



No. SEIAA/GUJ/EC/5(f)/ 41 /2013

Date: 4 MAR 2013
Time Limit

Sub: Environment Clearance for the - Galaxy Surfactants Ltd. for expansion by addition of new products in the existing unit located at Plot No. 892, GIDC, Jhagadia, Dist : Bharuch..... in Category 5 (f) of Schedule annexed with EIA Notification dated 14/9/2006.

Dear Sir,

This has reference to your application along with Form-I vide letter dated 15/04/2011, EIA / EMP and RA / DMP Report vide letter dated 28/03/2012, Additional information / documents vide their letters dated 17/10/2012 & 04/12/2012, submitted to the SEAC, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006.

The proposal is for Environmental Clearance for - Galaxy Surfactants Ltd. for expansion by addition of new products in the existing unit located at Plot No. 892, GIDC, Jhagadia, Dist : Bharuch. The project proponent has applied for manufacturing following products :

Sr.	Product	Capacity	
		Existing	Proposed
1	Ethoxylated Lauryl Alcohol (ETLA)	37,000 MT/Annum	-
2	2-Phenoxy Ethanol	8,000 MT/Annum	-
3	Organic Surface Active Agents & Organic Active preparations including anionic, cationic, amphoteric, nonionic surfactants such as Fatty Alcohol Sulphates /Fatty Alcohol Ether Sulphates/ Alkanolamides / Fatty Acid Esters/Ethoxylates/ Glycinates/ Amine Oxides/ Betains/ Quaternary Ammonium Compounds.	-	1,82,000 MT/Annum
4	Specialty Chemicals such as Phenol Ethoxylates Isethionates and Sunscreen.	-	14,000 MT/Annum

The proposal fall in the project / activity no. 5(f) in the schedule of the Environment Impact Assessment Notification, 2006. As the unit is located in to the notified industrial estate of GIDC, Jhagadia, it falls in category "B" of the schedule.

The project activity is covered in 5(f) and is of 'B' Category. Since, the proposed project is located in the notified industrial area, public consultation is not required as per paragraph 7(i) (III) (i) (b) of the Environment Impact Assessment Notification-2006.

The SEAC, Gujarat had recommended to the SEIAA, Gujarat, to grant the Environment Clearance to this project for the above-mentioned project. The proposal was considered by SEIAA, Gujarat in its meeting held on 16.02.2013 at Gandhinagar. Since the public consultation is not required for the project, 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. SPECIFIC CONDITIONS:

A.1 WATER:

1. No ground water shall be used for the project. Additional water requirement for the expansion shall not exceed 803 KL/day and it shall be met through GIDC water supply only. The water meter shall be installed and records of monthly water consumption shall be maintained regularly.
2. Additional wastewater generation from the proposed expansion shall not exceed 295 KL/day [i.e. 255 KL/day of industrial effluent + 40 KL/day of domestic wastewater].

3. The additional wastewater quantity of 295 KL/day from the expansion shall be treated in the ETP [Primary + Secondary] and the treated wastewater shall be completely utilized for on land irrigation on 61,000 m² green belt area within the premises.
4. The unit shall upgrade its ETP so as to make it adequate to treat increased quantum of industrial effluent due to the proposed expansion. The ETP shall be operated regularly and efficiently to achieve the GPCB norms at the final outlet.
5. There shall be no effluent discharge in the GIDC underground drain strictly.
6. The unit shall provide treated effluent storage tanks / lagoon of total 2100 KL capacity for storage of treated effluent during high rainy period when utilization of treated effluent for plantation / gardening / irrigation is not feasible.
7. The unit shall provide metering facility at the inlet and outlet of the ETP and maintain records for the same.
8. The unit shall provide online monitoring system for monitoring of pH, TOC / COD & flow of treated effluent with an arrangement to reflect the monitored data on the company's server, which can be accessed by the GPCB on real time basis.
9. A proper logbook of the ETP operation, effluent discharge quality and quantity, power consumption, chemical consumption etc. shall be maintained and shall be furnished to the GPCB from time to time.
10. The unit shall join and participate financially and technically for any common environmental facility / infrastructure as and when the same is taken up either by the GIDC or GPCB or any such authority like NCTL, created for this purpose by the Government / GIDC.

A.2 AIR:

11. Caustic scrubber shall be provided for control of process emission of SO₃ & SO₂ whereas water scrubber shall be provided for control of process emission of HCl. These air pollution control systems shall be operated efficiently so as to achieve the GPCB norms at the stack outlet.
12. Natural gas [1160 Nm³/Hr] or FO [780 Kg/Hr] shall be used as a fuel in new Boilers (2 nos. 8 TPH each). Natural gas [200 Nm³/Hr] or FO [140 Kg/Hr] shall be used as a fuel in new Thermic Fluid Heater (2 nos., 6 Lac Kcal/Hr. each). Adequate stack height as per prevailing norms shall be provided for flue gas emission from the stacks.
13. Natural gas [1120 Nm³/Hr] or FO [760 Kg/Hr] or HSD [760 Kg/Hr] will be used as a fuel in new Generator Sets [2 no. - 2 MW & 1.6 MW]. The stack height of the Generator Sets shall be equal to the height needed for the combined capacity of all proposed Generator Sets.
14. The emission from the flue gas stacks and process stacks shall conform to the standards prescribed by GPCB. At no time, the emission levels shall go beyond the stipulated standards.
15. The unit shall undertake measures for solvent recovery and Reactors shall be equipped with column, condenser, chilled trap and receiver for recovery of solvent. Spent solvent recovery shall not be less than 95 percent in any case.
16. Measures shall be taken to reduce the process vapors emissions as far as possible. Use of toxic solvents shall be minimum. All venting equipment shall have vapour recovery system.
17. 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).
18. All the vessels used in the manufacturing process shall be close to reduce the fugitive emission. Adequate ventilation system shall be provided in work areas.
19. Regular performance evaluation of the air pollution control systems shall be undertaken every year to check its adequacy, through credible institutes like L.D. College of Engineering, NPC or other such other institutes of similar repute, and its records shall be maintained.
20. Regular monitoring of ground level concentration of HCl, SO₂, VOC, PM₁₀ and PM_{2.5} 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.3 HAZARDOUS / SOLID WASTES:

