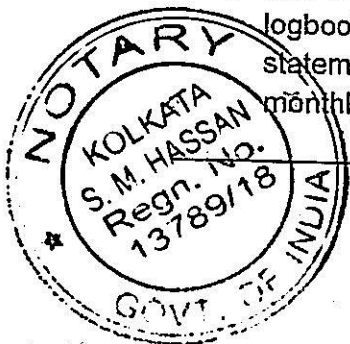
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- b) The applicant shall take all reasonable steps to minimize any adverse impact to natural waters resulting from non-compliance with any effluent limitation specified in this consent including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.
- c) Nothing in this consent shall be construed to relieve the applicant from civil or criminal penalties for non-compliance whether or not such non-compliance is due to factors beyond his control, such as break-down, electric failure, accident or natural disaster.
4. Proper housekeeping shall be maintained inside the factory premises including process areas by a dedicated team
5. The industry must constitute a team of responsible and technically qualified personnel who will ensure continuous operation of all pollution control devices round the clock (including night hours) and should be in a position to explain the status of operation of the pollution control measures to the inspecting officers of the Board at any point of time. The name of these persons with their contact telephone numbers shall be intimated to the concerned Regional Officer and Head Office of the Board, and in case of any change in the team it shall be intimated to the Board immediately.
6. The industry shall engage dedicated qualified manpower to ensure continuous and effective operation of online stack / Ambient Air Quality / Effluent monitoring stations for maintenance of database, real time data transfer to SPCB server, data analysis and co-ordination with concerned personnel of process units for taking corrective measures in case of non-compliances and to respond to the instructions of SPCB in this matter.
7. All employees of the industry including officers, staff, workers, contract workers involved in operation/maintenance/ supervision of process area, pollution control areas, raw material and waste handling areas shall undergo short term training at least twice in a year in the field of pollution control and environment protection to create awareness and develop green skill. The report on the activities along with details and photographs shall be submitted to the Board on annual basis by end of June for previous financial year.
8. ISO auditing reports of the industry in the field of environment shall be submitted to the Board every year on annual basis.
9. The environmental cell shall be established and upgraded effectively to guide, monitor the pollution control and environmental protection activities inside the industries on day to day basis to ensure that the conditions stipulated in the consent to establish/operate order of the SPCB and conditions imposed in EC and provisions of various environmental acts and rules are complied with and the report returns, compliances are submitted to the Board in due time.
10. Adequate numbers of scientific / technical persons having qualification in environmental engineering/ environmental science from recognized institution/ university must be engaged or appointed along with other interdisciplinary qualified persons to effectively implement and monitor different areas of environment management and regulatory compliances including air pollution control, water pollution control, online monitoring, real time data transmission, management of solid waste, hazardous waste, E-waste, plastic waste etc. The Head of the environmental cell should be a senior level official, who will directly report to the plant head to ensure that environmental management is performed effectively to ensure compliance to the environmental norms on priority basis.
11. Energy consumption data of different pollution control devices like ESP/ Bag filter/ Scrubber/ Cyclone/ Gas cleaning plant/ Fume treatment plant/ ETP/STP/Flow meters (treated effluent recycling) shall be collected online on real time centralized platform/ dashboard with data storage facility and generate tamperproof monthly / periodic reports, which shall be analysed by Energy Auditor, certified by Bureau of Energy Efficiency and accordingly the Energy Management / preventive maintenance of Pollution Control equipment shall be adopted. The energy management of process and pollution control devices shall be practiced to record the progressive achievements to minimize energy consumption in order to reduce greenhouse gas emission.
12. The post EIA monitoring schedule should be strictly followed for different parameters around the plant for the units is covered under EIA notification. The industry shall also conduct noise level study in the core zone and buffer zone of the industry and submit 6 monthly report to the Board.

F. SPECIAL CONDITIONS
F1 (Air Pollution Control)

- ❖ The industry shall comply with the emission and discharge standard as laid down in Gazette Notification No. GSR-277(E), dtd. 31.03.2012 of MoEF, Govt. of India.

1. The industry shall install separate energy meters for pollution control devices. A logbook shall be maintained to record the energy meter readings and a monthly statement of such energy meter readings of power consumption along with monthly electricity bill shall be furnished to the Board.



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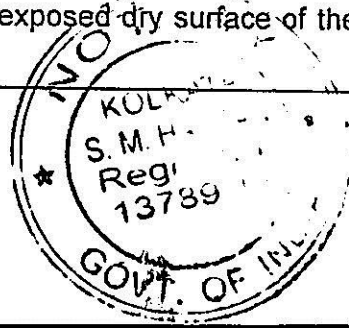
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2. All the online continuous stack emission monitoring systems (CEMS) for measurement of particulate matter and gaseous pollutants shall be operated effectively & uninterruptedly and real time monitoring data so generated shall be transmitted directly to RT-DAS server of the Board without passing through any local PC or server.
3. All the online continuous ambient air quality monitoring stations (CAAQMS) shall be operated effectively and uninterruptedly and real time monitoring data so generated shall be transmitted directly to RT-DAS server of the Board without passing through any local PC or server.
4. The industry shall strictly follow the guidelines of CPCB dated July, 2018 for Online Continuous Effluent Monitoring Systems (OCEMS) and Guidelines for continuous Emission Monitoring Systems dtd. August, 2018 for PM and other gaseous pollutants.
5. The performance evaluation of ESP, bag filter, air pollution control devices, online CEMS, AAQMS & surveillance cameras shall conducted by a reputed institute like NIT/IIT and annual report shall be submitted to the Board by end of June for the previous financial year.
6. The installed HD-IP camera shall be operated continuously so that video streaming shows in server of the Board on interruptedly.
7. The digital display board installed at the main gate shall be of minimum size of 6ft x 4ft as stipulated by CPCB with provision of display of real time data online analysers (CEMS, CAAQMS & CEQMS), so that the public can visualize the actual emission and the values of parameters displayed at the gate. Outdoor LED video screens should be preferred for digital display of environmental parameters, CTO and authorization conditions and awareness clippings on environment at the main gate, colony area and process area.
8. Online CO / Ammonia/ Chlorine and such other gas monitoring system shall be installed in every process area where such toxic gas are expected to be generated and in the plant premises along with alarm system to avoid accidental hazards due to gas leakage.
9. Green belt shall be properly designed and developed with plantation of suitable local species and species prescribed by CPCB.
10. The industry shall ensure tampered proof real time transmission of online monitoring data to the server of CPCB and SPCB and maintain the health of the analyzers and data connectivity through valid AMC.
11. The unit shall submit fly ash utilization status to the Board annually and shall comply to the provisions of revised fly ash Notification No. SO.5481(E),dt. 31.12.2021 of MoEF & CC, Govt. of India.
12. Appropriate measures like provision of water sprinkling or soil covering shall be made over the exposed dry surface of the ash ponds to prevent dust nuisance



