M. M. JOSHI
MEMBER SECRETARY
SEIAA (GUJARAT)

सत्यमेव जयते

Government of Gujarat

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY GUJARAT

No. SEIAA/GUJ/EC/1(d)/340/2016 **Date: 20 MAY 2016** By R P A D

Time Limit

Sub: Environment Clearance to M/s: Atul Limited for Setting up of an additional Captive Power Plant within the existing Chemical manufacturing complex at survey no.274, 275 & 276, Atul, Valsad ..... In Category 1(d) of Schedule annexed with EIA Notification dated 14/09/2006.

Dear Sir,

This has reference to your application along with Form-I dated **21/08/2014** submitted to SEIAA, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006 and EIA report/ additional information / documents submitted vide letter dated **03/11/2015** and **11/03/2016** to the SEAC.

The proposal is for Environmental Clearance to **M/s: Atul Limited for Setting up of an additional Captive Power Plant within the existing Chemical manufacturing complex at survey no.274, 275 & 276, Atul, Valsad.** It is an existing unit for manufacturing following products, which falls in the category - 1(d) of the schedule of the EIA Notification-2006:

Sr. no.	Product Name	Production Capacity		
		Existing	Proposed	After Expansion
1.	Captive Power plant (CPP)	34 MW	22 MW	56 MW

The project activity is covered in 1(d) and is of 'B' Category. Public hearing was conducted by Gujarat Pollution Control Board on 09/10/2015.

The SEAC, Gujarat vide their letter dated **04/05/2016** had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project based on its meeting held on **23/03/2016**. The proposal was considered by SEIAA, Gujarat in its meeting held on **07/05/2016** at Gandhinagar. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14th September, 2006 subject to the compliance of the following conditions.

A. CONDITIONS :

A. 1 SPECIFIC CONDITION :

1. Unit shall comply the emission standards mentioned in the Notification by MoEF&CC vide no. S.O. 3305 (E) dated 07/12/2015.
2. All measures shall be taken to prevent soil and ground water contamination.
3. The project proponent shall submit the detailed study report to Gujarat Pollution Control Board (GPCB) at least once in a year, through the reputed institute or university to assess the impacts on soil and ground water quality, if any, due to application of the waste water generation from the CPP and shall adopt the additional mitigation measures as may be suggested through such studies.

A. 2 WATER :

4. The fresh water requirement for the proposed expansion shall not exceed 2095 KL/day and it shall be met through the existing water supply system from River Par. Permission from the Concern authority for additional water requirement shall be obtained.
5. Metering of water shall be done and its records shall be maintained. No ground water shall be tapped in any case for meeting the project requirements.
6. The industrial effluent generation from the proposed expansion shall not exceed 270 KL/day and entire quantity of effluent shall be utilized for ash quenching, dust suppression, fire hydrant make up, Gardening and Plants floor cleaning.
7. There shall be no discharge of industrial effluent from the proposed project in any case.
8. Domestic wastewater generation shall not exceed 1 KL/day which shall be disposed off into soak pit system.
9. The unit shall provide metering facility at the inlets and outlets of the collection cum reuse system of waste water and maintain records of the same.
10. Proper logbooks of waste water reuse system showing quantity and quality of effluent reused shall be maintained and furnished to the GPCB from time to time.
11. Rain water harvesting of rooftop rain water shall be undertaken as proposed in the EIA report of the project and the same water shall be used for the various activities of the project to conserve fresh water as well as to recharge ground

water through percolation wells. Before recharging the rain water, pre-treatment must be done to remove suspended matter.

