



**STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY,
(SEIAA), ORISSA.**

(Constituted vide order No. S.O. 2674 (E) Date 17th Nov. 2008 of Ministry of Environment & Forest, Govt. of India, Under Environment Protection Act, 1986.) Qr. No. 5RF-2/1, Unit-IX, Bhubaneswar-751022
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Ref. No. _____

Dt. _____

SEIAA – 273/10

From

Bhagirathi Behera, IFS
Director, Environment-cum-
Spl. Secretary to Government
& Member Secretary, SEIAA, Odisha

To

Sri Trailokya Mishra,
Chairman, M/s Nayagarh Sugar Complex Ltd.
488, IDCO Tower, 2000
Mancheswar Industrial Estate
Bhubaneswar -751010
Phone-0674-258588, 0674-2586823
E-mail- office@nayasugar.com

Sub: Environmental Clearance for grain based distillery plant of 25 KLD and 1 MW captive power plant at existing Nayagarh Sugar Complex Ltd. at Panipoila, Balungaon in the district of Nayagarh.

Sir,

This has reference to your letter no. NSCL/HO/ENV-01/2010-11/1007 dated 30.11.2010 along with application for Terms of Reference (ToR) and subsequent application vide letter no. NSCL/ENV-02/2010-11/1034 dated 13.12.2010, no. NSCL/HO/ /2010-11/67 dated 08.02.2011, no. NSCL/HO/Distlley/2011-226 dated 24.05.2011, no. NSCL/ENV-02/2011-12-506 dated 27.09.2011 and no. NSCL/HO//2011-540 dated 27.10.2011 on the above mentioned subject I am directed to say that the State Environment Impact Assessment Authority, Odisha have considered he application for the proposal for expansion project of M/s Nayagarh Sugar Complex Ltd. for 25 KLD Grain Based Distillery Plant and 1MW Captive Power Plant within the premises of M/s Nayagarh Sugar Complex Limited, At-Panipoila, P.O. –Baligaon Dist-Nayagarh, Odisha. The proposed distillery will produce 25000 liters per day Extra neutral alcohol (ENA)/Rectified Spirit (RS)/Export Quality Rectified Sprit (EQRS) using feed stock as broken rice, maize, sorghum etc. The total land acquired is 143 acres. The land required for distillery is 5 acres. Water requirement is 809 KLD (existing Sugar Plant 184 KLD+ proposed distillery 625 KLD) which will be sourced from Piteijhar reservoir dedicated for the factory. Power requirement is 1MW and source is own captive power plant. The power plant will run on coal for 4 months, bagasse on other 4 months & rice husk/saw dust on rest 2 months. MoU signed with coal supplier for supply of low Sulphur coal. Mostly bagasse & rice

through high speed decanter for separation of solids. The thin slops from centrifuge will be partly recycled to process and balance will be concentrated through multi effect evaporator (MEE). The concentrated syrup will be mixed uniformly in the Rotary Drum Dryer to form Distillers Dry grains soluble (DDGS) and used as cattle feed. The quantity of generation of Distillers Dry grains soluble (DDGS) is 36,00 TPA. The unit will generate 3456 TPA fly ash, Rice husk/saw dust ash 900 TPA, bagasses ash 240 TPA and coal bottom ash 864 TPA. The bottom ash will be used for filling of low lying area, fly ash will be used for brick & cement manufacturing. Rice husk and bagasses ash will be used as manure for green belt development. The unit will adopt zero discharge concept. ESP will be provided at boiler. ToR was issued by the SEAC on 23rd March, 2011 for conducting EIA study. Conducting public hearing was exempted by the SEAC for the proposal as per Para-7(I) (III) stage-3 of EIA notification, 2006 of MoEF, Govt. of India as the location of the existing Nayagarh Sugar Complex Ltd. is within the Nayagarh Industrial Area. The cost of the project is Rs. 30.19 crores.

Based on the information / documents and clarifications furnished by the proponent and on recommendation of SEAC, Odisha, the State Environment Impact Assessment Authority, Odisha hereby accords Environmental Clearance in favour of the project for a period of 5 (five) years under the provisions of the Environment Impact Assessment Notification, 2006 and 2009 and subsequent amendment thereto under various MoEF, Govt. of India circulars thereunder and subject to the following stipulated conditions.

Stipulated Conditions:-

A. Specific Conditions

- 1) Environmental clearance accorded is for grain based distillery unit (25 KLDP) only and no molasses based distillery unit shall be set up without prior environment clearance.
- 2) Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. Multi-cyclone followed by bag filter alongwith stack of adequate height shall be provided to boiler to control particulate emissions within 100 mg/Nm³. At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- 3) High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm³.
- 4) The National Ambient Air Quality Standards issued by the ministry vide G.S.R No. 462(E) dated 16th November, 2009 shall be followed.
- 5) In plant, control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals /materials, multi cyclone separator and water sprinkling system. Dust Suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored and records shall be maintained. The emissions shall conform to the limits imposed by Odisha State Pollution Control Board. (OSPCB).