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due to wind action. Dust suppression measures shall also be provided where construction activities are undertaken at ash pond area to prevent dust nuisance.

Coke Ovens :

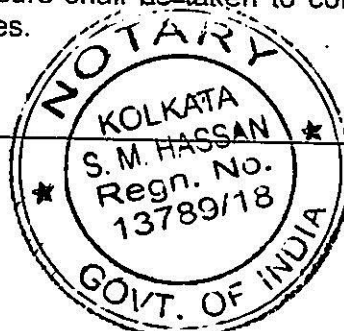
- Dry fog type dust suppression network of adequate capacity in coal handling area shall be installed and operated effectively.
- All possible measures shall be taken to prevent fugitive emission through different sources and operations.
- Corrective measures shall be taken in all the coke ovens to bring the stack & fugitive emission level in compliance to norms.
- Maximum efforts shall be made to prevent leakage of gas from various sources and it shall comply with the norms stipulated for fugitive emission.
- Dust suppression systems provided in Coal Handling area and Coke Crushing area shall be operated and maintained adequately for better control of fugitive emission.

Steel Melting Shops:

- Fume extraction system shall always be fixed on furnace and the fume generated shall be passed through the GCPs to bring down the particulate matter within the prescribed limit of 150 mg/Nm³ during normal operation and 300 mg/Nm³ during oxygen lancing.
- Maintenance and cleaning of the GCP system shall be done at appropriate intervals to keep the system fully effective.
- The sludge generated from GCP shall be properly handled so that there shall be no washout of the same and contaminate the surface runoff.

Blast Furnace :

- There shall not be any leakages from flanges and pipes and gas conveyance system of blast furnace. Such leakages if any shall be immediately attended to and action shall be taken in accordance with off site and on site emergency plan.
- The industry shall carry out minimum number of bleeding and slipping operations so that there shall be minimum fugitive emission. Unit shall maintain a register recording the numbers of bleeding and skipping operation for verification of Board.
- Adequate no of carbon monoxide (CO) detectors shall be installed near Gas Cleaning Plant (GCP) area and shall be in operation all the time. Appropriate and adequate alarm provision shall also be made.
- Steps shall be taken up for the introduction of direct injection of reducing agents (coal dust injection CDI) and the time limit suggested therein shall be adhered to. Dry fog type dust suppression system network shall be maintained adequately to control fugitive emission generated at junction houses and at high line area of all BFs.
- Appropriate pollution control measure shall be taken to control the emission from cast house area of all blast furnaces.



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Sinter Plant-I, II & III

- Pollution control measures installed at Sinter Plant -I, II & III shall be operated effectively, so that particulate matter emission shall not exceed the limit of 150mg/Nm³.
- Cyclone and water scrubber at lime crushing area shall be made operative. Alternatively appropriate dust suppression device shall be installed.
- Care shall be taken to control fugitive emission generated at sinter breaker area.
- The iron ore fines, mix coke, return fines and plant waste shall be used to manufacture sinter in sinter plant.

Cold Rolling Mills

- Adequate measures shall be taken to control acid fumes in the shop floor of pickling lines. The scrubbers installed should be operated continuously and effectively.
- Mechanical dosing system installed at acid regeneration plant shall be maintained and operated adequately.
- Housekeeping practice shall be improved in Acid regeneration plant.

Ore Bedding and Blending Plant (OBBP)

- All the bag filters are required to be operated regularly so as to control emission of fugitive dust and comply with the norm of 100mg/Nm³ for particulate matter emission.
- Dry fog type dust suppression measures installed at all the fugitive dust generating points shall be operated and maintained adequately.

Silicon Steel Mill

- Acidic fumes from pickling unit shall be passed through alkali scrubber before release through stack.

Hot Rolling Mills

- The emission from the oil-fired reheating furnace shall comply to the norms of 100mg/Nm³.

Hot Strip Mill (New)

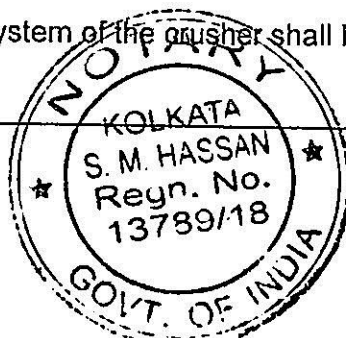
- The unit shall provide suction hood for fume collection and wet scrubber for treatment of fumes generated during rolling from finishing mill area.
- Mixed gas shall be used as fuel in the reheating furnace having stack height of 120m and the particulate matter emission in the stacks attached to reheating furnace shall not exceed 50 mg/Nm³.

