

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

SEAC-2015/CR- 346/TC-2
Environment department
Room No. 217, 2nd floor,
Mantralaya Annexe,
Mumbai- 400 032.
Date: 26th August, 2016

To,
M/s. Balaji Formalin Pvt. Ltd.
At unit at plot no N-32/1,
Addl Patalganga MIDC, Tal Khalapur,
Raigad.

Subject: Environment clearance for proposed Organic Chemical Manufacturing unit at plot no N-32/1, Addl Patalganga MIDC, Tal Khalapur, Raigad by M/s. Balaji Formalin Pvt. Ltd.

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 115th 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 98th & 101st meetings.

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 below:

1.	Name of Project:-	Proposed organic chemicals manufacturing plant at N-32/1 , Additional Patalganga MIDC, Khalapur, Dist : Raigad by M/s Balaji Chemicals, Now M/s. Balaji Formalin Pvt. Ltd.
2.	Project Proponent:-	Mr. Mukesh Gupta, Managing Director Address: c/o Balaji Formalin Ltd. ,1398, village Moti Bhoyan, Tal Kalol, Dist Ahmedabad Gujarat 382721 Email ID: mukesh@balajiformalin.com
3.	Consultant	MITCON Consultancy & Engineering Services Ltd.
4.	Accreditation of consultant (NABET Accreditation)	NABET-QCI Accredited category 'A' consultant
5.	New Project / Expansion in existing project/ Modernization/ Diversification in exiting project	New Project

6	If expansion/ Diversification, whether environmental clearance has been obtained for existing project (If yes, enclose a copy with compliance table)	NA			
7.	Activity schedule in the EIA Notification	5(f) Cat B			
8.	Area Details	Total plot area : 15,000 sqm (3.70 Acre)			
9.	Name of the Notified Industrial area / MIDC area	Additional Patalganga MIDC, Khalapur, Dist : Raigad			
10.	TOR given by SEAC? (If yeas then specify the meeting)	Yes 20 th & 21 st April 2015 by SEAC-1 in 100 th meeting			
11.	Estimated capital cost of the Project (including cost for land, building, plant and machinery separately)	No	Description	Capital Cost Rs. In Crore	
		1.	Land & Site Development	05.00	
		2.	Building/Premises	02.00	
		3.	Plant and Machinery/ Equipment	50.00	
		4.	Furniture and Fixture	00.20	
		5.	Any other Movable/ immovable Fixed Assets	18.00	
			Total	75.20	
12.	Location details of the project :	<ul style="list-style-type: none"> • 18°52'24.0"N 73°10'06.7"E • Location: Plot No. N-32/1, Additional Patalganga MIDC , Khalapur, Dist. Raigad , Maharashtra 			
13.	Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas / inter-State boundaries	Karnala Wild Life Sanctuary within 10 km radius of the study area			
14.	Raw materials (including process chemicals, Catalysts & additives).	Sr. No	Products/Co- products	Name of Raw Material	Quantity in MT/annum
		1	Formaldehyde	Methanol	68175
		2	Hexamine	Ammonia	3300
				Formaldehyde HA	21600
		3	Paraformaldehyde	Formaldehyde	56000
		4	Urea Formaldehyde Resin & Melamine Formaldehyde Resin	Formaldehyde	17250
				Urea	9000
				Caustic Soda	600
				Formic Acid	3
				Melamine	12000
5	Phenol	Formaldehyde	2075		

			Formaldehyde Resin	Phenol	1060		
				Caustic Soda	830		
				Water	1035		
		6	Silver Refining			SILVER (Catalyst)*	18
						Nitric Acid	15
						Reducing Agent	9
						Caustic	9
		7	Urea Formaldehyde Concentrate			Methanol	5040
						Urea	5100
						Caustic	40
						Water	2000
		8	Sulphonated Nephthalene Formaldehyde			Formaldehyde	3000
						Nephtalene	4220
						Sulfuric Acid	3440
						Caustic Soda	2540
						Lime Powder	440
						DM Water	14000
		9	Methylal (99.5 %)			Formaldehyde	19440
						Methanol	15480

