

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

SEIAA-2016/CR 05/TC 3
Environment department,
Room No. 217, 2nd floor,
Mantralaya Annexe,
Mumbai 400-032
Date: 15th May, 2016.

To,
M/s. Galaxy Surfactants Ltd.
C-49/2, TTC Industrial Area, Pawne,
Navi Mumbai- 400 703

Subject: - Environment clearance for Modernization in production of surfactant & speciality chemicals at existing Plot No.V-23 & Plot No.1, MIDC Talaja, Dist.Raigad by M/s. Galaxy Surfactants Ltd.

Reference- Even number environment clearance letter dated 8th April, 2015.

Sir,

This has reference to your communication on the above mentioned subject.

2. It is noted that, the proposal earlier considered by SEIAA in its 83rd meeting & decided to accord grant of EC to the project. Accordingly EC has been issued to the project vide letter dated 8th April, 2015.

3. Project information from documents submitted by you & considered by SEAC & SEIAA was summarized in even number environment clearance letter dated 8th April, 2015. It is noted that amended information submitted by PP and same appraised by SEAC-I in its 96th meeting are as below-

1	Name of project	M/s Galaxy Surfactants Ltd. Proposed Project of surfactants & Specialty chemicals Manufacturing
2	Project Proponent	M/s Galaxy Surfactants Ltd.
5	New project/expansion in existing project/modernization/d iversification in	Modernization

	existing project	
6	If expansion/ diversification, whether environmental clearance has been obtained for existing project (If yes enclose a copy with compliance table)	Yes
7	Activity schedule in the EIA Notification	5(f) B, B-2
8	Area Details	Total plot area : 77,802 Sq. M Build up area : 36,404 Sq. M Green Belt Area : 4,080 Sq. M
9.	Name of the Notified Industrial Area/ MIDC area	MIDC Taloja, Taluka – Panvel, Dist- Raigad, Maharashtra
10.	TOR given by SEAC? (If yes then specify the meeting)	No
11.	Estimated capital cost of the project (Including cost for land, building, plant and machinery separately)	Zero Investment
12.	Location details of the project:	<ul style="list-style-type: none"> • Latitude : 19° 07'N • Longitude : 73° 11' E • Location : Plot No.V-23 & Plot No.1, MIDC Taloja, Taluka – Panvel, Dist- Raigad • Elevation above mean sea level meters : 25 m
13.	Distance from protected areas/ critically polluted areas/ Eco Sensitive area/ inter- state boundaries	Not Applicable

14.	Raw materials (including process chemicals, catalysts & additives)	Please refer Table Below			
Sr. No.	Raw Material	QTY MT/M	Nature (Solid/ liquid)	Source of material (Local/ Imported)	Means of transportation (Source to storage site) with justification
1	Fatty Alcohol	1810	Liquid	Local	Manufacturers / traders in Mumbai, Gujarat By road in tankers / trucks
2	Sulphur	140	Bright Yellow Granules	Local	
3	Caustic Soda Lye/Potash lye	444	Liquid	Local	
4	Ethylene Oxide	742	Liquid	Local	
5	Mono Ethanol Amine	67	Liquid	Local	
6	SCI 60 % (Sodium Cocoyl Isethionate)	120	Liquid	Local	
7	Sodium Isethionate	15	Liquid	Local	
8	Sodium/Ammon ium Bi-sulphate	3	Solid	Local	
9	DMAPA	71	Liquid	Local	
10	Mono Chloro Acetic Acid	73	Solid Flakes	Imp/Local	
11	Fatty acids	512	Liquid	Imp	
12	MEG (Mono Ethylene Glycol)	30	Liquid	Local	
13	Cetostearyl Alcohol	44	Flakes	Local	
14	Starch	66	Solid	Local	
	Total	4137			
15	Production Details	Please Refer Below Table			
			Existing	Proposed	Total

Sr. No.	Name of the Product	Production Quantity (MT/Month)	additional production Quantity for Environmental Clearance (MT/Month)	Production Quantity (Existing + Proposed additional) (MT/Month)		
1	Anionic surfactants (on 100% AM basis) such as Fatty Alcohol Sulphate, Fatty Alcohol ether sulphates etc.	5950	1190	7140		
2	Ethylene Oxide Condensate	3500	1500	5000		
3.	Cationic Surfactants (on 100% AM basis) such as Betains, Quaternary Ammonium Salts etc.	1267	253	1520		
4	Sulphosuccinates	50	10	60		
5	Surfactant blends (on 100% AM basis) such as Syndet Soap-Granules/Noodles, Sparkle series etc.	1100	220	1320		
6	Fatty Acid Esters, Fatty alkanol amides and esterquats	1416	284	1700		
7	Conc. Sulphuric Acid (By Product)	110	22	132		
8	Sodium Sulphate 20 -25 % solution , Solids 37.5 MT/ M (By Product)	150	30	180		
	Total	13543	3509	17052		
16.	Process details / manufacturing details	Please refer prefeasibility report				
17	Rain water Harvesting (RWH)	(All details like recharge pits, storage tank capacity etc) Not recommended for a chemical factory.				
18.	Total Water Requirement	Total water Requirement: 785 KLD				
	Water Consumption	Utilization Existing	Existing loss	Existing Effluent	Additional Req. For Modernization	New Proposal Effluent
	Industrial cooling & Boiler	725	541	184	Nil	Nil
	Industrial processing					

	Domestic	40	10	30	Nil	Nil
	Gardening	20	20	Nil	Nil	----
	Total	785	571	214	Nil	Nil
19.	Storm water drainage	MIDC storm water drain available by the side of plot.				
20.	Sewage generation and treatment	<ul style="list-style-type: none"> • Amt of sewage generation (CMD): 30 CMD • Proposed treatment for the sewage: Well-designed Septic tank followed by Soak pit is available. • Capacity of STP (CMD): Separate STP is not provided as sewage is treated in the ETP. 				
21.	Effluent Characteristics	Please refer Table below				
	Sr. No	Parameters	Unit	Before Treatment		After treatment
				Sewage	Effluent	
	1	pH	-	7-8	4-10	5.5-8.5
	2	COD	mg/lit	400	4000	<250
	3	BOD	mg/lit	250	2000	<100
	4	Suspended solids	mg/lit	--	200	<100
	5	Total dissolved solids	mg/lit	--	2000	<100
	6	Total ammoniacal nitrogen	mg/lit	Nil	250	<100
	7	Sulphates	mg/lit	Nil	<500	<1000
	8	Chlorides	mg/lit	Nil	<500	<1000
22.	ETP details	<ul style="list-style-type: none"> • Amount of effluent generation (CMD): 180 CMD • Capacity of the ETP: 310 CMD 				

		<ul style="list-style-type: none"> Amount of water send to the CETP: Membership of CETP : Yes
23.	Note on ETP technology to be used	Galaxy Surfactant limited has provided MBR technology to cater to the pollution load of effluent.
24.	Disposal of The ETP sludge	ETP Sludge is disposed through Common Hazardous Waste treatment storage disposal facility, Mumbai Waste Management, Talaja.
25.	Solid Waste Management	Please Refer Below Table

Sr. No.	Source	Cat No.	Type of waste	Qty(TPM)	Form (Sludge/ dry/ Slurry)	Disposal
1	ETP	34.3	ETP Sludge	8.7	Sludge	CHWTSDF
2	Process	34.1	Flue gas cleaning Residue	7.0	Solid	CHWTSDF

- If waste(s) contain any hazardous or toxic substance / Radioactive material or heavy metals then provide quantity, disposal data and proposed precautionary measures
- What are the possibilities of recovery and recycling of wastes? Not Applicable

26.	Atmospheric Emissions (Flue gas characteristics SPM, SO ₂ , NO _x , CO etc.)	Sr. No.	Pollutant	Source of Emission	Emission rate
		1.	SPM	Process /Boiler/ D.G. Set	<150 mg/nm ³
		2.	SO ₂	Boiler/ D.G. Set	<67 kg/ hr.
		3.	NO _x	Boiler/ D.G. Set	<50 ppm
		4.	Ammonia	Process	<35 mg/nm ³
		5.	HCl	Scrubber	<50 ppm

27.	Stacks emission Details	Please refer to Table below
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Sr. No.	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM	S %	SO ₂ Kg/Day
1	Boiler -1 (Thermic fluid heater)	Stack	30	FO/LDO	9 MT/Day	4.5%	810

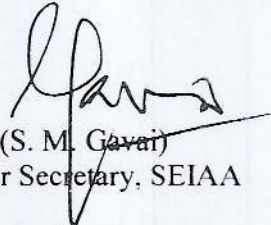
2	D.G. Set -1 (2 MW)	Stack & acoustic enclosure	42		18 MT/Day		
3	Boiler -2	Common stack with cyclone	32	FO / LDO	LDO- 3.8 MT/Day	4.5%	630
4	Boiler -3				F.O. - 3.2 MT/Day		
5	Boiler -4	Common stack with cyclone & dust collection system	30	Coal	18 MT/ day	0.5%	90
6.	Scrubber (3 Nos.)	Stack with scrubber & Electrostatic precipitator	30	N.A.	Nil	--	--
7	D.G. Set -2 (1000 KVA)	Stack & Acoustic enclosure	6	HSD	600 Litrs/ hr.	0.05	3.84
28.	Emission Standard	Pollutant s	Emission standard limit Proposed Limit		MPCB Consent	Pollutants	
		SPM/ TPM	<150 mg/nm ³		<150 mg/ nm ³	SPM/ TPM	
		SO ₂	<67 kg/ hr.		<67 kg/ hr.	SO ₂	
		Ammonia	<50 ppm		<50 ppm	Ammonia	
		HCl	<35 mg/ nm ³		<35 mg/ nm ³	HCl	
		NO _x	<50 ppm		<50 ppm	NO _x	
29.	Ambient Air quality data	Pollutant	Permissible Standard	Proposed Concentrat ion	Remarks		
		SPM (PM ₁₀)	100 µg/m ³	<100 µg/m ³	Shall be within limit		
		RPM (PM _{2.5})	60 µg/m ³	<60 µg/m ³	Shall be within limit		
		SO ₂	80 µg/ m ³	<80 µg/ m ³	Shall be within limit		
		NO _x	80 µg/ m ³	<80 µg/ m ³	Shall be within limit		

30.	Details of Fuel to be used:	<table border="1"> <thead> <tr> <th data-bbox="592 152 703 208">Sr.No.</th> <th data-bbox="711 152 962 208">Fuel</th> <th data-bbox="970 152 1402 208">Daily consumption (TPD/KLD)</th> </tr> </thead> <tbody> <tr> <td data-bbox="592 241 703 275">1.</td> <td data-bbox="711 241 962 275">LDO</td> <td data-bbox="970 241 1402 275">3.8 MT/ Day</td> </tr> <tr> <td data-bbox="592 286 703 320">2.</td> <td data-bbox="711 286 962 320">Furnace Oil</td> <td data-bbox="970 286 1402 320">12.2 MT/ Day</td> </tr> <tr> <td data-bbox="592 331 703 365">3.</td> <td data-bbox="711 331 962 365">Coal</td> <td data-bbox="970 331 1402 365">18 MT/ Day</td> </tr> <tr> <td data-bbox="592 376 703 409">4.</td> <td data-bbox="711 376 962 409">HSD</td> <td data-bbox="970 376 1402 409">400 Ltr/ hr</td> </tr> </tbody> </table> <p data-bbox="592 465 1402 577"> ✓ Source of Fuel : From market/ outside fuel companies ✓ Mode of Transportation of fuel to site : By Road & through </p>	Sr.No.	Fuel	Daily consumption (TPD/KLD)	1.	LDO	3.8 MT/ Day	2.	Furnace Oil	12.2 MT/ Day	3.	Coal	18 MT/ Day	4.	HSD	400 Ltr/ hr	
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31.	Energy	<p data-bbox="592 589 1402 723"> Power Supply : MSEDCL • Existing Power requirement : 3982 KW • Proposed power requirement : Existing Power supply will be used for proposed project. </p> <p data-bbox="592 768 1402 902"> DG sets: • Number and capacity DG sets to be used (Existing and proposed) 1 no. DG set of Capacity 2 MW </p> <p data-bbox="592 947 1402 1081"> Details of the non-conventional renewable energy proposed to be used: </p>																
32.	Green Belt Development	<ul data-bbox="592 1093 1402 1171" style="list-style-type: none"> • Green belt area: 4080 Sq. M • Number of species of trees & shrubs to be planted: 371 <p data-bbox="592 1205 1402 1238">List of trees (Common Names of the Species)</p> <table border="1" data-bbox="592 1238 1209 1630"> <thead> <tr> <th data-bbox="600 1238 727 1283">Sr No.</th> <th data-bbox="735 1238 1201 1283">Name of Tree</th> </tr> </thead> <tbody> <tr> <td data-bbox="600 1294 727 1328">1.</td> <td data-bbox="735 1294 1201 1328">Bakan Neem (Melia Azaderach)</td> </tr> <tr> <td data-bbox="600 1339 727 1373">2.</td> <td data-bbox="735 1339 1201 1373">Ashoka (Saraca Asoka)</td> </tr> <tr> <td data-bbox="600 1384 727 1417">3.</td> <td data-bbox="735 1384 1201 1417">Silver</td> </tr> <tr> <td data-bbox="600 1429 727 1462">4.</td> <td data-bbox="735 1429 1201 1462">Coconut</td> </tr> <tr> <td data-bbox="600 1473 727 1507">5.</td> <td data-bbox="735 1473 1201 1507">Gulmohor</td> </tr> <tr> <td data-bbox="600 1518 727 1552">6.</td> <td data-bbox="735 1518 1201 1552">Rain Tree</td> </tr> <tr> <td data-bbox="600 1563 727 1597">7.</td> <td data-bbox="735 1563 1201 1597">Bel</td> </tr> </tbody> </table>	Sr No.	Name of Tree	1.	Bakan Neem (Melia Azaderach)	2.	Ashoka (Saraca Asoka)	3.	Silver	4.	Coconut	5.	Gulmohor	6.	Rain Tree	7.	Bel
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33.	Details of pollution control Systems:	Sr. No.	Source	Proposed to be installed		
		1	Air	By dispersal into atmosphere through chimney of adequate/ recommended height.		
		2	Water	Full-fledged ETP consisting of Multiple Effect Evaporator, condensate of which is treated by Primary, secondary and Tertiary treatment.		
		3	Noise	D.G. proposed of 2 MW		
34.	Environmental Management plan Budgetary Allocation	<ul style="list-style-type: none"> Capital cost (with break up): Zero Investment Existing EMP cost shall be used for proposed modernization of project. As there is not increment in pollution load. 				
35	EIA submitted (If yes then submit the salient features)	NOT APPLICABLE				
36	Public hearing report (If public hearing conducted then submit the salient features)	NOT APPLICABLE				
37	Air pollution, water pollution issues in the project area, if any	NO				
38	Storage of chemicals (inflammable/ explosive/ Hazardous/ Toxic substances)	Sr. No.	Raw Material	QTY MT/A	Nature (Solid/ liquid)	Source of material (Local/ Imported)
		1	Sulphur	140	Bright Yellow Granules	Local
		2	Ethylene	742	Liquid	Local

			Oxide			
		3	Mono Ethanol Amine	67	Liquid	Local
		4	DMAPA	71	Liquid	Local

2. Terms and conditions stipulated in even number environment clearance letter dated 8th April, 2015 remains the same.


 (S. M. Gavai)
 Member Secretary, SEIAA

Copy to:

1. Additional Secretary, MOEF, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
2. Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
3. The CCF, Regional Office, Ministry of Environment and Forest (Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No- 3, E-5, Ravi-Shankar Nagar, Bhopal- 462 016). (MP).
4. Commissioner, Municipal Corporation Greater Mumbai (MCGM)
5. Regional Office, MPCB, Mumbai
6. Collector, Mumbai
7. IA- Division, Monitoring Cell, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
8. Select file (TC-3)

(EC uploaded on 21/05/2016)