



Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment
Authority(SEIAA), JHARKHAND)

To,

The -1

SHEONARAIN JAISWAL PRIVATE LIMITED

SHOP NO. 1 , 2ND FLOOR AKASH COMPLEX , NEAR JMJ SCHOOL
 DORANDA RANCHI - 834002 -834002

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the SEIAA vide proposal number SIA/JH/IND2/442593/2023 dated 11 Sep 2023. The particulars of the environmental clearance granted to the project are as below.

1. EC Identification No.	EC23B022JH198251
2. File No.	SEIAA/2023-24/2737/2023
3. Project Type	New
4. Category	B
5. Project/Activity including Schedule No.	5(g) Distilleries
6. Name of Project	SHEONARAIN JAISWAL PVT. LTD. (GRAIN BASED DISTILLERY WITH COGENERATION PLANT)
7. Name of Company/Organization	SHEONARAIN JAISWAL PRIVATE LIMITED
8. Location of Project	JHARKHAND
9. TOR Date	N/A

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 11/10/2023

(e-signed)
 Ashok Kumar, IFS
 Member Secretary
 SEIAA - (JHARKHAND)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH. Please quote identification number in all future correspondence.

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State Level Environment Impact Assessment Authority, Jharkhand

Nursery Complex, Near Dhurwa Bus Stand, Dhurwa, Ranchi. Jharkhand-834 004

E-mail: msseiaa.jhk@gmail.com / chr-sciaajhr@gov.in

website: www.jseiaa.org

Letter No. : EC/SEIAA/2022-23/2737/2023/

Ranchi. Date :

**To: Shri Sanjay Kumar Gupta (Director),
M/s Sheonarain Jaiswal Private Limited,
Shop No. 1, 02nd Floor, Akash Complex,
Near JMJ School, North Office Para, Doranda,
District – Ranchi – 834002 (Jharkhand).**

Sub. : Environmental Clearance for the project “Grain Based Distillery with Cogeneration Plant of M/s Sheonarain Jaiswal Pvt. Ltd. at Village : Balsiring, Tehsil : Namkum, Distt. : Ranchi, Jharkhand” (Proposal No. : SIA/JH/IND2/442593/2023) – regarding.

Ref. : Your application no. Nil, dated - 11.09.2023.

It is in reference to the project “Grain Based Distillery with Cogeneration Plant of M/s Sheonarain Jaiswal Pvt. Ltd. at Village : Balsiring, Tehsil : Namkum, Distt. : Ranchi, Jharkhand” submitted by you for seeking Environmental Clearances (EC).

This is a case of violation which has been taken for appraisal on 21.09.2023.

The project is a violation case since the project proponent has started the construction without prior Environmental Clearance from State Environment Impact Assessment Authority (SEIAA), Jharkhand.

However, The Honourable Supreme court in its order dated 9th December 2021 In the matter of the Civil appeal No 7576-7577 of 2021 in the Electro steel Steels Limited Vs Union of India and Ors in its para 93 has inter- alia observed the following :

“The interim order passed by the Madras high Court appears to be misconceived. However, this court is not hearing an Appeal from that interim order. The interim stay passed by the Madras High court can have no application of operations of the Standard Operating Procedure to the projects in territories beyond the territorial jurisdiction of Madras High court. However, final decision may have been taken in accordance with the Orders/ Rules prevailing prior to 7th July, 2021.”

Thus, the SEIAA, Jharkhand, in the light of Ho`ble Supreme Court order dated 9th December 2021, Office Memorandum no. F.No.22-21/2020-IA.III[E 138949] dated 28.01.2022 of MoEF&CC, Govt. of India and Standard Operating Procedure (SOP) issued by MoEF&CC,

Govt. of India vide its file number 22-21/2020-IA-III, dated 07.07.2021, the matter has been taken for consideration & recommendation of EC for violation projects.

Project Category : 5 (g) Distilleries

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 101st meeting held on 20-24.02.2023 and SEIAA, Jharkhand has approved the Violation ToRs in 102nd meeting held on 17th & 18th March, 2023. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2022-23/2737/2023/470, date 24.03.2023. The final EIA / EMP submitted by PP to SEIAA on 11.09.2023 and which was forwarded to SEAC on 11.09.2023.

SNJPL proposed to set up an Greenfield Grain based distillery of 60 KLD capacity alongwith 1.775 MW Power Plant with latest technology of Multi Pressure Distillation and MSDH for dehydration to achieve good quality of Fuel grade Ethanol.

Proposed production of 60 KLD distillery with 1.775 MW captive Power Generation plant will be based on grain such as Corn/Maize, Broken rice and the Spoiled Grain as basic raw materials. Other inputs will be water, antifoam agents, Urea, H₂SO₄ and enzymes. Rice husk/Biomass /Bagasse/Coal will be used as fuel in Boiler.

The Distillery proposes to achieve Zero Liquid Discharge by Decantation, Multi Effect Evaporation (MEE) followed by dryer to form Distiller's Grain Solids with Solubles (DDGS), which will be used as cattle/fish Feed. The entire spent wash will be used to achieve Zero Liquid Discharge.

Grain Based Distillery of Sheonarain Jaiswal Pvt. Ltd. (SNJPL), is proposed at Plot No. 726 (P), Balsiring, Turka Toli, Tupudana, Near Ring Road, PS- Dhurva, P.O. Hatia, Block Namkum in District Ranchi, Jharkhand having Latitude 23°15'25.89"N & Longitude 85°16'24.30"E at 648 m. above MSL. The Project Site is connected to NH-75 via Ring Road. It is about 10 kms. from district head quarter at Ranchi and is well connected by NH – 75. SNJPL is about 7 Km. (SSE) from Hatia Railway Station on Netaji S.C.Bose Gomoh–Hatia Sec. of SER. Total cost of the proposed SNJPL distillery project is estimated to be Rs. 22 Crores.

3.64 Ha. (8.99 Acres) of land of Khata No. 123, Khesra No. 726 will be utilized for proposed grain based distillery project out of total available land of 10.82 ha. (26.74 Acres) in Khata No. 123, Khesra Nos. 726 & 576 of Balsiring, Namkum, Ranchi.

Land Details :

Khata no.	Plot no.
123	726 (P)

Manufacturing & Production Details :

Manufacturing Facilities	Product	Production Capacity
Distillery	Ethanol / ENA	60 KLPD
Power Co-generation	Power	1.775 MW
No. Of Days Operation / Annum	350 days	

Distilleries Dry Grain with Solubles (DDGS). & CO ₂ will be generated as by-product.	
By-Product	Generation Capacity
DDGS	30 TPD
CO ₂	20 TPD
Fusel Oil	90 Ltrs. / day

Raw Material Requirement :

Item	Raw Material Requirement
Maize / Broken Rice	162 TPD / 156 TPD
No. Of Days Operation / Annum	350 days

Pollution Control Measures :

The proposed Grain based distillery will be based on "Zero Liquid Discharge". Fresh water requirement of the project will be met by Ground Water. Efforts will be made to conserve as much water as possible by recycling and reuse. Spent wash generated during Grain operation, would be decanted by centrifuge decanter to obtain Distiller's Wet Grains with Soluble (DWGS), and the concentrate (Thin Slop) is concentrated (DGSS) in Multi-effect evaporator and then mixed with DWGS and dried in Rotary Dryer to form Dried Distiller's Grain with Soluble (DDGS) and used as Cattle feed/Poultry/Fish. Process condensate from MEE will be treated and recycled back in the process. Closed water recycle system and plant process is designed to minimize fresh water requirement by recycling various effluents after treatment.

