## STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

SEAC- 2015/CR-175 (I)/TC-2 Environment department Room No. 217, 2<sup>nd</sup> floor, Mantralaya Annex, Mumbai- 400 032. Dated: February, 2016.

To, M/s. SI Group India Ltd Plot No. E-89, MIDC Ranjangaon, Tal-Shirur, Dist- Pune

Subject: Environmental Clearance for proposed expansion of Synthetic Resin Production capacity by 300 MT / M to 800 MT / M at plot E-89, MIDC Ranjangaon Tal Shirur, Pune, M/s. SI Group

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification, 2006, by the State Level Expert Appraisal Committee-I, Maharashtra in its 112<sup>th</sup> meeting and decided to recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 93<sup>rd</sup> meeting.

2. It is noted that the proposal is considered by SEAC-I under screening category 5(f) B1 as per EIA Notification 2006.

## Brief Information of the project submitted by Project Proponent is as:

1	Name of the Project	M/s. SI Group India Ltd.
2	Project Proponent	Mr. Prabhakar Singh Plot No. E-89, MIDC Ranjangaon, Tal-Shirur, Dist- Pune
3	Consultant	M/s. Ultra-TechEnvironmental Consultancy & Laboratory
4	Accreditation of consultant (NABET Accreditation)	Ultra- Tech Accreditation of consultant (NABET Accreditation) NABET Accreditation Certificate No. NABET/EIA/1417/RA010
5	New Project / Expansion in existing project/ Modernization/ Diversification in exiting project	Modernization with Expansion

6	If expansion/ Diversification, whether environmental clearance has been obtained for existing project (If yes, enclose a copy with compliance table)	Environmental Clearance was not required for existing project.						
7	Activity schedule in the EIA Notification	·	5 (f)- Synthetic Organic					
8	Area Details		al plot area (Sq. n t up area (Sq. m.)					
9	Name of the Notified Industrial area / MIDC Area	Ran	jangaon MIDC a	irea.				
10	TOR given by SEAC? (If yes then specify the meeting)	Yes	, in 87 <sup>th</sup> SEAC 1	meeting				
11	Estimated capital cost of the Project (including cost for land, building, plant and machinery separately)	Tota	Total (Existing + Proposed): Rs. 66.31 Crores					
12	Location details of the project:	Latitude: Approx. 18°46'57.72"N Longitude: Approx. 74°16'46.39"E Location: Ranjangaon, Maharashtra Elevation above Mean Sea Level (meters): 644						
13	Distance from Protected Areas / Critically Polluted areas / Eco- sensitive areas / inter-State boundaries	No such establishment with in 10 Km. Radius (Study area)						
14	Raw materials (including process chemicals, catalysts, & additives).	#	Name of Raw materials	Existin g Qty. ( MT)	Propos ed Qty.( MT)	Remark		
		1 Phenol 425 720 After expansion 10 % phenol will be used as raw materia						
		2						
		3	Oxalic Acid - Catalyst	3.3	5.6	Catalyst as required		
		4						

15	Production details						
		#	Product	Existing MTM	Proposed increase MTM	Total MTM	
		1	Synthetic Resin	500	300	800	
		2	PF Moulding Powder	350	_	-	
		3	MF Moulding Powder	50	-	_	
		4	UF Moulding Powder	25		-	
16	Process details / manufacturing details	Phenol/ phenols are reacted with set quantity of Formaldehyde i.e. the reaction process executed/operated with Standardized/ fixed Phenol &Formaldehyde ratio in the presence of a catalyst under normal atmospheric pressure and under refluxed for fixed hours. On completion of reflux reaction, it is dehydrated with steam pressure (Max 150psi) and reaction water is collected separately. Dehydration is carried out to achieve standard melting point and flow. Further, Molten resin is discharged into trays for cooling and solidification. Solidified mass is broken into lump forms and sent to further process of reduction in particle size and Hexamine is being added or mixed according to requirements, the same is then blended, sieved & packed for dispatches.					
17	Rain Water Harvesting (RWH)	<ul> <li>Level of the Ground water table:</li> <li>Size and no of RWH tank(s) and Quantity:</li> <li>Location of the RWH tank(s):</li> <li>Size, nos of recharge pits and Quantity:</li> <li>Budgetary allocation (Capital cost and O&amp;M cost):</li> <li>O &amp; M cost Rs</li> </ul>					
18	Total Water Requirement	Total water requirement:  • Fresh water (CMD): 155 m³/d &  • Source: MIDC (Local)  • Recycled water (CMD): 80 m³/d					
10	Storm victor desires	0	Cooling: 50 m <sup>3</sup> / Process: NA Greening: 80 m <sup>3</sup> / Domestic: 40 m <sup>3</sup> Total (fresh water): 1:	/d /d 55 m <sup>3</sup> /d	1:4.1.		
19	Storm water drainage	e Ex	Natural water drainage Quantity of storm water Size of SWD: isting Plot. No new store	er:			