21. The company must strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous Waste (Management, Handling and Transboundary Movement) Rules 2008, as may be amended from time to time. Authorization from the GPCB must be obtained for collection / treatment / storage / disposal of hazardous wastes.
22. Hazardous / solid wastes shall be stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal.
23. ETP sludge and electrostatic precipitator waste shall be sent to the nearest common TSDF.
24. Discarded barrels / containers / bags / liners shall be either reused or returned back to suppliers or sold only to the authorized vendors after decontamination.
25. Spent solvent shall be subjected to solvent recovery with the help of in-house solvent recovery systems and recovered solvents shall be reused in the process. No spent solvent shall be sold outside in any case.
26. Used oil shall be sold only to the registered recyclers / re-refiners.
27. Hazardous wastes / by-products viz. Sulphuric Acid [98%], Phenyl Carbitol, HCl [30%], Sodium Sulphate [10%], Sodium Acetate [20 – 25%], Methanol / Ethanol, etc. shall be sold only to the authorized end consumers. Records of sell shall be maintained and submitted to the GPCB at regular intervals.

A.4 SAFETY:

28. Necessary prior permissions from various statutory authorities like PESO, Nagpur, Factory Inspectorate and others shall be obtained.
29. The project management shall strictly comply with the provisions made in Manufacture Storage and Import of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals.
30. All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic, explosive, flammable and combustible chemicals; especially Ethylene Oxide, Solvents, Phenol, etc.
31. Only flame proof electrical fittings shall be provided in the plant.
32. Adequate fire protection system shall be installed in the project as per the statutory requirements.
33. All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of hazardous chemicals. Handling and charging of the hazardous chemicals shall be done in such a manner that minimal human exposure occurs.
34. Storage and use of hazardous chemicals shall be minimized to the extent possible and all necessary precautions shall be taken to mitigate the risk generated out of it.
35. Personal Protective Equipments shall be provided to workers and its usage shall be ensured and supervised.
36. 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.
37. Tie up shall be done with nearby health care unit / doctor for seeking immediate medical attention in the case of emergency.
38. Training shall be imparted to firefighting team and emergency response team. Training shall also be imparted to all the workers on safety and health aspects of hazardous materials handling.
39. 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 on regular basis as per Factories Act & Rules.
40. Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.

A.5 NOISE:

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

A.6 CLEANER PRODUCTION AND WASTE MINIMISATION:

42. The unit shall undertake the Cleaner Production Assessment study through a reputed institute / organization and shall form a CP team in the company. The recommendations thereof along with the compliance shall be furnished to the GPCB.
43. The unit shall also undertake following waste minimization measures :
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Use of automated and enclosed filling to minimize spillage.
 - c. Reuse of by-products from the process as raw materials or raw materials substitutes in other process.
 - d. Venting equipment through vapour recovery system.
 - e. Use of close feed system into batch reactor.
 - f. Use of high pressure hoses for equipment cleaning to reduce wastewater generation.
 - g. Dry cleaning / mopping of floor instead of floor washing
 - h. Regular preventive maintenance to avoid leakage, spillage etc.

A.7 GREEN BELT AND OTHER PLANTATION:

44. The unit shall develop green belt in 38.8% of total plot area as per the CPCB guidelines as proposed. Native and fast growing species shall be planted in the green belt.
45. Drip irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development within the premises.
46. The unit shall also take up adequate plantation at suitable open land on road sides and other open areas within the Jhagadia estate or in nearby locality or schools in consultation with the GIDC / GPCB / Gram Panchayat and submit an action plan of plantation for next three years to GPCB.
47. The unit shall become a member of the society constituted / to be constituted in Jhagadia for greening of estate and shall contribute appropriately for this cause.

B. OTHER CONDITIONS:

48. 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.
49. A separate Environment Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environment Management and Monitoring functions.
50. The project management shall vigorously implement the recommendations / suggestions stated in the EIA / EMP and RA / DMP report of the project.
51. The company shall carry out socio-economic developmental / community welfare activities in consultation with the District Development Officer / District Collector.
52. Pucca flooring / impervious layer shall be provided in the work areas. Leakages from the pipes, pumps etc. shall be minimal

- and if occurs, shall be arrested promptly.
53. 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.
 54. 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.
 55. 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.
 56. 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.
 57. 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.
 58. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
 59. 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.
 60. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
 61. 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. 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 Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules. This environmental clearance is valid for five years from the date of issue.
 62. 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,

(A.A.DOLTI)
Member Secretary

Issued to:

✓ **Mr. Ramesh B. Mande,**
Sr. Manager – Corporate Governance Process,
Galaxy Surfactants Limited,
C-49/2, TTC Industrial Area,
Pawne, Navi Mumbai – 400 701.

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

(A.A.DOLTI)
Member Secretary