A. 3 AIR:

12. Existing two Coal fired Steam Boilers shall be replaced with two AFBC Boilers having capacity 50 TPH each.
13. Fuel (Indian Coal and /or Imported Coal and or Lignite) to the tune of 16725 MT/Month shall be used for proposed Boilers.
14. Sulfur and ash content of the fuel to be used shall be analyzed and its record shall be maintained.
15. A long term study of radio activity and heavy metals contents on coal/lignite to be used shall be carried out through a reputed institute and results thereof analyzed regularly and reported along with monitoring reports. Thereafter mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal/lignite and fly ash (Including bottom ash) shall be put in place.
16. Height of flue gas stacks attached to Boilers shall be minimum 74.58 meters.
17. A flue gas stack of 74.58 m height shall be provided with online monitoring system to proposed Steam Boiler. Mercury emissions from stacks shall also be monitored on periodic basis.
18. High efficiency Electro Static Precipitators (ESP) with efficiency not less than 99.9% shall be installed for control of flue gas emission from the proposed Boilers. The ESP shall be operated efficiently to ensure that particulate matter emission does not exceed the GPCB norms. The control system shall be designed and integrated in plant DCS in such a way that if emission from ESP exceeds the specified standard prescribed in the Environment (Protection) Rules, 1986 as amended from time to time, utilization of boiler capacity shall reduce so that flue gas emission from the stack meets with the specified standards or boiler shall shut down totally.
19. Third party monitoring of the functioning of the ESP along with its efficiency shall be carried out once in a year through a reputed institute / organization.
20. Lime stone injection technology shall be adopted to control SO_2 and it shall be ensured that SO_2 levels in the ambient air do not exceed the prescribed standards.
21. The company shall prepare schedule and carry out regular preventive maintenance of mechanical and electrical parts of ESPs and assign responsibility of preventive maintenance to the senior officer of the company.
22. Diesel to the tune of 300 Lit/hr shall be used as a fuel in stand-by D.G.Set (1500 KVA).
23. The flue gas emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. At no time, the emission levels shall go beyond the stipulated standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
24. Online monitoring system shall be installed to monitor the SOx, NOx and SPM in the flue gas stack. An arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB on real time basis.
25. Adequate storage facility for the fly ash in terms of closed silos shall be provided at site. No ash pond shall be constructed.
26. Handling of the fly ash shall be through a closed pneumatic system.
27. Ash shall be handled only in dry state.
28. The unit shall strictly comply with the Fly Ash Notification under the EPA and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.
29. The fugitive emission in the work zone 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). Following indicative guidelines shall also be followed to reduce the fugitive emission.
    - All handling & transport of coal & Lignite shall be exercised through covered coal conveyors only.
    - Enclosure shall be provided at Coal/Lignite loading and unloading operations.
    - Water shall be sprinkled on Coal/Lignite stock piles periodically to retain some moisture in top layer and also while compacting to reduce the fugitive emission.
    - All transfer points shall be fully enclosed.
    - Adequate dust suppression/extraction system at crusher house as well as for the Coal/Lignite stock yard and other vulnerable areas shall be provided to abate dust nuisance
    - Accumulated coal dust /fly ash on the ground and other surfaces shall be removed / swept regularly and water the area after sweeping.
    - Internal roads shall be either concreted or asphalted or paved properly to reduce the fugitive emission during vehicular movement.
    - Air borne dust shall be controlled with water sprinklers at suitable locations in the plant.
    - Coal/Lignite shall be transported through covered trucks only whereas fly ash shall be transported through closed trucks only.
    - A green belt shall be developed all around the plant boundary and also along the roads to mitigate fugitive & transport dust emission.
30. Regular monitoring of ground level concentration of $PM_{2.5}$, PM_{10}, NOx, SO_2 and Hg shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by the

GPCB. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be taken immediately. The location of the stations and frequency of monitoring shall be decided in consultation with the GPCB.

A. 4 SOLID / HAZARDOUS WASTE:

31. The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous & other wastes (Management and Transboundary Movement) Rules 2016, as may be amended from time to time. Authorization from the GPCB shall be obtained for collection / treatment / storage / disposal of hazardous wastes.
32. Hazardous waste sludge shall be packed and stored in separate designated hazardous waste storage facility with impervious bottom and leachate collection facility, before its disposal.
33. The used oil shall be sold to only to the registered recyclers / rerefiners.
34. The discarded containers / barrels / bags / liners shall be sold only to the registered recycler.
35. For storage of fly ash, closed silos of adequate capacity shall be provided. No ash pond shall be constructed in the project.
36. The fly ash shall be supplied to the manufacturers of fly ash based products such as cement, concrete blocks, bricks, panels, etc. The unit shall strictly comply with the Fly Ash Notification under EPA and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.
37. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWIF.