Waste Water Generation & Treatment :

The spent wash from proposed grain based distillery will be subjected to decantation to separate out wet cake and 6-7% w/w solid thin slop will be fed to evaporator. The thick syrup @ 35-40 % solids after the evaporation would then fed to DWGS drier to produce DDGS at 88-90% w/w solids which will be sold as Cattle feed. The boiler blow down, DM plant, softener regeneration water will be treated in a neutralization tank and after treatment it will be used as cooling tower makeup water.

Process condensate from evaporation section will be partly recycled and balance will be treated in process condensate treatment plant, treated water will be used as dilution water in slurry preparation and as cooling tower makeup water and steam condensate will be recycled back to the boiler.

Air Pollution :

To minimize air pollution load due to operation of proposed boilers of SNJPL Bag Filters with stack of adequate height will be installed with the boiler to control the particulate and gaseous emissions due to combustion of fuel. CO₂ produced during the fermentation process will be collected and utilized as an industrial gas or bottled and sold. Diesel Generator (DG) Sets with acoustic enclosures will also have adequate stack height as per Central Pollution Control Board (CPCB) Guidelines. All the internal roads will be asphalted. Development of Green Belt (in 1:21





Ha. 33 % of total project area) around the periphery and within the premises of the plant will help in attenuating the pollutants emitted by the plant.

Solid Waste Management:

Solid waste	Quantity	Disposal
ETP sludge	30 kg/day	Used as manure
Boiler ash	18 TPD	Rice Husk Ash will be sold to cement manufactures/ceramic industry. Ash of Coal will be sold to fly ash bricks manufacturing unit.

Raw Material required along with estimated Quantity, likely source, marketing area of final products, mode of Transport of raw material & finished product.

S. No.	Particular	Requirements
1.	Grain (MT/day)	Maize : 162 TPD Broken Rice : 156 TPD
2.	Fresh Water (KLPD)	340
3.	Electricity	1.775 MW
4.	Fuel	
5.	Rice husk / Biomass / Coal	90 TPD / 72 TPD
6.	Enzymes -Alpha Amylase (1-4) -Amyloglucosidase(1-6)	45 Kg/day 60 Kg/day
7.	Chemicals Sulphuric Acid Sodium Hydroxide NH ₂ -CO-NH ₂ (Nutrients) Antifoam Agent Dry Yeast	 39 Kg /day 51 Kg /day 45 Kg /day 75 Kg /day 1 Kg/KL of spirit production

Water Requirement

TOTAL WATER INPUT (KL)		TOTAL WATER OUTPUT (KL)	
Process water in fermentation	350	Steam condensate	145
DM water for boiler feed	215	Water in Spent wash	315
Soft water for vaccum pump and others	35	Thin Slope	80
Soft water makeup for cooling tower	110	CT evaporation and drift losses	150
Water in Grain	15		

		Boiler (Deaerator, Blowdown, drain) Losses	30
Miscellaneous Washing (Provisional)	5	Vaccum pump sealing / purge	5
TOTAL	730	Miscellaneous Washing (Provisional)	5
		TOTAL	730

RECYCLE and UTILIZATION STREAMS (KL)	
Steam Condensate recycle for boiler	125 KLD
Thin slop recycle Slurry preparation and Liquefaction section	50 KLD
Process condensate recycle to process and CT	35 KLD
Vaccum pump water recirculation	30 KLD
Treated WW	175 KLD
Recycling/ re-utilization of water per day (Industrial Purposes)	400 KLD
Recycling/ re-utilization of water per day (Green Belt)	15 KLD
Total Recycling/ re-utilization of water per day	415 KLD
Fresh Water requirement for Distillery	300 KLD
Fresh Water for Cooling Tower Make-up Cogeneration Plant	20 KLD
Total Industrial Fresh Water Requirement	320 KLD
Domestic Use	10 KLD
Overall Fresh Water Requirement	330 KLD

Power Requirement and Source :

The Unit's own Power cogeneration will be 1.775 MW generation which will be used for captive power requirement. DG sets will be used in case of emergency.