Tonnage Oxygen Plant I, II & III

- Noise level in the Oxygen plant shall be maintained as per National Ambient Air Standards.
- Waste oil generated from various sources of TOP I, II & III shall be collected in Environmental sound manner and disposed off in compliance to the provisions of Hazardous Waste Rules.

Calcining Plant-II

- The dust extraction system of the crusher shall be operated effectively.



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- Adequate measures shall be taken for revival of waste gas cleaning system.

Special Plate Mill

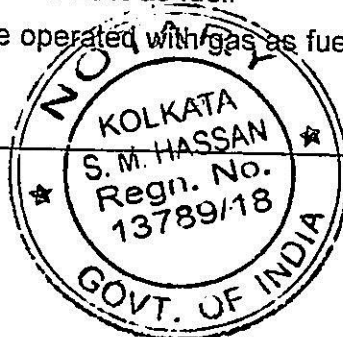
- Mix gas shall be used as fuel in Re-heating furnace, Austenising Furnace and Tempering Furnace. The unit shall provide a stack of 30 mtr. height each into the Austenising furnace and tempering furnace of special plate plant for dispersion of flue gas emission.
- The unit shall provide both dust extraction system as well as dust suppression system at all dust potential generating points.
- Good housekeeping practices shall be followed to improve the work environment.

Sulphuric Acid Plant

- The unit shall adopt DCDA double conversion, double absorption process for maximum conversion of SO₂ to SO₃ and production of higher grade of Sulphuric Acid in Sulphuric Acid Plant to keep emission within prescribed norms.
- The automation and control system provided in the Sulphuric Acid Plant shall maintain the process parameters for improved conversion and absorption efficiency.
- Alkali Scrubber shall be operated for scrubbing of stack gas during start up when concentration of SO₂ remain high due to less conversion. Gases shall be scrubbed with caustic solution so that acid mist shall not exceed 70 mg/Nm³ and SO₂ emissions shall not exceed 2.0 kg/ton of sulphuric acid production at the outlet of the stack.

Captive Power Plant -I

- Steps shall be taken for regular monitoring of Mercury (Hg) in the stack of boilers and submit data to the Board.
- The unit shall provide low NO_x burners to reduce NO_x emission to keep the level within the prescribed standard by MoEF & CC vide Notification dtd. 07.12.2015.
- Steps shall be taken for installation of Flue Gas Desulphurisation (FGD) system in future if required to keep the SO₂ level within 600mg/Nm³ to conform the MoEF & CC Notification dtd. 07.12.2015. This shall also include management and disposal of effluent / solid waste to be generated from FGD system.
- As per the Notification of MoEF & CC dtd. 07.12.2015, it is required to comply with the revised emission standard in respect of Particulate Matter (PM), Sulphur Dioxide (SO₂), Oxide of Nitrogen (NO_x), Mercury (Hg) and water consumption with the adoption of appropriate technology.
- Online monitoring system for PM, SO₂, NO_x and Hg for thermal power plant as per CPCB guideline dtd. July, 2017 for CEMS and standards prescribed for these parameters by MoEF and CC dtd. 07.12.2015 shall be complied.
- The unit shall operate the MP boiler- III and HP Boiler – I & II using premium quality coal having ash content less than 20% as fuel.
- HP Boiler no. III & IV shall be operated with gas as fuel. No other fuel shall be used there.



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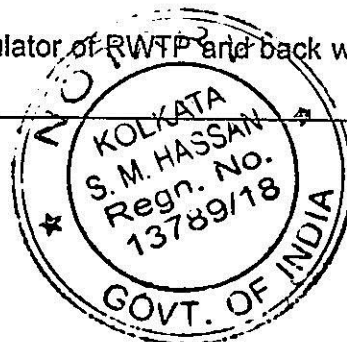
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- HP Boiler No.; V & VI and MP Boiler No. I & II shall be operated with both gases and premium quality coal having ash content less than 20% as fuel.
- Since the unit shares the facility of ash disposal of NSPCL, any lapses / violations / non-compliances on the part of NSPCL towards ash pond management shall lead to the appropriate action including restriction / restraint on use of such facility.
- All the measures including sufficient water sprinkling and developing green belt around the coal handling plants, coal stock yard etc. which are potential sources of fugitive emission shall be taken to mitigate dust position.
- Dry ash collection and storage facilities shall be operated along with dust suppression / dust extraction system in order to control fugitive dust emission during handling of fly ash.

F2 (Water Pollution Control)

1. Specific water consumption shall be limited within 3.5 m³/MWh for CPP as per MoEF & CC vide Notification dtd. 07.12.2015.
2. The industry shall comply to the standard as specified at Annexure-1 for discharge of effluent in respect of individual outfalls (discharging into Guradih nalla) as well as overflow of lagoon (discharged to Brahmani river).
3. Specific water consumption shall be reduced to 5m³/ton for long products and 8m³/ton for flat products.
4. All the online continuous effluent quality monitoring systems (EQMS) shall be operated effectively and uninterruptedly and real time monitoring data so generated shall be transmitted directly to RT-DAS server of the Board without passing through any local PC or server.
5. The Effluent Treatment Plant (ETP) and STP shall be operated effectively and continuously through a dedicated in-house team or through valid AMC so as to confirm to the prescribed norms.
6. The wastewater arising from the Austenising, Quenching and Tempering Furnace from the Special plate plant shall be taken to a setting tank and then cleaned in a pressure filter. The cleaned water shall be re-used in the plant.
7. The unit shall use 1100 m³/hr wastewater from lagoon after treatment in the raw wastewater treatment plant consists of cascade aeration system, oil skimming system, flash mixer, flocculation & clarifloculator as make-up water in new hot strip mill.
8. Wastewater generated from various units such as descaling, roughing, finishing mill of hot strip mill shall be treated in ETP consisting of scale pit, settling tank with oil skimming system, 39 nos. of high pressure sand filter. After treatment the treated water shall be passed through 3 nos. of cooling tower and recycled with makeup water.
9. Underflow from clarifloculator or RWTP and back wash from pressure sand filter