20	Sewage generation and treatment	<ul> <li>Amount of sewage generation (CMD): 32 m³/d</li> <li>Proposed treatment for the sewage: Up to Tertiary Treatment recycled for gardening.</li> <li>Capacity of the STP (CMD) - 35</li> <li>STP already provided.</li> </ul>						
21	Effluent characteristic	SR. NO.	PARAM ETER	RAW EFFLUE T	EN QUAI	ATED E LITY EB LIMI	TS	
		1.	pН	3.2 – 4.5	6.5-8.	5		
		2.	B.O.D	2000	Max.	100	Mg/li t.	
		3.	C.O.D	4000	Max.	250	Mg/li t.	
		4.	T.S.S.	162	Max.	100	Mg/li t.	
		5.	Oil & grease	5	Max.	,	Mg/li t.	
22	ETP details	<ul> <li>Amount of effluent generation (CMD):35 m³/day</li> <li>Amount of treated effluent recycled (CMD): 15 m³/day (direct recycle)</li> <li>Capacity of the ETP (CMD): 35 m³.</li> <li>Amount of water send to the Sewer Line (CMD): Nil</li> <li>Membership of the CETP (If require): No</li> </ul>						
24	Note on ETP technology to be used  Disposal of the ETP	Effluent Treatment Plant:  The total waste water generated is 35 m³/day, it is sent to ETP and treated up to secondary & tertiary treatment, meeting all MPCB parameters and then transferred to recycling. The sludge generated from ETP is sent to MEPL.  To be sent to CHWTSDF						
25	sludge (If applicable) Solid waste	Non Haza	Non Hazardous Solid waste:					
	Management	Non hazardo s solid waste generat n	Type of waste	Quanti ty Existin g	Quantity Propose d	Total	Managem ent	
		From Domestic Activities Waste Paper Kg/day Kg/day Kg/day Handed over to the authorize recyclers						
		From Boiler	Coal Ash	1.5 MT/da y	1.5 MT/day	1.5 MT/d ay	To Brick Manufactu rers	
		• Hazaı	rdous waste	is to be ser	nt to CHWT	SDF for	Disposal.	

	Details			Before Expansion and /or Substitutio	After Expansion and or/Substitu tion	
	Cate Kg/y	gory Number	1	150 Nos./Month	200 Nos./month	
	a. Containers b. ETP sludge c. Process waste (scale) d. Waste Oil e. Oil soaked Cotto Waste  (Furnish informatio for each relevant category ,out of 18 waste category separately)  Mode of treatment /disposal		n .	Nos./Month 80 Kg/day 50 Kg/day 0.75 KL/Month 0.30 MT/month Through Authorized agency	Less than 80 Kg/day 80 Kg/day 0.75 KL/Month 0.30 MT/month Through Authorized agency	
50	Inclu-	ding transport torage in each	n			
Atmospheric Emissions (Flue gas characteristics SPM, SO2, NOx, CO, etc.)	S. Poll No nt	of emissi on Boiler	Emission rate kg/h	1	ge/m³	
27 Stack emission Details: (All the stacks attached to process units, Boilers, captive power plant, D.G. Sets, Incinerator both for existing and proposed activity). Please indicate the specific section to which the stack is attached. e.g.: Process section, D.G.	Sr. No. 1 2	Chimney atta Boiler DG set	ached to	Stack ht. 31 mt. 9 mt		

28	Set, Boiler, Power Plant, incinerator etc. Emission rate (kg / hr) for each pollutant (SPM, SO2, NOx etc. should be specified Emission Standard						
		Pollutants (SPM,SO 2etc)	Emission Standard Limit (mg/Nm3)	Propose d Limit (Max.)	MPCB Consent		
		SPM	As Per MPCB Standards	150 mg/Nm 3	150 mg/Nm3		
		SO <sub>2</sub>	As Per MPCB Standards	 Kg/day	Within limit		
		SO <sub>2</sub> process	As Per MPCB Standards	ppm	Within limit		
29	Ambient Air Quality Data			······			
30	Details of Fuel to be used:	Coal – 9-13 MT/d Or FO 5-7.5 KL/d  Source of fuel: Local  Mode of transportation of fuel to site: By Road					
31	Energy	Power supply:268330 MW Existing power requirement: 258730KW Proposed power requirement: 9600 KW  DG sets: Number and capacity DG sets to be used: 1 Nos.					
		be used: NA			e energy proposed to		
32	Green Belt Development	• Existing 1	It area (Sq. m.): 15,8 No. of trees: 821 No size, age and specie ted: Nil	os.	be cut, trees to be		