Steam Requirement :

Steam requirement will be sourced from proposed 18 TPH Rice husk / Bagasse / Biomass / Coal fired boiler.

S.No.	Steam requirement	Kg/Lit Of Total Spirit
1.	Liquefaction, Distillation, MSDH (Wash to AA mode), Integrated Evaporation, DWGS Dryer	3.5 to 3.8 Kg/Lit of Total Spirit

Boiler Details :

Steam requirement is 15 TPH, which will be sourced from proposed 18 TPH Boiler.

Steam Consumption (Dry Saturated)	Proposed Scheme
1. Cooking and Liquefaction	0.6 Kg/lit of TS
2. Distillation	1.7 Kg/lit of TS
3. Ethanol	0.6 Kg/lit of TS

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4. DWGS Dryer	1.6 Kg/lit of TS
5. Total Steam Requirement	4.5 Kg/lit of TS (With Multi Effect Evaporator and dryer)

Proposed Boiler Details :

HP Boiler of 18 TPH capacity alongwith Bag Filter as Air Pollution Control Equipment followed by adequate Stack height will be installed as per CPCB & JSPCB guidelines. Details regarding proposed boiler are mentioned in the table given below :

Proposed Boiler Details

S. No.		Details
1.	Type of Fuel	Rice Husk/Biomass/Coal
2.	Capacity of Boiler	18 TPH
3.	Stack Height	33.7 m
4.	Pollution Control Equipment Measures	Bag Filters

Waste Water Generation & Treatment :

The spent wash from proposed grain based distillery will be subjected to decantation to separate out wet cake and 6-7% w/w solid thin slop will be fed to evaporator. The thick syrup @ 35-40 % solids after the evaporation would then fed to DWGS drier to produce DDGS at 88-90% w/w solids which will be sold as Cattle feed.

The boiler blow down, DM plant, softener regeneration water will be treated in a neutralization tank and after treatment it will be used as cooling tower makeup water. Process condensate from evaporation section will be partly recycled and balance will be treated in process condensate treatment plant, treated water will be used as dilution water in slurry preparation and as cooling tower makeup water and steam condensate will be recycled back to the boiler.

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Land for SNJPL project is registered in the name of SNJPL.
2	CO	:	The CO, Namkum (Ranchi) vide letter no. 320 (ii), dated 10.02.2023 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatyan & Register II.
3	DFO Wild Life	:	DFO Wildlife Ranchi vide letter no. 1081, dated 06.12.2021 certified that the proposed project site is outside Eco Sensitive Zone of Palkot Wildlife Sanctuary.
4	DFO Forest Distance	:	DFO, Ranchi vide letter no. 5286, dated 27.12.2022 certified that the distance of reserved / protected forest is more than 250 metre from project site.
5	CGWA	:	No Objection Certificate for Ground Water Abstraction issued by CGWA vide NOC no. CGWA/NOC/IND/ORIG/2022/15295.

			dated 21.04.2022
6	Public Hearing	:	Public Hearing conducted by JSPCB on 26.08.2023.

During the presentation the following documents were sought :

- Public Hearing commitments with time bound action plan and fund provision to be provided.
- Revised EMP budget to be provided.
- Revised budget for remediation plan for natural resource and ecological damage assessment to be provided.
- Revised water & Material balance to be provided.

The Project Authorities have submitted the above mentioned documents.

On the basis of above the State Level Expert Appraisal Committee (SEAC), Jharkhand recommended an amount of rupees 40.70 Lakh as per CPCB guidelines towards remediation plan and natural & community resource augmentation plan to be spent within a period 03 years. The details of summary of Natural resource and Environmental / Ecological Damage assessment with budgetary provision for expenditure under the below mention head for remediation :-

Components	Details	Budgetary Provision (in Rs. Lakhs)
1. Air Environment	Health Camps in Balsiring & Guthiya Villages for checking & Treatment of Respiratory ailments (2 times at the interval of 4 months – upto Mar, 2024)	5.50
2. Soil Environment	To check soil erosion, Tree Plantation around Blue Pond near project site (360 Nos. of Trees @ Rs. 1250 will be planted by Mar, 2024)	4.50
3. Social Environment	Construction of Road in effected area (700 m.) by Mar, 2024.	20.0
4. Energy Conservation	Provision of Solar Panels in Guthiya and Balsiring villages (100 Nos. 75 Watt. Solar Panel @ Rs. 5700/- each – 50 Nos. in each village by Jul, 2024)	5.70

5. Community Development	Skill Development training of local youths (100 Nos. youth @ Rs. 5000/= each) (Computer & IT Skill training for 50 nos. male youths and Stitching & Embroidery training for 50 nos. female youths by Dec. 2024)	5.0
GRAND TOTAL		40.70

- i. The Committee visited the project site on 20.09.2023 to verify the details submitted by PAs.
- ii. Total budgetary provision with respect to remediation plan and natural and community resource augmentation plan is Rs. **40.70 Lakh**.
- iii. Therefore, PAs shall be required to submit a bank guarantee of an amount of Rs. **40.70 Lakh** towards implementation of remediation plan and natural and community resource augmentation plan with the Jharkhand State Pollution Control Board.

On the basis of 108th Minutes of Meeting of SEAC, the project Authority has submitted the Bank Guarantee to Jharkhand State Pollution Control Board, Ranchi, and the evidence of the same has been submitted to SEIAA, Jharkhand on **05.10.2023** bearing Bank Guarantee No. : **087GT02232720005** dated : **29.09.2023** valid up to **28.09.2026**.

- iv. The bank guarantee shall be released after successful completion of remediation plan, duly recommended by the SEAC, Regional Office – MoEF & CC, Govt. of India and its approval from Regulatory authority(SEIAA). Remediation plan shall be completed in 03 years with the consultation of Local / Urban Bodies / State Govt. Deptt.
- v. Approval / permission from CGWA shall be obtained before drawing ground water for the project activities, if applicable. Jharkhand State Pollution Control Board shall not issue Consent to Operate (CTO) until the PAs obtains such permission.
- vi. PAs shall take other necessary clearances / permissions under various act and rules if any, from the respective authorities / departments.
- vii. STP of adequate capacity shall be established within the project premises.
- viii. Energy conservation measures adhering to part of ECBC norms shall be complied with.
- ix. The penalty of **Rupees 4.125 Lakh** being 0.50% (Suo Moto) of the project cost incurred till date (**Rs. 8.25 Crore**) shall be submitted to Jharkhand State Pollution Control Board in the form of demand draft.

On the basis of 108th Minutes of Meeting of SEAC, the project Authority has also submitted the penalty amount to Jharkhand State Pollution Control Board, Ranchi, and the evidence of the same has been submitted to SEIAA, Jharkhand on **05.10.2023** bearing **demand draft** no. : **002413** dated : **27.09.2023**.

- x. Action will be taken for the violation by the Jharkhand State Pollution Control Board under the provision of section 19 the Environment (Protection) Act, 1986.

The PAs have submitted the above required documents.

- xi. Jharkhand State Pollution Control Board and project Authorities will **ensure** that the amount of Bank Guarantee shall not be released/lapsed **till the completion** of remediation plan, natural and community resource augmentation plan as directed by MoEF & CC vide O.M. No. **F.No.22-21/2020-IA.III**, dated **07th July, 2021**. In case of non compliance of the said directions/conditions, the Environmental Clearance issued will be deemed to be cancelled with immediate effect.

State Level Environment Level Impact Assessment Authority (SEIAA), Jharkhand in its **109th** meeting held on **27th & 28th September, 2023** discussed the project proposal along with recommendations made by SEAC in its **108th** meeting held on **19th, 20th, 21st, 22nd, 23rd, 24th and 25th September, 2023** and decided to grant EC to the project.