15.	Production details	Name of Products, By products and Intermediate Products	Existing (T/Year)	Proposed Activity (new/modernization/expansion) (T/Year)
		Aqueous Formaldehyde (37% to 55% Concentration) – (AF)	-	150000
		Hexamine	-	6,000
		Paraformaldehyde (91-96%) (PFD)	-	20,000
		Urea Formaldehyde (UF) & Melamine Formaldehyde (MF) (Liquid Resin)	-	15,000
		And (or)		
		Urea Formaldehyde (UF) & Melamine Formaldehyde (MF) (Powder Resin)	-	7,500
		Phenol Formaldehyde (PF) (Liquid resin)	-	5000
		And (or)	-	
		Phenol Formaldehyde (PF) (Powder resin)	-	2500
		Silver refining	-	18
		Urea Formaldehyde Concentrate (UFC)	--	20000
		Sulphonated Naphthalene Formaldehyde (SNF) Superplasticizers (Liquid)	-	20000
		And (or)	-	
		Sulphonated Naphthalene Formaldehyde (SNF) Superplasticizers (Powder)	-	7000
Methylal (99.5%)	-	18000		
Total (Maximum)	-	254018		
16.	Process details / manufacturing details	<p>Product wise Manufacturing process is as below (in brief):</p> <ol style="list-style-type: none"> Aqueous Formaldehyde (37% to 55% Concentration) <ul style="list-style-type: none"> ❖ Evaporation of Methanol. ❖ Mixing of gaseous Methanol with air, steam and recycle gas. ❖ Oxidation of Methanol to Formaldehyde in an water cooled tubular catalytic Reactor. ❖ Absorption of Formaldehyde in De-Mineralized Water Urea Formaldehyde Concentrate (UFC- 85) <p>Whole process for the manufacturing of UFC-85 is same as manufacturing of aqueous formaldehyde except the absorbing media. In case of UFC-85, Formaldehyde-rich gas from the Reactor is fed to an Absorber where the Formaldehyde is absorbed in Urea Solution.</p> 		

		<p>3. Hexamine</p> <ul style="list-style-type: none"> ❖ Synthesis ❖ Evaporator cum Crystallization: ❖ Centrifuging: ❖ Drying: <p>4. Paraformaldehyde (96%) Concentration of aqueous Formaldehyde (37 – 55%) Polymerization and drying Concentration of distillates for recycling Conveying, pulverization and storage / packaging of the Product</p> <p>5. Urea Formaldehyde (UF) & Melamine Formaldehyde (MF) Resins Urea Formaldehyde resins, Melamine Formaldehyde and Melamine Urea Formaldehyde combination resins are manufactured in similar batch processes</p> <p>6. Phenol Formaldehyde Resins The Resol Resins are manufactured with Formaldehyde to Phenol molar ratio greater than one, normally in the range 1.4 to 1.6. Novolac Resins, in which the Formaldehyde to Phenol molar ratio is less than one, may be made using an acid catalyst although even then the acid would be a weak organic acid and not a mineral acid.</p> <p>7. Sulphonated Naphthalene Formaldehyde (SNF) Superplasticizers</p> <ul style="list-style-type: none"> ❖ Sulphonation ❖ Condensation ❖ Neutralization ❖ Filtration ❖ Storage & Handling <p>8. Methylal Methanol and Formaldehyde are pumped into the fixed bed Catalytic Reactor in appropriate proportions. The reaction temperature is controlled at 60 ~85 . The obtained mixing solution of Methylal, Methanol and water is heated for evaporation by the re-boiler steam at the bottom of distillation column. The compositions with low volatility are collected at the top through screen packing, while the heavy fraction remains at the column bottom. The azeotropic fraction of Methylal and Methanol from the column top is condensed and sent to the reflux tank. Part of it returns to the top of the tower for circulation, and part of it is collected as 92% Methylal solution, which is pumped to multi-pressure Distillation Column with a pressure range of 1.2 Mpa to 1.5</p> <p>9. Process of Silver Refining Stage-I -Process of making silver nitrate Stage-II Silver crystals Stage-III Melting Process</p>
17.	Rain Water Harvesting (RWH)	RWH structures will be provided to harvest the rain water from roof TOP area. The collected rain water will be utilized for plant uses to minimize the raw water requirement. The surface

		<p>water run-off from the terrace area would be led to a sump for settling and the over flow would be collected in the common water tank for further uses in the plant to minimize the raw water requirement of the plant.</p> <p>Total rain water harvested : 40830 m³/y</p> <ul style="list-style-type: none"> ➤ Roof top Rain Water harvesting Potential will be: 14511.6 m³ /y ➤ Rain Water harvesting Potential (storm water drainage)= 26325.6 m³ /y 																								
18.	Total Water Requirement	<p>Total water requirement:</p> <ul style="list-style-type: none"> • Fresh water (CMD) : 657 KLD & Source : MIDC <p>Use of the water:</p> <p>Industrial process : 433 CMD</p> <p>Cooling : 216 CMD</p> <p>Domestic: 8 CMD</p>																								
19.	Storm water drainage	Proper storm water drainage line will be provided to maintain the natural flow of storm water followed by rainwater harvesting																								
20.	Sewage generation and treatment	<ul style="list-style-type: none"> • Amount of sewage generation (CMD) : 07 KLD • Proposed treatment for the sewage: The Domestic wastewater @ 8.0 KL/day will be treated in STP. Water generated in various manufacturing process will be recycled to AF- 37 plant. 																								
21.	Effluent characteristic	<p>Representative samples collected from similar unit working nearby Ahmedabad. The characteristic of waste water was observed as below</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Parameters</th> <th>Unit</th> <th>Observed values</th> </tr> </thead> <tbody> <tr> <td>pH</td> <td>-</td> <td>7.5</td> </tr> <tr> <td>Color</td> <td>-</td> <td>Colourless</td> </tr> <tr> <td>SS</td> <td>mg/lit</td> <td>195</td> </tr> <tr> <td>TDS</td> <td>mg/lit</td> <td>1209</td> </tr> <tr> <td>BOD</td> <td>mg/lit</td> <td>15</td> </tr> <tr> <td>COD</td> <td>mg/lit</td> <td>85</td> </tr> <tr> <td>Oil & Grease</td> <td>mg/lit</td> <td>4.5</td> </tr> </tbody> </table>	Parameters	Unit	Observed values	pH	-	7.5	Color	-	Colourless	SS	mg/lit	195	TDS	mg/lit	1209	BOD	mg/lit	15	COD	mg/lit	85	Oil & Grease	mg/lit	4.5
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22.	ETP details	<p>Effluent Generation: 132 KL/day of effluent will be collected and treated in the ETP. 84 KL/day of treated water will be reused for the cooling and washing activities.</p> <p>RO Reject Water adhering to prescribed water will be used for Gardening Purpose otherwise RO Reject Water will be taken to ETP.</p>																								
23.	Note on ETP technology to be used	<p>Collection Tank: Effluent coming from DM plant, blow down tank, cooling tower purge etc. will be collected and equalized by means of flow and quality in this tank. Equalized effluent will be sent to Neutralization tank through gravity.</p> <p>Neutralization Tank: Effluent coming from collection tank will be collected and neutralized in this tank with the help of acid / alkali solution as per requirement.</p> <p>Neutralized effluent will be sent to filter press / filter notch trough neutralized effluent pump.</p>																								

		<p>Filer Press: Effluent from the Neutralization tank will be filtered in the filter press / Notch filter. Filtrate is taken to the treated effluent holding tank through gravity and solid cake if any is taken to the sludge drying beds.</p> <p>Treated Effluent Holding Tank: Finally treated waste water confirming Maharashtra Pollution Control Board norms will be stored in the effluent holding tank from there it will be utilized for cooling, washing, greenbelt development etc. Unit committed to no discharge of effluent outside the factory premises</p>			
24.	Disposal of the ETP sludge (If applicable)	will take appropriate membership of the TSDF site for disposal			
25.	Solid waste Management	Source	Type of Waste	Quantity Per Annum	Method of Disposal
ETP		Sludge & Silt	300 MT	Collection, storage, Transportation & Disposal at TSDF	
Raw Material Storage & Handling		Discarded bags	5, 00,000 nos.	Collection, Storage, Decontamination, Transportation and disposal by selling / recycling/reusing to vendors	
Plant and Machineries		Spent /Used Oil	100 Liters	Collection, Storage and used for lubrication within the premises OR sell to registered reprocessors/ MoEF approved recyclers	
		Wastes/residues containing oil	0.5 MT	Collection, Storage, Transportation & Disposal at CHWIF	
DM Plant		Spent Resin	10 KL/year	Collection, Storage, Transportation & Disposal by co-processing in cement kiln	
26.	Atmospheric Emissions (Flue gas characteristics SPM, SO ₂ , NO _x , CO, etc.)	<p>PM₁₀ < 150 mg/Nm³ HC as CH₄ < 15 mg/Nm³ Benzene < 90 mg/Nm³ Formaldehyde < 10 mg/Nm³ SO₂ < 100 PPM NO_x < 50 PPM</p>			

27.	<p>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. Set, Boiler, Power Plant, incinerator etc. Emission rate (kg/hr.) for each pollutant (SPM, SO₂, NO_x, etc. should be specified</p>	<table border="1"> <thead> <tr> <th data-bbox="616 208 679 349">Sr. No.</th> <th data-bbox="679 208 831 349">Stack Attached To</th> <th data-bbox="831 208 959 349">Type of Fuel</th> <th data-bbox="959 208 1059 349">Height (m)</th> <th data-bbox="1059 208 1150 349">Diameter</th> <th data-bbox="1150 208 1289 349">Concentration of Pollutants</th> <th data-bbox="1289 208 1418 349">Air Pollution Control</th> </tr> </thead> <tbody> <tr> <td data-bbox="616 349 679 461">1</td> <td data-bbox="679 349 831 461">Steam Boiler (5 TPH)</td> <td data-bbox="831 349 959 461">Furnace Oil</td> <td data-bbox="959 349 1059 461">48</td> <td data-bbox="1059 349 1150 461">0.45</td> <td data-bbox="1150 349 1289 461" rowspan="3">PM ≤ 150 mg/Nm³ SO₂ ≤ 100 ppm NO_x ≤ 50 ppm</td> <td data-bbox="1289 349 1418 461" rowspan="3">Adequate stack</td> </tr> <tr> <td data-bbox="616 461 679 640">2</td> <td data-bbox="679 461 831 640">D.G.Set-1 (1000 KVA), Stand-by</td> <td data-bbox="831 461 959 640">Diesel</td> <td data-bbox="959 461 1059 640">6</td> <td data-bbox="1059 461 1150 640">0.2</td> </tr> <tr> <td data-bbox="616 640 679 819">3</td> <td data-bbox="679 640 831 819">D.G.Set-2 (1000 KVA), Stand-by</td> <td data-bbox="831 640 959 819">Diesel</td> <td data-bbox="959 640 1059 819">6</td> <td data-bbox="1059 640 1150 819">0.2</td> </tr> </tbody> </table>							Sr. No.	Stack Attached To	Type of Fuel	Height (m)	Diameter	Concentration of Pollutants	Air Pollution Control	1	Steam Boiler (5 TPH)	Furnace Oil	48	0.45	PM ≤ 150 mg/Nm ³ SO ₂ ≤ 100 ppm NO _x ≤ 50 ppm	Adequate stack	2	D.G.Set-1 (1000 KVA), Stand-by	Diesel	6	0.2	3	D.G.Set-2 (1000 KVA), Stand-by	Diesel	6	0.2
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28.	Emission Standard	Pollutants (SPM, SO ₂ , ETC)		Proposed Limit (mg/Nm ³)																												
		SPM/TPM		<150																												
		SO ₂		<100 ppm																												
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29.	Ambient Air Quality Data	<table border="1"> <thead> <tr> <th data-bbox="616 1133 754 1312">Pollutant</th> <th data-bbox="754 1133 935 1312">Permissible Standard µg/m³</th> <th data-bbox="935 1133 1134 1312">Proposed/ Resultant Concentration (in µg/m³)</th> <th data-bbox="1134 1133 1386 1312">Remarks</th> </tr> </thead> <tbody> <tr> <td data-bbox="616 1312 754 1346">PM₁₀</td> <td data-bbox="754 1312 935 1346">100</td> <td data-bbox="935 1312 1134 1346">34.02</td> <td data-bbox="1134 1312 1386 1659" rowspan="3">Provision of pollution control equipment's, stacks & dust suppression method & by developing green belt around the factory and within the premises</td> </tr> <tr> <td data-bbox="616 1346 754 1379">SO₂</td> <td data-bbox="754 1346 935 1379">80</td> <td data-bbox="935 1346 1134 1379">21.35</td> </tr> <tr> <td data-bbox="616 1379 754 1659"></td> <td data-bbox="754 1379 935 1659"></td> <td data-bbox="935 1379 1134 1659"></td> </tr> </tbody> </table>					Pollutant	Permissible Standard µg/m ³	Proposed/ Resultant Concentration (in µg/m ³)	Remarks	PM ₁₀	100	34.02	Provision of pollution control equipment's, stacks & dust suppression method & by developing green belt around the factory and within the premises	SO ₂	80	21.35															
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30.	Details of Fuel to be used:	Sr. No	Fuel	Daily Consumption (TPD/KLD)		• Source of electricity: MSEDCL.
				Existing	Proposed	
		1	Gas	-		
		2	Naphtha	-		
		3	HSD (diesel for DG Set)	-	0.5 KL/hr	
		4	Fuel Oil (Furnace)	-	120 M/Month	
		5	Coal	-		
		6	Lignite	--		
7	Electricity	-	4 MVA			
31.	Energy	<p>Power supply:</p> <ul style="list-style-type: none"> Existing power requirement: Nil Proposed power requirement: 4 MVA <p>DG sets:</p> <ul style="list-style-type: none"> Number and capacity DG sets to be used (existing and proposed) : 2 Nos. (1000 KVA) <p>Details of the non-conventional renewable energy proposed to be used : None</p>				
32.	Green Belt Development	Green belt area (Acre.): 5292.87 sqm. (i.e. 1.3 Acre)				
33.	Details of Pollution Control Systems:	Sr. No.		Existing pollution control system	Proposed to be installed	
		1	Air	NA--	Absorbers: 2 nos. Cyclone: 5 nos. Water Separator: 1 nos. Bag filter followed by Water Scrubber: 2 nos. Caustic Scrubber: 1 nos. Alkaline Scrubber: 1 nos. Stack of 48 m:1	
		2	Water	NA--	STP & ETP	
		3	Noise	NA--	Acoustic Enclosures will be provided	
		4	Solid Waste	NA	TSDF site/Recycled and Reused	
34.	Environmental Management plan Budgetary Allocation	<ul style="list-style-type: none"> Capital cost of Project: Rs. 75.20 Crore Environmental Protection Measures : One Time Capital Cost : Rs. 195 Lakh Recurring cost : Rs. 18 Lakh 				

No.	Particulars	INR, Lakhs																								
One Time Installation Cost (Capital Cost)																										
1	Air Pollution Control System (Process absorber, Cyclone Separator, Bag filter, caustic scrubber, Stack etc.)	100																								
2	Noise Control System	10																								
3	Green Belt Development	10																								
4	Environment Monitoring and Management	5																								
5	Water Pollution Control System – ETP/STP	65																								
6	Occupational Health & Safety	5																								
	Total	195																								
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1	Environmental Monitoring	2																								
2	General Maintenance of ETP	7																								
3	Greenbelt maintenance	1.5																								
4	Noise Pollution Control	1																								
5	Occupational Health	1.5																								
6	Environmental Management	2																								
7	Corporate Social Responsibility	3																								
	Total	18																								
35.	EIA Submitted (If yes then submit the salient features)	<p>Baseline data collection has been initiated from March to May 2015, EIA EMP prepared and submitted.</p> <table border="1"> <thead> <tr> <th>Particulars</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>Latitude</td> <td>18°52'24.0"N</td> </tr> <tr> <td>Longitude</td> <td>73°10'06.7"E</td> </tr> <tr> <td>Site Address</td> <td>M/s Balaji Chemicals Plot No. N-32/1, Additional Patalganga MIDC, Khalapur, Dist. Raigad, Maharashtra</td> </tr> <tr> <td>Accessibility</td> <td>Nearest village – Karade – 0.5 km Nearest Railway station – Rasyani – 2.88 km Nearest Airport – Chhatrapati Shivaji ,Mumbai – 33 kms Mumbai – Pune NH4 way : 4.6 km</td> </tr> <tr> <td>No. of villages/Pada in</td> <td>94</td> </tr> <tr> <td>Total Population</td> <td>140403</td> </tr> <tr> <td>Nearest River /Water Body</td> <td>Patalganga River (1.2 km)</td> </tr> <tr> <td>Nearest IMD Observatory</td> <td>Bhira</td> </tr> <tr> <td>Religious /</td> <td>None</td> </tr> <tr> <td>Archaeological</td> <td>Karnala Fort</td> </tr> <tr> <td>Ecological</td> <td>Karnala Wild Life Sanctuary within</td> </tr> </tbody> </table>	Particulars	Details	Latitude	18°52'24.0"N	Longitude	73°10'06.7"E	Site Address	M/s Balaji Chemicals Plot No. N-32/1, Additional Patalganga MIDC, Khalapur, Dist. Raigad, Maharashtra	Accessibility	Nearest village – Karade – 0.5 km Nearest Railway station – Rasyani – 2.88 km Nearest Airport – Chhatrapati Shivaji ,Mumbai – 33 kms Mumbai – Pune NH4 way : 4.6 km	No. of villages/Pada in	94	Total Population	140403	Nearest River /Water Body	Patalganga River (1.2 km)	Nearest IMD Observatory	Bhira	Religious /	None	Archaeological	Karnala Fort	Ecological	Karnala Wild Life Sanctuary within
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		Seismic Zone	II
36.	Public hearing report (If public hearing conducted then submit the salient features)	NA.	
37.	Air pollution, water pollution issues in the project area, If any	No	
38.	<p>Storage of chemicals (inflammable/explosive/hazardous/toxic substances)</p> <p>List of Hazardous chemicals as per MSIHC Rules</p> <p>The following hazardous chemicals will be stored as per the MSIHC Rules:--</p> <ul style="list-style-type: none"> ❖ Methanol (88695 MTPA) ❖ Ammonia (3300 MTPA) ❖ Formaldehyde (150000 MTPA) ❖ Caustic soda (4019 MTPA) ❖ Suphuric acid (3440 MTPA) ❖ Nitric acid (15 MTPA) ❖ Formic acid and other misc. organic compound (15 MTPA) 		

3. The proposal has been considered by SEIAA in its 98th & 101st meetings & 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 :

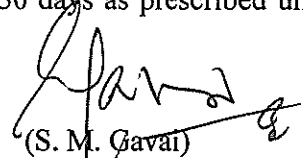
General Conditions for Pre- construction phase:-

- (i) This environment clearance is issued subject to achieving Zero Liquid Discharge (ZLD) and installation of on line air monitoring facility equipment's.
- (ii) PP to take utmost precaution for the health and safety of the people working in the unit as also for protecting the environment.
- (iii) No additional land shall be used /acquired for any activity of the project without obtaining proper permission.
- (iv) For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.
- (v) Proper Housekeeping programmers shall be implemented.
- (vi) 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.
- (vii) A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set.(If applicable)
- (viii) A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.
- (ix) Arrangement shall be made that effluent and storm water does not get mixed.
- (x) 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.

- (xi) 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.
- (xii) 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.
- (xiii) 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.
- (xiv) 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.
- (xv) Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.
- (xvi) The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
- (xvii) 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.
- (xviii) 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.
- (xix) 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.
- (xx) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (xxi) 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.
- (xxii) 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>

- (xxiii) 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 1st June & 1st December of each calendar year.
- (xxiv) 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.
- (xxv) 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, SO₂, NO_x (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.
- (xxvi) 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.
- (xxvii) The environmental statement for each financial year ending 31st 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 29th 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, 1st Floor, D-, Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.


(S. M. Gavai)
Member Secretary, SEIAA.

Copy to:

1. Shri T. C. Benjamin, IAS (Retired), Chairman, SEAC-I, 602, PECAN, Marigold, Behind Gold Adlabs, Kalyani Nagar, Pune – 411014. .
2. Additional Secretary, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
3. Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
4. 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).
5. Regional Office, MPCB, Raigad.
6. Collector, Raigad
7. IA- Division, Monitoring Cell, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
8. Select file (TC-3)

(EC uploaded on)