33	Details of Pollution					
	Control Systems:	S.		Existin	Proposed to be installed	
		N		g		
		i)	Air	-	Dust Collector & Scrubber for Steam Boiler & Stack as per MPCB	
		ii)	Wate r	-	Domestic Effluent to ETP after septic tank. Full fledged Primary, Secondary and Tertiary for Trade Effluent, fully aerobic ETP	
		iii)	Nois e	-	Acoustic enclosures will be provided to D.G. Set. The noise levels in the day time shall be maintained 75dB(A) and 70 dB(A) during night time. Trees act as a Noise Buffer.	
		iv)	Solid Wast e	-	To Authorised Agency	
34	Environmental Management plan Budgetary Allocation	• (	Capital c	Present + I cost: 66.31 cost : 5 La	Cr.	
35	EIA Submitted (If yes then submit the salient features)	• }	l'es			
36	Public hearing report (If public hearing conducted then submit the salient features)	<ul> <li>Date of the public hearing: NA</li> <li>Name of the news paper in which the advertisement appeared: N.A.</li> <li>Location of the public hearing: NA</li> <li>Number of people attended the hearing: NA</li> <li>Objection(s) / Suggestion(s) if any: NA</li> </ul>				
37	Air pollution, water pollution issues in the project area, If any	NA				

38. Storage of chemicals (inflammable/explosive/hazardous/toxic substances)

Sr. No.	Storage Tank	Capacity		
1	Phenol	120 KL X 2 No.		
2	Formaldehyde	60 KL X 2 No.		
	Powder form			
3	Oxalic Acid	Store room		
4	Hexamine	Store room		

3. The proposal has been considered by SEIAA in its 93<sup>rd</sup> meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:

## General Conditions for Pre- construction phase:-

- (i) No additional land shall be used /acquired for any activity of the project without obtaining proper permission.
- (ii) This environmental clearance is issued subject to implementation of online air monitoring facility equipment.
- (iii) For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.
- (iv) Regular monitoring of the air quality, including SPM & SO2 levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.
- (v) Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area.
- (vi) Proper Housekeeping programmers shall be implemented.
- (vii) In the event of the failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieve.
- (viii) A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set.(If applicable)
- (ix) A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.
- (x) Arrangement shall be made that effluent and storm water does not get mixed.
- (xi) Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.
- (xii) Noise level shall be maintained as per standards. For people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.
- (xiii) The overall noise levels in and around the plant are 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 confirm to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989.
- (xiv) Green belt shall be developed & maintained around the plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
- (xv) Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.
- (xvi) Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.
- (xvii) The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
- (xviii) The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management and Handling) Rules, 2003 (amended). Authorization from the MPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes.
- (xix) The company shall undertake following Waste Minimization Measures:
  - Metering of quantities of active ingredients to minimize waste.
  - Reuse of by- products from the process as raw materials or as raw material substitutes in other process.
  - Maximizing Recoveries.

- Use of automated material transfer system to minimize spillage.
- (xx) Regular mock drills for the on-site emergency management plan shall be carried out. Implementation of changes / improvements required, if any, in the on-site management plan shall be ensured.
- (xxi) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (xxii) Transportation of ash will be through closed containers and all measures should be taken to prevent spilling of the ash.
- (xxiii) Separate silos will be provided for collecting and storing bottom ash and fly ash.
- (xxiv) Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department
- (xxv) The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in
- (xxvi) Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1<sup>st</sup> June & 1<sup>st</sup> December of each calendar year.
- (xxvii) A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
- (xxviii)The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their 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 the SPCB. The criteria pollutant levels namely; SPM, RSPM. SO<sub>2</sub>, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

130

- (xxix) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC 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 SPCB.
- (xxx) The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned 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 EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.
- 4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.

- 5. The Environment department reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.
- 6. **Validity of Environment Clearance**: The environmental clearance accorded shall be valid for a period of 7 years as per MoEF & CC Notification dated 29<sup>th</sup> April, 2015 to start of production operations.
- 7. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.
- 8. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.
- 9. Any appeal against this environmental clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1<sup>st</sup> Floor, D-, Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

(Malini Shankar) Member Secretary, SEIAA.

## Copy to:

- 1. Shri. R. C. Joshi, IAS (Retd.), Chairman, SEIAA, Flat No. 26, Belvedere, Bhulabhai desai road, Breach candy, Mumbai- 400026.
- 2. Shri T. C. Benjamin, IAS (Retired), Chairman, SEAC-I, 602, PECAN, Marigold, Behind Gold Adlabs, Kalyani Nagar, Pune 411014.
- **3.** Additional Secretary, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aligani, New Delhi-110003.
- **4.** Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
- 5. 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).
- 6. Regional Office, MPCB, Pune.
- 7. Collector, Pune
- **8.** IA- Division, Monitoring Cell, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aligani, New Delhi-110003.
- 9. Select file (TC-3)

(EC uploaded on 2/02/2016)