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- of ETP of hot strip mill shall be taken to a common thickener for treatment. Underflow of thickener shall be passed through belt press and separated water shall be recycled to RWTP. Sludge from belt press after drying will be used in OBPP.
10. The solid waste generated in form of scale pit and ETP sludge from HSM shall be recycled in the OBPP.
 11. Under no circumstances, there shall be any diversion of effluent from by product plant into any other drain or discharge system.
 12. Effluent from Coke Oven plant shall be treated in modified BOD plant and treated effluent shall be completely reused in the plant. The RO reject shall be completely reused in coke quenching without discharged to lagoon.
 13. Regular monitoring of operating parameters of BOD plants, periodic analysis of the parameters of the effluent shall be conducted to verify the performance and better management of BOD plant.
 14. Water used for cooling purpose in sinter plant-II, blast furnaces and all other process plants shall be recirculated after adequate treatment instead of discharge to drain.
 15. Wastewater generated from wet scrubbers attached to gas cleaning plants (GCP) of Steel Melting Shop -1 & 2 shall be treated separately and recycled completely.
 16. Sludge recovered from filtration of treated system of BF, SMS-I, II & III shall be evacuated from the site on daily basis and shifted to OBPP for reuse.
 17. Wastewater generated from wet scrubber attached gas cleaning plant (GCP) of Blast Furnace shall be recycled completely after treatment in the clarifier. The sludge shall be used in making base mix.
 18. Sludge dewatering device provided to remove the solids from the clarifier under flow shall be properly operated and the filtered water shall be reused in the scrubber.
 19. Wastewater generated from Blast Furnace and SMS area shall be treated in new ETP and after complete stabilization of ETP by 30th June, 2024, the unit shall reuse the treated effluent completely in the plant without discharging to Guradih nallah at Outfall-I.
 20. In hot rolling mill, water used during rolling shall be completely recycled after treatment.
 21. Effluent generated from the plant, the acid spillage or leakage from the plant and storage area shall be properly treated in neutralization pit and treated effluent shall be reused in dust suppression and floor washing.



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22. The neutralization pit sludge, sulphur muck and spent catalyst shall be properly collected and stored under covered shed and safely dispose in it's secured land fill.
23. For treatment of effluent generated in hot strip mill during rolling, adequate oil skimmers shall be provided at all the sedimentation tanks for proper treatment of effluent.
24. Proper facility shall be developed to handle & manage the recovered mill scale from the sedimentation tank of hot strip mill which is taken to OBBP for reuse.
25. In silicon steel mill, the sludge generated from clarifier under flow shall be handled, stored and disposed strictly in accordance with the directives of the Board and provisions under Hazardous Waste Rules. There shall be no contamination of water, soil or storm water by coming in contact of this waste.
26. The ETP in silicon steel mill shall be operated effectively and proper house keeping shall be maintained to avoid odour nuisance. The efficiency of oil removal system shall be enhanced to make it adequate and more effective.
27. The unit shall implement proper surface runoff collection and treatment facility at individual process areas like sinter plant, blast furnace, OBBP, coke oven by product plant areas .
28. The drains carrying surface run off water shall be cleaned on regular basis.
29. The industry shall submit a detailed account of solid waste generated from all the process area / utilities / logistics etc., their reuse (if any) and mode of disposal to the Board.
30. The unit shall submit Environmental Statement in filled in format every year by 30th of September.
31. The wastewater quality in all the outfalls shall confirm to the standards prescribed as per Table- 'B'.
32. The quality of discharge from the lagoon shall be monitored by the RSP regularly and submit to the Board on monthly basis.
33. The performance evaluation of ETP, STP, online CEQMS & Web cameras, flow meter shall be conducted by reputed institute like NIT / IIT and annual report shall be submitted to the Board by end of June for previous financial year.
34. Flow meter and level sensors with telemetry system should be installed in the bore wells as stipulated by Central Ground Water Authority/ Water Resources Department.
35. The industry shall conduct surface run off management study and develop rain water harvesting structures and surface runoff treatment systems inside the premises.



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36. The industry shall strengthen the Environmental Engineering Department in terms of manpower and infrastructure to cope with the increased workload and improved results for compliance to statutory norms.
37. The Board reserves the right to revoke/refuse consent to operate / to modify of stipulate additional conditions as deemed appropriate at any time during period for which consent is granted.
38. Consent to operate is subject to availability of all other statutory clearances required under relevant Acts/Rules and fulfillment of required procedural formalities.

G) ADDITIONAL CONDITIONS:

1. The unit shall ensure to stop completely the red fumes emission from LD Converter-1 of SMS-II by taking adequate control measures.
2. The unit shall complete the scheme for utilization of treated effluent of STP for gardening, road cleaning by 31st July, 2024.
3. The unit shall deploy mechanical road sweeping machine for cleaning of internal roads and work zone area by 31st March, 2024.
4. The unit shall explore to utilize SMS slag from waste dump area to reduce the dump height.
5. The industry shall take adequate steps to minimise accumulation of dust heaps & consequent fugitive dust emission during plying of vehicles and due to wind action during hot & dry weather conditions in Calcining Plant -II.
6. The industry shall take adequate steps to control fugitive emissions generated from Coke Oven-1, 4 & 5 and coal handling areas within 06 months.
7. The unit shall complete the stabilization of full-fledged operation of ETP of Outfall-I by June, 2024 and completely recycle the treated waste water for the process inside the plant premises and RO reject in slag cooling.
8. Concreting of internal road near Coke oven Battery No.2 shall be completed before resumption of operation of Battery No.2.
9. The unit shall complete installation of fog/mist cannon to suppress the fugitive dust emission at potential dust generating points inside the plant within 06 months and improve house-keeping to control PM₁₀ concentration in ambient air quality within prescribed norm.

