

State Level Environment Impact Assessment Authority, Jharkhand.

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

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Letter No.-EC/SEIAA/2014-15/650/2015/ 299

Ranchi, Date: 16.12.2018

To: **Shri Dipankar Panda,**
(Managing Director)
Ranchi Industrial Area Development Authority,
Fifth Floor, RIADA Bhawan,
Namkum, Ranchi,
Jharkhand – 834010.

Sub.: Environmental Clearance for the project “Common Effluent Treatment Plant (CETP) of Jharkhand Industrial Area Development Authority (JIADA) at Vill. – Pugru, P.S. & Dist. – Ranchi”.

Sir,

It is in reference to the project “Common Effluent Treatment Plant (CETP) of Jharkhand Industrial Area Development Authority (JIADA) at Vill. – Pugru, P.S. & Dist. – Ranchi” submitted by you for seeking prior Environmental Clearances (EC).

The proposal was appraised by State Level Expert Appraisal Committee (SEAC) and recommended for grant of Environmental Clearance in its meeting held on 08th & 09th October, 2018.

Ranchi Industrial Area Development Authority was constituted by Govt. of Bihar. Four industrial areas namely Tupudana Industrial Area, Kokar Industrial Area, Namkum Industrial Area & Tatisilvai have been setup under command of RIADA for offering land & supporting infrastructures to industrial units.

Presently none of above industrial Areas have facility for treatment of industrial waste water being generated by industrial units in these industrial areas. Industrial effluent is being discharged into the storm water drainage system. This system causes pollution of surface water. Sewage is being treated in individual septic tanks. Effluents from soak pit is discharged in surface drains.

RIADA has undertaken a project to upgrade infrastructural facilities in these Industrial Areas. Provision of CETP at Tupudana Industrial for treatment of industrial effluent & sewage is one component.

The proposed CETP has been planned to treat 2.5 MLD of industrial effluent and 1.00 MLD of Sewage. Proposed CETP envisages treatment of effluent in three stages including primary treatment, secondary treatment & tertiary treatment. The primary treatment would facilitate in treating the composite effluent to conform to standards prescribed by MoEF for input to CETP. The secondary treatment will facilitate in achieving the quality of treated effluent conforming to MoEF standard for discharge from CETP. Tertiary treatment will render the treated water suitable for reuse in Industrial Area.

The CETP has been designed on zero liquid discharge principle and will reduce the fresh water demand for the industrial area & also prevent pollution of surface water and ground water.

The estimated cost of project is Rs. 17.03 crores.

CF / DFO, Ranchi vide letter no. 922, dated - 15.03.18 certified that the minimum distance of Tonko Forest is 02 KM and the proposed site is not within 10 km from National Park, Sanctuary & Bio-Diversity. The CO, Namkum vide Letter no. 378, dated – 05.04.18 has mentioned / certified the plot no. of the project site is not recorded as “Jangle Jhari.

State Level Environment Impact Assessment Authority (SEIAA), Jharkhand in its meeting held on 06th November, 2018 discussed the project proposal along with recommendations made by SEAC and decided to grant EC to the project.

Following the decision of SEIAA, as mentioned above, Environmental Clearance is hereby issued to the **“Common Effluent Treatment Plant (CETP) of Jharkhand Industrial Area Development Authority (JIADA) at Vill. – Pugru, P.S. & Dist. – Ranchi”** alongwith the following 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. The CETP Authority shall ensure that the effluent streams to be received from the member units are property segregated as per the proposed scheme. Segregation and pre-treatment of effluent shall be done at member unit itself. The Environment Management Team of CETP shall guide their member industries to segregate their effluent streams at source so as to meet CETP inlet norms / quality. This shall be ensured by CETP management through continuous vigilant monitoring of member industries, guidance & training programmes.
- iii. Total quality of trade effluent to be received from all the member units shall not exceed 3.5 MLD.
- iv. The CETP authority shall lay above ground pipeline network with adequate capacity for to receive raw effluent from the member units.
- v. The CETP authority shall provide adequate ETP comprising of Primary, Secondary and Tertiary treatment units along with Ammonical Nitrogen removal system and Refractory (non - biodegradable effluent) COD removal system for the treatment of industrial waste water.
- vi. The CETP authority shall provide adequate close HDPE pipeline network for discharge of treatment effluent of 3.5 MLD into JIADA discharge pipeline through pumping station for final disposal to deep Sea.
- vii. Online Continuous Monitoring System shall be provided for monitoring of waste water discharge ensuring norms prescribed by regulatory authority.
- viii. PLC-SCADA system shall be installed for CETP operations and monitoring system and online PH meter, TOC meter with an arrangement to reflect its readings on the company's server, which can be fetched by the SPCB on real time basis.
- ix. Disciplinary policy as submitted during appraisal of the project shall be strictly followed by the CETP Authority and member industries.
- x. The inlet norms for the CETP shall be fixed in consultation with the SPCB and it should be in consonance with the CETP inlet norms prescribed under the E.P Rules and Hon'ble NGT order dated 01.04.2014 in case of application no. 34/2013 (WZ).

- xi. The project proponent shall strictly follow the "Guidelines for Management Operation and Maintenance of Common Effluent Treatment Plants " framed by the CPCB.
- xii. The CETP authority shall ensure that separate network is provided for effluent conveyance and storm water respectively, which shall be monitored in the monsoon season so that member units do not discharge storm water along with effluent in the proposed CETP.
- xiii. The CETP authority shall cooperate, participate financially and / or become member in any mega pipeline project / any other common environmental infrastructure project for disposal of treated effluent or any other such project is undertaken in future by Jharkhand State Pollution Control Board (JSPCB), JIADA or any such other agency of government or authorized by government, and PP shall contribute financially for execution of such project as may be decided by the said agency / authority.
- xiv. The CETP authority shall comply with all the conditions of Notifications, Office Memorandums, Circulars issued by State Govt. & Central Govt. orders from the Hon'ble NGT & Courts and directives issued by the SPCB.

II. Water :

- i. Total water requirement shall not exceed 25,28000 KLD which shall be met through JIADA water supply. No ground water shall be tapped for the project requirements.
- ii. The effluent meeting the inlet norms of CETP shall be transported to the CETP by above ground effluent conveyance pipeline network.
- iii. The CETP Authority shall be operated regularly and efficiency to achieve standards stipulated by the JSPCB.
- iv. Domestic wastewater (3.16 MLD) shall be disposed of into septic tank / soak pit system.
- v. Online measurement of TOC, flow & pH shall be done with an arrangement to reflect monitored data on the CETP's server, which can be accessed by the JSPCB on real time basis.
- vi. The CETP shall have only one outlet for the discharge of its effluent and no effluent shall be discharged without requisite treatment and without meeting with the JSPCB norms. Convenient easy approach shall be provided at the outlet for ease of sampling.
- vii. Flow meters shall be provided at the various stages of inlet and outlet of the CETP and records of the same shall be maintained and submitted to the JSPCB regularly.
- viii. Enough care shall be taken to prevent any leakages / accidental spillages during conveyance of the untreated effluent from the member units to the CETP.
- ix. The CETP authority shall form a "Monitoring Cell" within Environment Management Cell which shall carry out regular monitoring of the member units for enforcement of the inlet norms of the CETP, including collection of the samples at outlet of the member units. Quality of the effluent discharge from member units shall be analyzed and records of the same shall be maintained and furnished to the JSPCB every month.
- x. A proper CETP operation logbook containing records of quantity and quality of effluent received from the member units, quality of effluent at each stage of treatment, chemicals used, MLSS / MLVSS & DO concentrations in Aeration Tanks, quantity of the treated effluent recycled and discharged, quantity of sludge removal, energy consumption, Generation / Storage / Disposal of Hazardous waste etc. shall be maintained and furnished to the JSPCB from time to time.
- xi. Details of the member units failing to comply with the CETP inlet norms shall be submitted to the JSPCB on regular basis.
- xii. No bypass line or system, or loose or flexible pipe shall be kept in the CETP.

- xiii. All the chemicals and nutrients required to be added / dosed in any CETP unit shall be added by using "Metering Pumps" only.
- xiv. In case of power failure, stand - by D.G Set /s having power generation capacity equivalent to the requirement of power to run the CETP shall be installed, so that the CETP shall always be operated round the clock even in case of power failure.
- xv. The third party inspection of the CETP with respect to the compliance of the norms shall be carried out through a reputed institute like NEERI, IIT or any academic / research institute of similar repute once in a year and mitigation measures as may be suggested by such institute shall be implemented in consultation with the Jharkhand State Pollution Control Board.
- xvi. The CETP authority shall be responsible for collection of effluent from their member units and for the transportation of effluent to the CETP.
- xvii. The CETP authority shall instruct and make sure that every member shall have to make storage facilities to store the effluent for at least 48 hours in an impervious acid proof brick lining tanks / HDPE tanks.
- xviii. The CETP authority shall be responsible for proper conveyance of effluent from their member units to the CETP. Periodical maintenance of effluent conveyance pipelines and valves shall be carried out to avoid any spillage or leakage of the effluent being conveyed to the CETP from the member units. To distinguish the effluent conveyance pipelines from other pipelines, they should be coated with special colour.

III. Air :

- i. Diesel to the tune of 2.5 KL / hr (for each D.G set) shall be used as a fuel in stand-by D.G. Sets - 5 Nos. (2500 KVA)..
- ii. The flue gas emission from the D.G. Sets as well as emission from the scrubbers shall conform to the standards prescribed by the JSPCB. At no time, the emission levels shall go beyond the stipulated standards.
- iii. Alkali scrubber with proper hood system shall be provided to the chlorination system to control gaseous emission of Chlorine.
- iv. All transporting routes within the CETP shall have asphalt roads to minimize fugitive emission.
- v. Fugitive emission in work place environment shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety & Health).
- vi. The CETP authority shall take adequate preventive measures to curb release of VOC from the aeration tank and any other units of CETP.
- vii. Regular monitoring of ground level concentration of PM10 and PM 2.5, SO₂, NO_x and VOC shall be carried out in the impact zone and its records shall be maintained. Location of the stations and frequency of monitoring shall be decided in consultation with the JSPCB.

IV. Solid / Hazardous Waste :

- i. The CETP authority shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous Waste in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016, as may be amended from time to time. Authorization of the JSPCB shall be obtained for collection / treatment / storage / disposal of hazardous wastes.

- ii. Hazardous wastes shall be dried, packed and stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal.
- iii. The CETP authority shall provide adequate storage area for ETP sludge and other Hazardous wastes specifically during monsoon period when TSDF sites are temporarily closed and not accepting Hazardous wastes from member units with adequacy of storage area w.r.t. leachate generation & handing facility along with closed roof shed & pucca floor.
- iv. ETP sludge shall be sent to the Common TSDF for its disposal.
- v. The unit shall obtain necessary permission from the nearby TSDF site and CHWIF. (Whichever is application).
- vi. Used oil shall be sold o the approved registered recyclers.
- vii. Discarded containers and plastics liners shall be sold to the authorized vendors after its decontamination.
- viii. Trucks / Tankers used for transportation of hazardous waste shall be in accordance with the provisions under the Motor Vehicle Act, 1988, and rules made there under.
- ix. The design of the Trucks / tankers shall be such that there is no spillage during transportation.
- x. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF / CHWIF..

V. Safety :

- i. Adequate hand rails shall be provided to all the CETP units for preventing fall of any person in the CETP tanks.
- ii. All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of chemicals. Handling and dosing of the materials shall be done in such a manner that minimal human exposure occurs.
- iii. The CETP authority shall strictly comply with the provisions made in Manufacture Storage and Impact of Hazardous Chemicals Rules, 1989 as amended in 2000 for handling of hazardous chemicals. Necessary approvals from the Govt. Authorities shall be obtained for the project, if applicable.
- iv. All transportation of hazardous chemicals shall be as per the Motor Vehicle Act & Rule.
- v. Hazardous materials storage shall be at an isolated designated location, bund / dyke walls shall be provided for Hazardous Chemicals storage tanks.
- vi. Personal Protective Equipment shall be provided to workers and its usage shall be ensured and supervised.
- vii. First Aid Box and required Antidotes for the chemicals used in the unit shall be made readily available in adequate quantity at all the times.
- viii. Training shall be given to all workers on safety and health aspects of handling chemicals.
- ix. Occupational health surveillance of the workers shall be carried out on a regular basis and records shall be maintained as per the Factories Act and Rules. Pre-employment and periodical medical examination for all workers shall be undertaken as per statutory requirement.
- x. The CETP authority shall prepare a detailed Disaster Management Plan (DMP) for the project as per the guidelines from Directorate of Industrial Safety and Health.

VI. Noise :

- i. The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering controls like acoustic insulation hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under the Environment (Protection) Act, 1986 & Rules.

VII. Green Belt and other plantation :


- i. The CETP authority shall develop green belt within the premises as per the CPCB guidelines, preferably with local last growing species. The unit shall also tie up with local agencies like gram panchayat, schools, social forest office etc. for plantation and shall submit an action plan of plantation for next five years to the JSPCB. Drip irrigation system shall be used for the green belt for optimum utilization of the water resources.
- ii. The CETP authority shall develop green belt within the premises as per the CPCB guidelines. However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in JLADA or any other open areas in consultation with the JLADA / JSPCB and submit an action plan of plantation for next three years to the JSPCB.
- iii. Drip irrigation / low-volume, low - angle sprinkler system shall be used for the green belt development within the premises.

VIII. Other Conditions :

- i. All the recommendations of the EMP shall be complied with letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to Regional Office, MoEF & CC along with half yearly compliance report.
- ii. A separate Environment Management Cell equipped with full-fledged testing laboratory facilities shall be set up to carry out the Environment Management and Monitoring functions.
- iii. Construction of the proposed CETP units shall be undertaken meticulously keeping in view the existing natural drainage pattern of the project site to ensure that the natural drainage is not affected and also confirming to the existing central / local rules and regulations.
- iv. In the event of the CETP not functioning as proposed / breakdown of the CETP, the member units shall be immediately intimated to stop discharging the effluent / to shut down their plants immediately. The effluent from the member units shall not be received at CETP until the desired efficiency of the CETP has been achieved.
- v. The CETP authority shall maintain accurate records of their member units in respect of quantity of each product manufactured, quantity of water consumption, quality of trade effluent, quantity of effluent generated, booked & supplied to the CETP on day to day basis and shall submit the complied records to the JSPCB on monthly basis.
- vi. The CETP authority shall ensure that each & every member unit renews the agreement on / before expiry of said agreement and shall inform the JSPCB about any unit not renewing the agreement within stipulated period. CETP shall immediately inform the Jharkhand State Pollution Control Board about termination / suspension of the CETP membership of any member unit.
- vii. The CETP authority shall instruct and make sure that each member unit provides effluent storage tank having adequate retention time, from where the effluent shall go to the CETP for further treatment.

- viii. The CETP authority shall not allow any new member or enhance effluent quantity of existing members unless & until they have prior requisite permissions from competent authorities.
- ix. Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.
- x. Good house keeping shall be maintained within the CETP premises. All pipes, valves and drains shall be leak proof. Leakages from the pipes, pumps, shall be minimal and if occurs, shall be arrested promptly. Floor washing shall be admitted in to the effluent collection system for subsequent treatment and disposal.
- xi. During effluent transfer, spillages shall be avoided and garland drain be constructed to avoid mixing of accidental spillages with storm water.
- xii. Storm water shall not be mixed with the effluent. The storm water drains shall be kept separate and shall remain dry throughout the year except monsoon.
- xiii. The CETP authority shall intimate the JSPCB about occurrence of any accident, act or event resulting in discharge of poisonous, noxious or polluting matter or the likelihood of the same into a stream or land or well.
- xiv. The funds earmarked for environment protection measures should be maintained in a separate account and there should be no diversion of these funds for any other purpose. A year-wise expenditure on environmental safeguards should be reported.
- xv. The CETP authority shall assign specific budget for socio-economic upliftment of the surrounding villages and shall undertake eco-developmental measures including community welfare program most useful in the project area for the overall improvement of the environment of the environment in consultation with the District Development Officer / District Collector.
- xvi. The CETP authority shall comply with all the recommendations as well as the environmental protection measures and risk mitigation measures / safeguards proposed in the EIA Report of the project.
- xvii. Application of solar energy shall be incorporated for illumination of common areas, lighting for gardens and street lighting in addition the provision for solar water heating system shall also be provided.
- xviii. The area earmarked as green area shall be used only for plantation and shall not be altered for any other purpose.
- xix. All the commitments / undertakings given to the SEAC during the appraisal process for the purpose of environmental protection and management shall be strictly adhered to.
- xx. The project proponent shall also comply with any addition condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose for the environmental protection and management.
- xxi. The project authorities must strictly adhere to the stipulations made by the Jharkhand State Pollution Control Board (JSPCB), State Government and any statutory authority.
- xxii. No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environmental Clearance from the concerned authority.
- xxiii. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules. The project proponent will comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.

- xxiv. The project proponent shall comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.
- xxv. The project management shall ensure that unit complies with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.
- xxvi. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as JSPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
- xxvii. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the JSPCB and may also be seen at the Website of SEIAA / SEAC / JSPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Jharkhand language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of Ministry.
- xxviii. The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.
- xxix. It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
- xxx. concealing factual data or submission of false / fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xxxi. The project authorities shall also adhere to the stipulations made by the Jharkhand State Pollution Control Board.
- xxxii. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
- xxxiii. The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary.
- xxxiv. The project authorities shall inform the JSPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- xxxv. This environmental clearance is valid for seven years from the date of issue.
- xxxvi. Any appeal against this environmental clearance shall lie with the Hon'ble National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.
- xxxvii. Submission of any false or misleading information of data which is material to screening or scoping or appraisal or decision on the application makes this environmental clearance cancelled.


Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand.