

F. No. J-11011/247/2012- IA II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(I.A. Division)

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Dated 12th November, 2015

To,

Shri V.N. Desai (President)
M/s RSPL Limited.
C/2, 3rd Floor, Safal Profitaire, Corporate Road,
Nr. Prahladnagar Ahmedabad Garden, Prahladnagar,
Satellite, Ahmendabad-0380015

E-mail : projectamd@rspl.net.in ; vn.desai@rspl.net.in ; Fax No. : 079-29701606

Subject: Greenfield Soda Ash Plant (1500TPD) alongwith Captive Power Plant (50 MW) at Village Kuranga, Taluka Dwarka, District Jamnagar, Gujarat by M/s RSPL Ltd.- Consolidated Environmental Clearance and CRZ Clearance reg.

Ref.: Your letter no. RSPL/CCG/MS/ENV-002/335/2014-15 dated 22nd December, 2014.

Sir,

This reference to your letter dated 22nd December, 2014 alongwith project documents including Form I, Terms of References, Pre-feasibility Report, EIA/EMP Report, public hearing report regarding above mentioned project and subsequent communications vide letter dated 20th February, 2015 and 1st September, 2015 on the above mentioned subject. MoEF&CC, Regional Office, Bhopal vide letter no. 6-GJB039/2015-BHO/1105 dated 31st August, 2015 has issued stage-1 forest clearance for diversion of 0.94 ha. reserved forest land.

2.0 The Ministry of Environment, Forest and Climate Change has examined your application. It is noted that proposal is for setting up of soda ash plant (1500 TPD) alongwith CPP (50 MW) at Village Kuranga, TalukaDheraka, District Jamnagar, Gujarat. Total plot area is 400 ha of which, area earmarked for greenbelt is 189 ha. Plant area comprises of Government Waste Land and Private Un-Irrigated agriculture land. There is no forest land within the plant area. The underground sea water intake and effluent disposal pipelines will pass through forest land (i.e. 0.94 ha. forest land). The land will be restored back on completion of pipeline laying job. Gaga wildlife sanctuary located at a distance of 6.4 Km. Site is located at a distance of 1.0 Km from Arabian sea. Kalipat River is located at a distance of 2.0 Km. Kuranga lake is located at a distance of 4.5 Km. Gojiness Creek is at a distance of 2.5 km. Reserve Forests are located within 10 km distance (i.e. Gojiness reserve forest; Kuranga Reserve Forest; Bhogat RF (6 Km); Bhatvadiya RF (500 m) and Gaga RF (8.0 Km). It is reported that no mangroves eco-system near Kuranga Sea Coast as well as within study area. Gujarat Coastal Zone Management Authority (GCZMA), Forest & Environment Department, Gandhinagar vide letter no. ENV-10-2014-72E dated 17.12.2014 has forwarded necessary recommendation for grant of environment clearance under the CRZ notification for laying of sea water intake and effluent facilities in Arbian Sea. Cost of project is Rs. 1800 Crore.

The following is configuration of the plant:

S.No.	Plant	Capacity
1	Soda Ash plant	Light soda Ash Dense soda ash 1500 TPD 770 TPD
2	Coal/Lignite based CPP	Steam 3 nos. x 150 TPH 50 MW
3	DG Set	6MVA

Soda ash plant process is based on Dry Liming Technology having features of less effluent; less sweet water use; Less steam requirement for ammonia recovery and most energy efficient technology. Raw materials i.e. Limestone (2700 TPD) will be sourced from captive limestone mines and from domestic/international market by road/sea; Salt (2580 TPD) from captive saltworks and from market by road/sea; Coke (174 TPD) from open market by road/sea; Ammonia (3.5 TPD) and Sodium Sulphide (2.24 TPD) from open market by road; Coal /Lignite from imported coal i.e. Indonesian or South African/GMDC/Open Market by road/sea.

2.0 Scrubbers and drop trap will be provided to the 5 nos. Lime Kilns. Scrubber will be provided to ammonia recovery system. Bagfilter will be provided to lime grinding system. Scrubber will be provided to filtration /calcinations. ESPs alongwith adequate stack height will be provided to coal fired boiler. All crushers and transfer points will be provided with dust extraction system consist of hoods, bag house, ID fans and exhaust duct. Closed storage, covered belt conveyor, baghouse/bagfilter will be provided at transfer points. Total water requirement will be 60 MLD water, which will be drawn from Arabian sea through submarine pipeline from the point suggested by the National Institute of Oceanography (NIO). Return cooling water will be mixed with process effluent from soda ash plant, rejects from RO/DM plant and brine preparation rejects. To achieve the GPCB/CPCB norms, effluent will be further treated in the effluent treatment plant & diluted with sea water. Treated /diluted mixed effluent will be discharged in the Arabian Sea at a designated point having diffuser system as recommended by NIO. Sewage will be treated in the sewage treatment plant (STP). Fly ash from coal as fuel will be used for cement manufacturing/brick manufacturing. If from Lignite only, it will be used for road making, pavement and flooring etc. Limestone rejects will be used in boilers for de-sulphurization. Used oil will be sent to authorized recycler/re-processors. Oily sludge and waste/spent oil will be disposed off through authorized re-processors.

3.0 Public hearing/consultation was conducted on 10th June, 2014.

4.0 All the Soda Ash Industries are listed at S.N. 4(e) under Category 'A' and appraised at the Central level.

5.0 The proposal was considered by the Expert Appraisal Committee (Industry) in its 3rd, 32nd and 36th meetings held during 3rd – 5th December, 2012, 20th-21st January, 2015 and 16th-17th March, 2015 respectively. The proposal was considered by the Expert Appraisal Committee (Infrastructure and Coastal Regulation Zone) in 144th meeting held during 28th-30th January, 2015 respectively. Project Proponent and the EIA Consultant namely NEERI have presented EIA / EMP report as per the TOR. EAC has found the EIA / EMP Report and additional information to be satisfactory and in full consonance with the presented TORs. The Committees recommended the proposal for environmental clearance and CRZ clearance.

6.0 Based on the information submitted by the project proponent, the Ministry of Environment and Forests hereby accords environmental clearance and CRZ clearance to above project under the provisions of EIA Notification dated 14th September 2006 and CRZ notification, 2011, subject to the compliance of the following Specific and General Conditions:

A: SPECIFIC CONDITIONS:

- i) The environmental clearance is subject to obtaining prior clearance from Wildlife angle including clearance from the Standing Committee of the National Board for Wildlife as applicable.
- ii) Electrostatic Precipitator along with adequate stack height shall be provided to coal fired boiler to control particulate emissions. 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.
- iii) As proposed, scrubbers shall be provided to the 5 nos. Lime Kilns. Scrubber shall be provided to ammonia recovery system and filtration/calcination section. The scrubbing media should be sent to effluent treatment plant (ETP) for treatment. **Efficiency of scrubber should be monitored regularly and maintained properly.** At no time, the emission levels should go beyond the prescribed standards.
- iv) Bagfilter shall be provided to lime grinding system. All crushers and transfer points shall be provided with dust extraction system consist of hoods, bag house, ID fans and exhaust duct. Closed storage, covered belt conveyor, baghouse/bagfilter shall be provided at transfer points. All the air pollution control devices suggested in the EIA/EMP shall be implemented.
- v) Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry vide G.S.R. No. 826(E) dated 16th September, 2009. The levels of PM10, PM2.5, SO₂, NO_x, VOC, CO and NH₃ shall be monitored in the ambient air and displayed at a convenient location near the main gate of the company and at important public places. The company shall upload the results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and GPCB
- vi) 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 maintained. The emissions shall conform to the limits stipulated by the GPCB.
- vii) Unit shall create covered coal storage yard along with facilities of garend drain around coal handling area which leads to a settling pit. Pucca road shall be created in and around coal storage area and parking area.
- viii) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
- ix) Total fresh water requirement from Arabian Sea shall not exceed 60 MLD and prior permission shall be obtained from the Competent Authority.
- x) As proposed, process effluent should be treated in ETP. Treated effluent should be discharged into Arabian Sea at a designated point having diffuser system as recommended

by NIO after conforming to the standards prescribed for the effluent discharge and obtaining permission from the GPCB. Domestic sewage should be treated in STP. Treated sewage shall be reused for horticulture purpose.

- xi) Treated effluent should be passed through guard pond. Online pH meter, flow meter and TOC analyzer should be installed.
- xii) Automatic /online monitoring system (24 x 7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the Company's website.
- xiii) 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 amended as on date for management of Hazardous wastes and prior permission from GPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for fire fighting facilities in case of emergency. Membership of TSDF for hazardous waste disposal shall be obtained.
- xiv) Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing alongwith the storm water. Direct exposure of workers to fly ash & dust should be avoided.
- xv) Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 as amendment in 2003. Fly ash shall be provided to cement and brick manufacturers for further utilization.
- xvi) Unit shall create covered coal storage along with facilities of gurand drain around coal handling area which leads to a settling pit. Pucca road shall be created in and around coal storage area and parking area.
- xvii) As proposed, green belt area of 189 ha shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- xviii) As proposed, 2.5 % (i.e. 43.70 Crore) of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program shall be ensured accordingly in a time bound manner.
- xix) All the commitments made to the public during public hearing/public consultation meeting held on 10th June, 2014 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.
- xx) 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.

B. SPECIFIC CONDITIONS IN RESPECT OF CRZ:

- i) Company shall explore possibility for enhance recycling of treated water.
- ii) The intake and outfall shall be through buried pipelines the pipelines shall be buried two meter below the ground level /sea bed.
- iii) The marine outfall shall be at 12 m below Chart Datum. The effluents shall be discharged through multiple ports at the outfall for proper thermal and salinity dispersion. The total effluent discharge to sea is approx. 6,00,000 KLD .
- iv) Installation of trash bar/screen shall be put in place at the intake well to avoid fish entrapment.
- v) All the recommendations and conditions specified by Gujarat Coastal Zone Management Authority (GCZMA) vide letter no. ENV-10-2014-72 E dated 17.12.2014 shall be complied with.
- vi) The outlet quality as well as the sea water near the outfall shall be monitored regularly especially for temperature and salinity. Necessary remediation measures shall be taken in case of significant impact of temperature and salinity. A report in this regard shall be submitted to Regional Office, MoEF&CC along with six monthly monitoring report.
- vii) 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 MoEF&CC along with half yearly compliance report to RO-MoEF&CC.
- viii) Construction activity shall be carried out strictly according to the provisions of CRZ Notification, 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- ix) The project shall be executed in such a manner that there shall not be any disturbance to the fishing activity. It shall be ensured that there is no displacement of people, houses or fishing activity as a result of the project.

C. GENERAL CONDITIONS:

- i) The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any other statutory authority.
- ii) 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.
- iii) The locations of ambient air quality monitoring stations shall be decided in consultation with the Gujarat Pollution Control Board (GPCB) 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.
- iv) 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. 75 dBA (day time) and 70 dBA (night time).

- v) 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.
- vi) 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.
- vii) Usage of Personnel Protection Equipments by all employees/ workers shall be ensured.
- viii) 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.
- ix) 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 and public hearing relating to the project shall be implemented.
- x) The company shall undertake CSR activities and all relevant measures for improving the socio-economic conditions of the surrounding area.
- xi) The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- xii) A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- xiii) The company shall earmark sufficient 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.
- xiv) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZilaParisad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal.
- xv) 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 and the Gujarat Pollution Control Board. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- xvi) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the Gujarat 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 Bhopal Regional Offices of MoEF by e-mail.
- xvii) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at

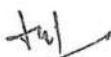
<http://envfor.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.

xviii) The project authorities 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 and the date of start of the project.

7.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

8.0 The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.

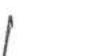
9.0 The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 alongwith their amendments and rules.



(Lalit Bokolia)
Additional Director

Copy to:-

1. The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8th Floor, Gandhi Nagar - 382 010, Gujarat.
2. The Additional Principal Chief Conservator of Forests(central), Ministry of Environment & Forests, Regional Office, E-5, Arera Colony, Link Road -3, Bhopal -462 016, M.P.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043, Gujarat.
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhavan, Jorbagh Road, New Delhi.
6. Guard File/Monitoring File/Record File.
7. Member Secretary (IA-III), CRZ & Infrastructure Division, IA Division.


(Lalit Bokolia)
Additional Director