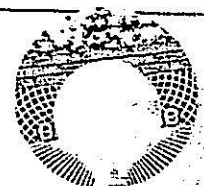
The occupier must comply with the conditions stipulated in section A,B,C,D,E F and G to keep this consent order valid.

To,

The Executive Director (Works),
M/s. Rourkela Steel Plant, SAIL
Rourkela-769 011
Dist – Sundargarh

Encl : As above


MEMBER-SECRETARY
STATE POLLUTION CONTROL BOARD, ODISHA



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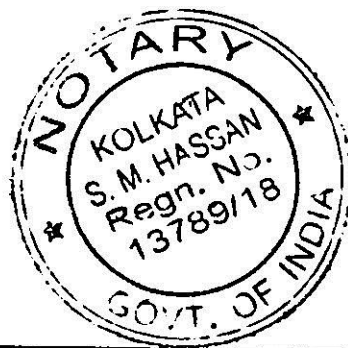
Memo No. 4538 /Dt. 30.03.2024 /

Copy forwarded to;

- i) Regional Officer, State Pollution Control Board, Rourkela
- ii) District Collector, Sundargarh
- iii) CGM (S&M), MCL, Burla
- iv) Director of Mines, Odisha/ DDM, Rourkela
- v) Director Factories & Boilers, Bhubaneswar
- vi) D.F.O. Sundargarh
- vii) Consent Register / HWM Cell, Bhubaneswar

[Handwritten Signature]
30/3/24

CHIEF ENV. ENGINEER
STATE POLLUTION CONTROL BOARD, ODISHA



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Annexure - I

Sl No	Description of the Outlet	Point Of discharge
1	Out fall No. 1 (SMS-II, BF-, COB no. 6, New CCD)	Guradihi Nallah
2	Out fall No. 2 (Loco shed, SP-I and CPP-I)	-do-
3	Out fall No. 3 (BF, Coke Oven no. 1 to 5 & By Product Plant Effluent)	-do-
4	Out fall No. 4 (Neutralisation Pit outlet of CRM)	-do-
5	Out fall No. 5 (Silicon Steel mill)	-do-
6	Out fall No. 6 (Tandem mill outlet of CRM)	-do-
7	Out fall No. 7 (Sewge Tretment Plant)	-do-
8	Out fall No. 9 (SMS-I and Pipe Plant Effluent)	-do-
9	Out fall No. 10 (In between Out fall no.9 and Lagoon inlet)	-do-
10	Lagoon outlet	Brahmani River (3925 M3/Hr)





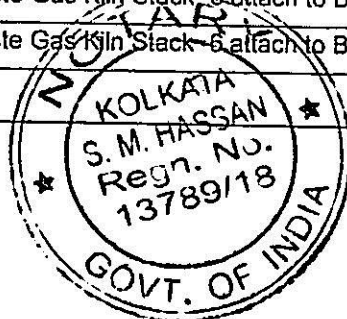
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Annexure-II

Sl. No.	Description of Chimney Stack	Maximum discharge m ³ /hour	Stack height (mtr)
	Stack attached		
1.	Coke Oven Battery 1	151906	95
2.	Coke Oven Battery 2	145079	90
3.	Coke Oven Battery 3	146786	90
4.	Coke Oven Battery 4	163854	95
5.	Coke Oven Battery 5	163854	95
6.	Coke Oven Battery 6	878068	120
7.	Sintering Plant 1 Process ESP	1892923	100
8.	Sintering Plant 1 Old ESP	327213	45
9.	Sintering Plant 1 Addl. ESP	414200	45
10.	Sintering Plant 2 Process ESP	1289373	120
11.	Sintering Plant 2 Space De dusting ESP	799666	80
12.	Sintering Plant 3 Process ESP	800725	120
13.	Sintering Plant 3 Plant De Dusting ESP	639692	80
14.	Blast Furnace-4 Cast House De fuming system ESP	306000	70
15.	Blast Furnace-5 Cast House De fuming system ESP	1151500	100
16.	Blast Furnace-5 Stock House ESP	484316	80
17.	SMS-1 LD No 4 Stack	38465	90
18.	SMS-1 LD No.5 Stack	38465	90
19.	SMS-2 Bag House B-1	132600	72.2
20.	SMS-2 Bag House B-2	52185	72.2
21.	SMS-2 Secondary Emission Control System ESP	361590	100
22.	SMS-2 Desulphurization Unit	327518	70
23.	LDBP waste gas kiln stack	48740	45
24.	CP-2 waste Gas Kiln Stack -1 attach to Bag filter	18800	50
25.	CP-2 waste Gas Kiln Stack -2 attach to Bag filter	18800	50
26.	CP-2 waste Gas Kiln Stack -3 attach to Bag filter	18800	50
27.	CP-2 waste Gas Kiln Stack -4 attach to Bag filter	18800	50
28.	CP-2 waste Gas Kiln Stack -5 attach to Bag filter	18800	50
29.	CP-2 waste Gas Kiln Stack -6 attach to Bag filter	18800	50