A. 5 SAFETY:

38. The project management shall strictly comply with the provisions made in the Factories Act, 1948 as well as Manufacture, Storage and Impact of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals.
39. Necessary precautions like continuous monitoring of hot spots [ignited lignite] using temperature detection systems, water sprinklers, avoiding stacking of lignite near steam pipeline etc. shall be made for storing lignite to prevent fire hazard.
40. All the risk mitigation measures, general & specific recommendations mentioned in Risk Assessment Report shall be implemented.
41. A well designed fire hydrant system shall be installed as per the prevailing standards.
42. Personal Protective Equipments shall be provided to workers and its usage shall be ensured and supervised.
43. 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.
44. Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken as per the Factories Act & Rules.
45. Flameproof fittings shall be provided in the plant area.
46. Adequate fire fighting facilities shall be provided at the proposed power plant.
47. Proper ventilation shall be provided in the work area.
48. All transporting routes within the factory premise shall have paved roads to minimize splashes and spillages.
49. The project management shall prepare a detailed Disaster Management Plan (DMP) for the project as per the guidelines from Directorate of Industrial Safety and Health.

A. 6 NOISE:

50. To minimize the noise pollution the following noise control measures shall be implemented:
    - Selection of any new plant equipment shall be made with specification of low noise levels.
    - Manufacturers / suppliers of major noise generating machines / equipments like air compressors, feeder pumps, turbine generators, etc. shall be instructed to make required design modifications wherever possible before supply and installation to mitigate the noise generation and to comply with the national / international regulatory norms with respect to noise generation for individual units
    - Regular maintenance of machinery and vehicles shall be undertaken to reduce the noise impact.
    - Noise suppression measures such as enclosures, buffers and / or protective measures shall be provided.
    - Employees shall be provided with ear protection measures like earplugs or earmuffs.
    - Proper oiling, lubrication and preventive maintenance shall be carried out of the machineries and equipments to reduce noise generation.
    - Construction equipment generating minimum noise and vibration shall be chosen.
    - Ear plugs and/muffs shall be made compulsory for the construction workers working near the noise generating activities / machines / equipment.
    - Vehicles and construction equipment with internal combustion engines without proper silencer shall not be allowed to operate.
    - Construction equipment meeting the norms specified by EP Act, 1986 shall only be used.

- Noise control equipment and baffling shall be employed on generators especially when they are operated near the residential and sensitive areas.
- Noise levels shall be reduced by the use of adequate mufflers on all motorized equipment.

51. The overall noise level in and around the plant area shall be kept well within the prescribed standards by providing noise control measures including acoustic insulation, hoods, silencers, enclosures, vibration dampers etc. on all sources of noise generation. The ambient noise levels shall confirm to the standards prescribed under the Environment (Protection) Act and Rules. Workplace noise levels for workers shall be as per the Factories Act and Rules.

A. 7 GREEN BELT AND OTHER PLANTATION:

52. The unit shall develop green belt in at least 68000 sq. m area within the premises. Green belt shall comprise of rows of varying height tall native trees with thick foliage in the periphery of the factory premises.
53. The unit shall also take up adequate plantation at suitable open land on road sides and other open areas in nearby villages or schools in consultation with the Gram Panchayat / GPCB and submit an action plan for the same for next three years to the GPCB.

B. OTHER CONDITIONS:

54. In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.
55. All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by M/s: Eco Chem Sales & Services, Surat & submitted vide letter no. NIL dated 03/11/2015 and commitments made during presentation before SEAC, proposed in the EIA report shall be strictly adhered to in letter and spirit.
56. All the recommendations of CREP guidelines as may be applicable from time to time shall be followed vigorously.
57. A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
58. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.
59. No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.
60. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act,1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous & other wastes (Management and Transboundary Movement) Rules 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
61. 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.
62. 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.
63. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
64. 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 GPCB and may also be seen at the Website of SEIAA/ SEAC/ GPCB. 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 Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.
65. 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.
66. 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.
67. 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.
68. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
69. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
70. 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.

71. The project authorities shall inform the GPCB, 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.
72. This environmental clearance is valid for seven years from the date of issue.
73. Any appeal against this environmental clearance 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.

With regards,
Yours sincerely,

(M. M. JOSHI)
Member Secretary

Issued to:
Mr. V. K. Patel (VP-Utility & Services)
M/s: Atul Ltd.
At & Post : Atul,
Dist.: Valsad

Copy to:-

1. The Secretary, SEAC, C/O. G.P.C.B. Gandhinagar - 382010.
2. The Chairman, Central Pollution Control Board , Parivesh Bhavan, CBD -cum-Office Complex, East Arjun Nagar, New Delhi-110032
3. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office (WZ), E-5, Arera Colony, Link Road-3, Bhopal-462016, MP
4. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
5. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10 A, Gandhinagar-382010
6. Select File

(M. M. JOSHI)
Member Secretary