- 6) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB guidelines. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
- 7) The company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the SEIAA, Odisha, Regional office of MoEF, the respective Zonal office of CPCB and the OSPCB. The levels of PM₁₀, PM_{2.5}, SO₂, NO_x and HC (Methane) in ambient air shall be monitored and displayed at a convenient location near the main gate of the company and at important public places.
- 8) Total fresh water requirement from Piteijhar reservoir shall not exceed 809 m³/day and prior permission shall be obtained from the Competent Authority and a copy shall be sent to the Regional office of MoEF/SEIAA, Odisha.
- 9) Spent wash generation shall not exceed 235 m³/day. Spent wash shall be treated through centrifuge decanter & multi-effect evaporator (MEE) and the concentrated syrup shall be mixed uniformly in the Rotary Drum Dryer to form Distillers Dry grains soluble (DDGS) and used as cattle feed. Spentless, waste water from utilities and bottle washing shall be treated in effluent treatment plant (ETP) and water quality of treated effluent shall meet the norms prescribed by CPCB/OSPCB and treated effluent shall be recycled/reused. Performance of ETP shall be monitored regularly and maintained. No effluent shall be discharged outside the premises and Zero discharge shall be adopted. Sewage shall be disposed off through septic tank followed by soak pit.
- 10) Spent wash shall be stored in impervious lagoon with HDPE lining as per CPCB guideline and shall be kept in proper condition to prevent ground water pollution. Storage capacity of spent wash lagoon shall be for 5 days.
- 11) Adequate numbers of ground water quality monitoring stations shall be set up to monitor, pH, BOD, COD, Chloride, Sulphate and TDS by providing piezometers around the project area. Sampling and trend analysis monitoring must be made on monthly basis and report submitted to the SEIAA, Odisha, MoEF, Regional Office at Bhubaneswar and OSPCB.
- 12) No storage of wet cake shall be done at site. An additional dryer shall be installed so that at any time wet cake is not sold then wet cake shall be converted into dry cake by operating additional dryer.
- 13) Fly ash and bottom ash shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust shall be avoided.
- 14) Fly ash and bottom ash shall be utilized as per Fly Ash Notification, 1999 and subsequent amendments issued time to time.
- 15) Rice husk storage shall be done in such a way that it does not get air borne or fly around due to wind. Rice husk & coal storage yard shall be properly covered.
- 16) Fire fighting system shall be as per the OISD117 norms and cover all areas where alcohol is produced, handled and stored. Provision of foam system for fire fighting shall be made to control fire from the alcohol storage tank.
- 17) Risk Assessment shall be carried to assess the fire and explosion risk due to storage of alcohol and report submitted to the Ministry and its Regional Office at Bhubaneswar within six months.
- 18) Green belt shall be developed in 56 acres out of total land 143 acre.
- 19) Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile

toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.

- 20) The applicant will take necessary steps for socio-economic development of the people of the area on need based assessment for providing employment, education, health care, drinking water and sanitation, road and communication facilities etc. after a detailed primary socio-economic survey.

B. General Conditions:

1. The project authorities shall strictly adhere to the stipulations made by the Odisha State Pollution Control Board.
2. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
3. The locations of ambient air quality monitoring stations shall be decided in consultation with the Odisha State Pollution Control Board and it shall be ensured that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
4. 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. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. dBA (day time) and 70 dBA (night time).
5. The company shall harvest rainwater from the roof-tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.
6. The Company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and its amendment time to time and prior permission from SPCB shall be obtained for disposal of solid/hazardous waste including boiler ash.
7. During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic wastewater and storm water drains.
8. Usage of Personnel Protection Equipments by all employees/workers shall be ensured.
9. 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.
10. The company shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures.
11. The company shall undertake CSR activities and all relevant measures for improving the socio-economic conditions of the surrounding area.
12. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.

13. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
14. As proposed, the company shall earmark Rs. 151.00 Lakhs for capital cost and adequate funds for recurring cost per annum to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/pollution control measures shall not be diverted for any other purpose.
15. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB, SEIAA, Odisha and the Odisha State Pollution Control Board. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
16. The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the Odisha State Pollution Control Board as prescribed under the Environment (protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Bhubaneswar Regional Offices of MoEF by e-mail.
17. The project proponent shall inform the public that the project has been accorded environmental clearance and copies of the clearance letter are available with the OSPCB/SEIAA Odisha. This shall be advertised within seven days from the the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
18. The project authorities shall inform the SEIAA, Odisha, Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
19. The SEIAA, Odisha may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
20. The SEIAA, Odisha reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.
21. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Wastes (Management and Handling) Rules, 2003/2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

Member Secretary

Memo No _____/Dt. _____

Copy to

1. Ministry of Environment & Forests, Govt. of India, Paryavaran Bhawan, C.G.O Complex, Lodhi Road, New Delhi for kind information.

2. Principal Secretary, Forests & Environment Dept., Government of Odisha for kind information.
3. Chairman, State Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-8, Bhubaneswar for kind information.
4. Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment & Forests, A-31, Chandrasekharapur, Bhubaneswar for kind information.
5. Chairman, Central Pollution Control Board, CBD-cum-office Complex, East Arjun Nagar, New Delhi-110032 for kind information.
6. Collector & District Magistrate, Nayagarh for kind information and necessary action.
7. Chairman/Member/Member Secretary, SEIAA for kind information.
8. Chairman, SEAC/Secretary, SEAC, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar for kind information.
9. Guard file for record.

Member Secretary