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30.	SSM Pickling Line Stack	1250	30
31.	SSM TA Line Furnace Stack	250	24
32.	SSM Decarb Line	305	24
33.	HSM Re heating Furnace Stack-1	16900	60
34.	HSM Re heating Furnace Stack-2	16900	60
35.	Plate Mill Reheating Furnace Stack	22500	100
36.	New Plate Mill Furnace	75000	120
37.	Tempering Furnace	27838	30
38.	Austenising Furnace	32678	30
39.	CPP-1 HP Boiler 1&2	409000	102
40.	CPP-1 HP Boiler 3&4	409000	50
41.	CPP-1 HP Boiler 5&6	409000	102
42.	CPP-1 MP Boiler 1 & 2	350000	40.5
43.	CPP-1 MP Boiler 3	350000	40.5
44.	Blast Furnace no.5 Power Blowing Station Stack-1	350000	100
45.	Blast Furnace no.5 Power Blowing Station Stack-2	350000	100
46.	Blast Furnace no.5 Power Blowing Station Stack-3	350000	100
47.	New Hot Strip Mill Reheating Furnace Stack no 1	111174	120
48.	New Hot Strip Mill Reheating Furnace Stack no 2	111174	120
49.	New Sulphuric Acid Plant	30000	30
50.	SMS 2 Converter-1	272000	80
51.	SMS 2 Converter-2	272000	80
52.	SMS 2 Converter-3	272000	80
53.	SMS 2 LHF 2A	100000	60
54.	SMS 2 LHF 2B	100000	60
55.	SMS 2 LHF 2C	175000	60
56.	Blast Furnace 1 Cast House De-dusting	150000	70



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Annexure-III

Emission permitted through the following stack subject to the prescribed

Sl. No	Stack	Standard for PM					
1.	Stack attached to All types of furnaces	150 mg/Nm ³					
2.	Stack attached to All types of kilns	100 mg/Nm ³					
3.	Stack attached to mixing grinding and transportation unit	100 mg /Nm ³					
		<table border="1"> <thead> <tr> <th>Sl No</th> <th>Description of stack</th> <th>PM conc. in mg/Nm³</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Stack attached to LD converter</td> <td>400 mg/Nm³ during lancing 150 mg/Nm³ during normal operation</td> </tr> </tbody> </table>	Sl No	Description of stack	PM conc. in mg/Nm ³	1	Stack attached to LD converter
Sl No	Description of stack	PM conc. in mg/Nm ³					
1	Stack attached to LD converter	400 mg/Nm ³ during lancing 150 mg/Nm ³ during normal operation					
4.	Stack attached to Coke ovens	50 mg/Nm ³					
5.	All stack attached to sinter plant-I,II&III	150 mg/Nm ³					
6.	Stack attached to Sulphuric acid plant	SO ₂ conc. - 2.0 kg/ton of H ₂ SO ₄					
7.	Stack attached to Sulphuric acid plant	Acid mist concentration shall not exceed 50 mg/Nm ³					
8.	Stack attached to Pickling exhaust	Acid mist concentration shall not exceed 50 mg/Nm ³					
9.	Stack attached to reheating furnace -1 of new Hot Strip Mill	50 mg/Nm ³					
10.	Stack attached to reheating furnace -2 of new Hot Strip Mill	50 mg/Nm ³					

POWER PLANT

Sl. No.	Description of Stack	Prescribed Standard (mg/Nm ³)			
		PM	SO ₂	NO _x	Hg
1.	Stacks attached to Boilers	100	600	600	0.03
	Stack attached to Sulphuric Acid Plant	Stack height (m)	Quantity of emission	Prescribed Standard	
				SO ₂	Acid Mist (mg/Nm ³)
		30	--	2.0 Kg/ ton of Sulphuric Acid Production	70



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COKE OVEN

As notified under the Environment (Protection) Rules vide notification G.S.R. 46 (E), dt.3.2.2006

Fugitive Visible Emission					
COKE OVEN PLANTS (by product recovery type)	(a) Leakage from door	5(PLD)*	10 (PLD)*	10(PLD)*	
	(b) Leakage from charging lids	1(PLL)*	1(PLL)*	1(PLL)*	
	(c) Leakage from AP covers	4(PLO)*	4(PLO)*	4(PLO)*	
	(d) Charging emission (Second / charge)	16(with HPLA)*	50 (with HPLA)*	75	
		New battery	Rebuild battery	Old battery (existing)	
STACK EMISSION OF COKE OVEN					
1.	(a) SO ₂ (mg/Nm ³)	800	800	800	
	(b) NO _x (mg/Nm ³)	500	500	500	
	(c) SPM, (mg/Nm ³)	50	50	50	
2.	(d) SPM emission during charging – for stamp charging batteries (stack emission) mg/Nm ³	25	25	25	
3.	(e) SPM emission during coke pushing (stack emission) gm/ton of coke	5	5 (applicable to stationary land based system)	--	
4.	(f) Sulphur in coke oven gas used for heating (mg/Nm ³)	800	--	--	

EMISSION FOR QUENCHING OPERATION					
1.	(a) Particulate matter gm/tonne of coke produced	50	50	--	
2.	Benzo -Pyrine (BaP) concentration in work zone air (ug/m ³)				
	(a) Battery area (top of the battery)	5	5	5	
	(b) Other units in coke oven plant	2	2	2	
	(c) Ambient standards (mg/Nm ³)	10	10	10	



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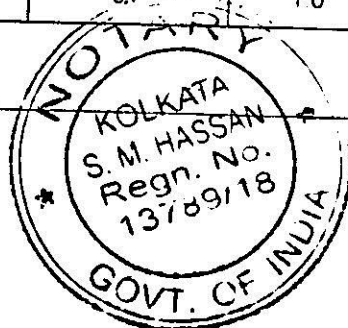
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CONSENT ORDER

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General Standards for discharge of environment pollutants PART-A: EFFLUENTS

Sl.No.	Parameters	Standards			
		Inland surface	Public sewers	Land for irrigation	Marine Coastal Areas
		(a)	(b)	(c)	(d)
1	Colour & odour	Colourless/Odourless as far as practicable	-----	See 6 of Annex-1	See 6 of Annex-1
2.	Suspended Solids (mg/l)	100	600	200	For process wastewater - 100 b. For cooling water effluent 10% above total suspended matter of influent.
3	Particular size of SS	Shall pass 850	-----	-----	
5.	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
6.	Temperature	Shall not exceed 5°C above the receiving water temperature	-----	-----	Shall not exceed 5°C above the receiving water temperature
7.	Oil & Grease mg/l max.	10	20	10	20
8.	Total residual chlorine	1.0	-----	-----	1.0
9.	Ammonical nitrogen (as N) mg/l max.	50	50	-----	50
10.	Total Kjeldahl nitrogen (as NH ₃) mg/l max.	100	-----	-----	100
11.	Free ammonia (as NH ₃) mg/l max	5.0	-----	-----	5.0
12.	Biochemical Oxygen Demand (5 days at 20°C) mg/l max.	30	350	100	100
13.	Chemical Oxygen Demand, mg/l max.	250	-----	-----	250
14.	Arsenic (as As) mg/l max.	0.2	0.2	0.2	0.2
15.	Mercury (as Hg) mg/l max.	0.01	0.01	-----	0.001
16.	Lead (as pb) mg/l max	0.1	1.0	-----	2.0



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CONSENT ORDER

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17.	Cadmium (as Cd) mg/l max.	2.0	1.0	-----	2.0
18.	Hexavalent Chromium (as Cr + 6) mg/l max.	0.1	2.0	-----	1.0
19.	Total Chromium (as Cr) mg/l max.	2.0	2.0	-----	2.0
20.	Copper (as Cu) mg/l max.	3.0	3.0	-----	3.0
21.	Zinc (as Zn) mg/l max.	5.0	15	-----	15
22.	Selenium (as Se) mg/l max.	0.05	0.05	-----	0.05
23.	Nickel (as Ni) mg/l max.	3.0	3.0	-----	5.0
24.	Cyanide (as CN) mg/l max.	0.2	2.0	0.2	0.02
25.	Fluoride (as F) mg/l max.	2.0	15	-----	15
26.	Dissolved Phosphates (as P) mg/l max.	5.0	-----	-----	-----
27.	Sulphide (as S) mg/l max.	2.0	-----	-----	5.0
28.	Phenolic compounds as (C ₆ H ₅ OH) mg/l max.	1.0	5.0	-----	5.0
29.	Radioactive materials a. Alpha emitter micro curie/ml. b. Beta emitter micro curie/ml.	10 ⁷ 10 ⁶	10 ⁷ 10 ⁶	10 ⁸ 10 ⁷	10 ⁷ 10 ⁶
30.	Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
31.	Manganese (as Mn)	2 mg/l	2 mg/l	-----	2 mg/l
32.	Iron (Fe)	3 mg/l	3 mg/l	-----	3 mg/l
33.	Vanadium (as V)	0.2 mg/l	0.2 mg/l	-----	0.2 mg/l
34.	Nitrate Nitrogen	10 mg/l	-----	-----	20 mg/l



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PART- B: NATIONAL AMBIENT AIR QUALITY STANDARDS

Sl. No.	Pollutants	Time Weighed Average	Concentrate of Ambient Air		
			Industrial Residential. Rural and other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1.	Sulphur Dioxide (SO ₂), µg/m ³	Annual * 24 Hours **	50 80	20 80	-Improved west and Gaeke - Ultraviolet fluorescence
2.	Nitrogen Dioxide (NO ₂), µg/m ³	Annual * 24 Hours **	40 80	30 80	- Modified Jacob & Hochheiser (Na-Arsenite) - Chemiluminescence
3.	Particulate Matter (size less than 10µm) or PM ₁₀ µg/m ³	Annual * 24 Hours **	60 100	60 100	-Gravimetric - TOEM - Beta Attenuation
4.	Particulate Matter (size less than 2.5µm) or PM _{2.5} µg/m ³	Annual * 24 Hours **	40 60	40 60	-Gravimetric - TOEM - Beta Attenuation
5.	Ozone (O ₃) µg/m ³	8 Hours ** 1 Hours **	100 180	100 180	- UV Photometric - Chemiluminescence - Chemical Method
6.	Lead (Pb) µg/m ³	Annual * 24 Hours **	0.50 1.0	0.50 1.0	-AAS/ICP method after sampling on EMP 2000 or equivalent filter paper. - ED-XRF using Teflon filter
7.	Carbon Monoxide (CO) mg/m ³	8 Hours ** 1 Hours **	02 04	02 04	- Non Dispersive Infra Red (NDIR) Spectroscopy
8.	Ammonia (NH ₃) µg/m ³	Annual* 24 Hours**	100 400	100 400	-Chemiluminescence - Indophenol Blue Method
9.	Benzene (C ₆ H ₆) µg/m ³	Annual *	05	05	-Gas Chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10.	Benzo (a) Pyrene (BaP)- Particulate phase only, ng/m ³	Annual*	01	01	-Solvent extraction followed by HPLC GC analysis
11.	Arsenic (As), ng/m ³	Annual*	06	06	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper
12.	Nickel (Ni), ng/m ³	Annual*	20	20	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper

- ** Annual arithmetic mean of minimum 104 measurements in a year at a particular site 1 hourly at uniform intervals.
- ** 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be less than or equal to 2% of the time in a year, 2% of the time, they may exceed the limits but not on two consecutive days.

Validity unknown

Digitally signed by SANTOSH KUMAR PANDY

Date: 2024.05.30 13:15:29 IST



P.T.O



STEEL AUTHORITY OF INDIA LIMITED
ROURKELA STEEL PLANT : ROURKELA

AUTHORISATION

I, Atanu Bhowmick aged about 59 years, S/o. Sri.Bijit Bihari Bhowmik working as Director-in-Charge in Steel Authority of India Limited, Rourkela Steel Plant, Rourkela the Opp. Party NO.5 in the matter OA No.157/2024 before the National Green tribunal, Eastern Zone Bench, Kolkata authorize Sri. Hiralal Mohapatra, Chief General manager (Utilities & Env.) of SAIL, Rourkela Steel Plant to represent the Opp. Party no.5 to appear, sign vakalatnama, appeal memo/pleading/petitions, submit documents, swear affidavit, depose and do all such things as may be necessary/ incidental before the NGT, Kolkata.

(Atanu Bhowmick)
Director-in- charge
SAIL, Rourkela Steel Plant

ATANU BHOWMICK
Director In-charge
SAIL, Rourkela Steel Plant
Rourkela

Signature of Sri Hiralal Mohapatra

Attested

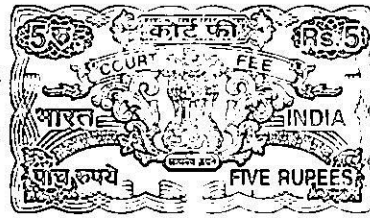
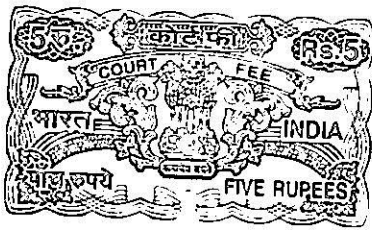
(Atanu Bhowmick)
Director-in- charge
SAIL, Rourkela Steel Plant

ATANU BHOWMICK
Director In-charge
SAIL, Rourkela Steel Plant
Rourkela



CIN: 1.27109D1, 1973GO1006454

स्टील अथॉरिटी ऑफ इंडिया लिमिटेड, राउरकेला इस्पात संयंत्र, राउरकेला, ओडिशा-769011, दूरभाष: 0661-2641587, फैक्स: 0661-2510085, ई-मेल:rsp.coc@gmail.com
Steel Authority of India Limited, Rourkela Steel Plant, Rourkela-769011, Odisha, Phone:0661-2641587, Fax :0661-2510085, e-Mail:rsp.coc@gmail.com



Hira Lal Mohapatra

HIRALAL MOHAPATRA
मुख्य महाप्रबंधक (उपयोगिता एवं पर्यावरण)
CGM (Utilities & Environment)
सेल, रा. उ. सं. / SAIL, RSP, Rourkela

“VAKALATNAMA”

In the National Green Tribunal, Eastern at
Before Ld. Zone Bench, Kolkata Judge

Suit/Case No. _____ of 2022

O. A. No. 157 of 2024/EZ

News item titled "Odisha 9 hospitalized
after suspected gas leak at Rourkela
Steel Plant" appearing in Times of India
-VS- dated 06.07.2024

Central Pollution Control Board & Ors.

_____ Plaintiff
_____ Applicant
_____ Appellant
_____ Complainant
_____ Defendant
_____ Opp. Party
_____ Respondent
_____ Accused

KNOW ALL MEN by these Respondents No. 5

That I/We do hereby in my / our name and my / our behalf constitute and appoint Mr./Ms. Nilanjana Pal, Adv. as true and lawful Pleader / Advocate & Attorneys to appear and act for me / us in the matter noted above to the suit written statement conduct suit, appeal from original suit order etc. and for that purpose to do all acts and things, whatsoever in that connection including compromise of the above matter disposing in or withdrawing money from filing or taking out of appear, document and payment order from Court referring matters in dispute between the parties here to arbitrate, withdrawing the above matters with liberty title fresh suit, sending properties released from attachment filing execution of Miscellaneous cases and other petitions, bidding at execution sale, obtaining payment from us our Court.

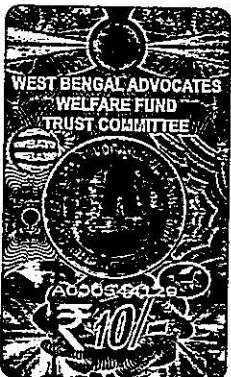
Withdrawing custody and other fees and doing on my / our behalf such other acts in the above matters as are necessary and proper.

I/ We hereby agreeing to ratify and confirm all acts so done by the said Advocate or Attorney as my/ our own acts and as it done by me/us to all intents and purposes.

Date 06.07.2024

ADVOCATES-

Nilanjana Pal, Advocate
Go. Kallol Basu, Advocate
B. N. Basu & Co. (Solicitors), 2nd floor
6, Old Post Office Street, Kolkata - 700001
M: 9433768756
Email Id - nilanjana_pal83@yahoo.com.



BEFORE THE NATIONAL GREEN
 TRIBUNAL,
 (EASTERN ZONE BENCH), KOLKATA

O.A. NO. 157 OF 2024/EZ

EARLIER O.A. NO. 771 OF 2024/PB

BETWEEN

News item titled "Odisha 9
 hospitalized after suspected gas leak
 at Rourkela Steel Plant" appearing in
 the Times of India dated 01.07.2024.
 APPLICANT

- Vs. -

Central Pollution Control Board &
 ORS.

..... RESPONDENTS



C 6 JAN 2025

COUNTER AFFIDAVIT

NILANJAN PAI,
 Advocate

C/o Mr. Kallol Basu, Advocate,
 B.N Basu & Co. (Solicitors),
 6, Old Post Office Street, 2nd Floor,
 Kolkata-700 001.

Mobile No. 9433768756

Email Id: nilanjan_pal83@yahoo.com

Enrolment No. WB/194/2009