On the basis of recommendation of SEAC and decision of SEIAA to grant of EC, Environmental Clearance is hereby issued to the **“Grain Based Distillery with Cogeneration Plant of M/s Sheonarain Jaiswal Pvt. Ltd. at Village : Balsiring, Tehsil : Namkum, Distt. : Ranchi, Jharkhand”** alongwith the following specific conditions as recommended by SEAC.

I. Specific Conditions:

- i. This Environmental Clearance is valid subject to the following condition below –
That this project has-
 - a. Obtained all legal rights to operate at concerned place.
 - b. Complied with all existing concerned laws of the land and
 - c. Complied with the decisions of SEIAA on the issue of Environmental Clearance till date.
- ii. **PA has obtained permission from CGWA for withdrawal of 200 KLD. Total fresh water requirement 315 KLD. The PAs must obtained permission from CGWA for withdrawal of the balance quantity before starting the project.**
- iii. **Sufficient capacity of ETP shall be installed before the STP to ensure complete treatment and maintain the zero discharge.**

II. Statutory Compliance:

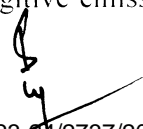
- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area).



- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- vi. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

III. Air quality monitoring and preservation:

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall install system carryout to Ambient Air Quality monitoring for common / criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous).
- iii. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- v. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.
- vi. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- vii. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.
- viii. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.



IV. Water quality monitoring and preservation:

- i. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD) and connected to SPCB and CPCB online servers.
- ii. Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).
- iii. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- iv. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- v. Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- vi. Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP and then passed through RO system.
- vii. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.

V. Noise monitoring and prevention:

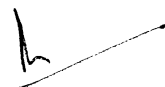
- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

VI. Energy Conservation measures:

- i. The energy sources for lighting purposes shall preferably be LED based.

VII. Waste Management:

- i. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- ii. Process organic residue and spent carbon, if any, shall be sent to cement industries ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- iii. The company shall undertake waste minimization measures as below:
 - a. Metering and control of quantities of active ingredients to minimize waste.



- b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
- c. Use of automated filling to minimize spillage.
- d. Use of Close Feed system into batch reactors.
- e. Venting equipment through vapour recovery system.
- f. Use of high pressure hoses for equipment clearing to reduce wastewater generation.

VIII. Green Belt:

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.

IX. Safety Public hearing and Human health issues:

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- iv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- v. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vi. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

X. Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May, 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements / deviation/violation of the environmental / forest/wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental/forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

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- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

XII. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely: PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.



- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- xvii. The Prescribed EC is valid as per Notification no. S.O. 1807(E) dated 12.04.2022 of MoEF&CC, Govt. of India.

Sd/-

Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand.

Memo No. : EC/SEIAA/2022-23/2737/2023/289

Ranchi, Date: 06/10/2023

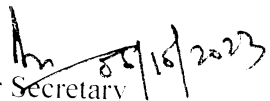
Copy to:

1. Additional Chief Secretary, Department of Forests, Environment & Climate Change, Govt. of Jharkhand.
2. Deputy Commissioner, District- Ranchi, Jharkhand.
3. Divisional Forest Officer, Ranchi Forest Division, Ranchi, Jharkhand.
1. Divisional Forest Officer, Wildlife Division, Ranchi, Jharkhand.
2. Director IA Division, Monitoring Cell, MoEF and Climate Change, Indira Paryavaran Bhavan, Jorbag Road, Aliganj, New Delhi – 110003.





3. Integrated Regional Office, Ranchi, Ministry of Environment, Forest and Climate Change, 2nd Floor, Jharkhand State Housing Board (HQ), Harmu Chowk, Ranchi, Jharkhand – 834002.
4. Member Secretary, Jharkhand State Pollution Control Board, Ranchi.
5. Secretary, Jharkhand State Expert Appraisal Committee, Ranchi.
6. Website.
7. Guard file.


Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand
