

# **LG POLYMERS INDIA PVT. LTD.**

**SY. NO.S 29 TO 45, 83/1 AND 83/3,  
RR VENKATAPURAM VILLAGE, PENDURTI MANDAL,  
VISAKHAPATNAM DISTRICT, ANDHRA PRADESH**

## **FORM I**

LG Polymers India Pvt. Ltd.  
Sy. No.s 29 to 45, 83/1 and 83/3,  
RR Venkatapuram Village, Pendurti Mandal, Visakhapatnam  
District, Andhra Pradesh – 530 029  
Phone :+91 91000 40246  
E-mail: [ppcmohan@lgpi.co.in](mailto:ppcmohan@lgpi.co.in); [ppcmohan@lgchem.com](mailto:ppcmohan@lgchem.com);  
[N Satyanarayana@lgpi.co.in](mailto:N_Satyanarayana@lgpi.co.in)

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**SUBMITTED TO  
MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE  
GOVERNMENT OF INDIA  
INDIRA PARYAVARAN BHAWAN, JOR BAGH ROAD, NEW DELHI**

**APPENDIX – I**  
**(See Paragraph – 6)**  
**FORM I**

**I) Basic Information**

S.No.	Item	Details
1	Name of the Project/s	<b>LG Polymers India Pvt. Ltd.</b>
2	S. No in the Schedule	5 (e) –A category (Petrochemical based processing)
3	Proposed capacity/area/length/tonnage to be handled/command area/lease area/number of wells to be drilled	Existing Capacity: 415 TPD Proposed Capacity: 240 TPD <b>Total after Expansion: 655 TPD</b>  <b>Total Site Area: 213 acres (Existing)</b> <b>Project Cost: 168 Crores</b>
4	New/Expansion/Modernization	Expansion
5	Existing Capacity/Area etc.	415 TPD
6	Category of Project i.e 'A' or 'B'	"A"
7	Does it attract the general condition? If yes, please specify	No
8	Does it attract the Specific condition? If yes, please specify.	No
9	Location Plot/Survey/Khasra No. Village Tehsil District	Sy. No.s 29 to 45, 83/1 and 83/3, RR Venkatapuram Village Pendurti Mandal Visakhapatnam District
	State	Andhra Pradesh
10	Nearest railway station/airport along with distance in km.	Railway Station: Simhachalam– 0.35 Km Airport: Visakhapatnam Airport – 2.3 Km
11	Nearest Town, City, District Headquarters along with distance in kms.	Gopalapatnam – 0.2 Km
12	Village Panchayats, Zilla Parishad, Municipal Corporation, Local body (complete postal address with telephone nos. to be given)	RR Venkatapuram –Village Panchayat
13	Name of the Applicant	P P. Chandra Mohan Rao
14	Registered Address	<b>LG Polymers India Pvt. Ltd.</b> Sy. No.s 29 to 45, 83/1 and 83/3, RR Venkatapuram Village, Pendurti Mandal, Visakhapatnam District, Andhra Pradesh – 530 029
15	Address for Correspondence:	
	Name	P P. Chandra Mohan Rao
	Designation(Owner/Partner/CEO)	Director - Operations
	Address	Sy. No.s 29 to 45, 83/1 and 83/3, RR Venkatapuram Village, Pendurti Mandal, Visakhapatnam District, Andhra Pradesh
	Pin Code	530 029
	E-mail	<a href="mailto:ppcmohan@lgpi.co.in">ppcmohan@lgpi.co.in</a> ; <a href="mailto:ppcmohan@lgchem.com">ppcmohan@lgchem.com</a> ; <a href="mailto:N_Satyanarayana@lgpi.co.in">N_Satyanarayana@lgpi.co.in</a>



	Telephone Number	0891-2520934 Mobile: +91 9949095186
	Fax No.	0891-2520538
16	Details of alternative Sites examined, if any. Location of these sites should be shown on a topo sheet.	No
17	Interlinked Projects	Not applicable
18	Whether separate application of interlinked project has been submitted?	-NA-
19	If yes, date of submission	-NA-
20	If no, reason	
21	Whether the proposal involves approval/clearance under: if yes, details of the same and their status to be given. (a) The Forest (Conservation) Act, 1980? (b) The Wildlife (Protection) Act, 1972? (c) The C.R.Z Notification, 1991?	-NA-
22	Whether there is any Government Order/Policy relevant/relating to the site?	No
23	Forest land involved (hectares)	No
24	Whether there is any location pending against the project and /or land in which the project is propose to be set up? (a) Name of the Court (b) Case No (c) Orders/directions of the Court, if any and its relevance with the proposed project.	No

**(II) Activity**
**1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)**

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	<b>NO</b>	There will not be any change in land use. The proposal is for expansion of existing unit.
1.2	Clearance of existing land, vegetation and buildings?	<b>NO</b>	
1.3	Creation of new land uses?	<b>NO</b>	
1.4	Pre-construction investigations e.g. bore houses, soil testing?	<b>YES</b>	Soil test done
1.5	Construction works?	<b>YES</b>	Construction activity involves creation of Production Blocks, Utilities and enhancement of effluent treatment system.
1.6	Demolition works?	<b>NO</b>	
1.7	Temporary sites used for construction works or housing of construction workers?	<b>NO</b>	Construction labor from local villages shall be employed.
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations	<b>YES</b>	Storage facilities shall be constructed. No major cut and fill or excavation is anticipated.
1.9	Underground works including mining or tunneling?	<b>NO</b>	No underground works like mining and tunneling.
1.10	Reclamation works?	<b>NO</b>	
1.11	Dredging?	<b>NO</b>	
1.12	Offshore structures?	<b>NO</b>	
1.13	Production and manufacturing processes?	<b>YES</b>	Enclosed in <b>Annexure – I</b>
1.14	Facilities for storage of goods or materials?	<b>NO</b>	Raw materials shall be stored with in factory premises. Materials in bags and drums will be stored in flame proof ware houses.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	<b>YES</b>	Effluents from process and utilities are treated in effluent treatment system. Domestic effluent sent to STP. ETP sludge is sent to TSDF. Details of waste treatment facilities presented in <b>Annexure II</b>
1.16	Facilities for long term housing of operational workers?	<b>NO</b>	Operational workers stay in surrounding villages.
1.17	New road, rail or sea traffic during construction or operation?	<b>YES</b>	Construction materials shall be transported to the site. The traffic density of the existing connecting road is negligible.
1.18	New road, rail, air waterborne or other transport infrastructure	<b>NO</b>	



	including new or altered routes and stations, ports, airports etc?		
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	<b>NO</b>	
1.20	New or diverted transmission lines or pipelines?	<b>NO</b>	
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	<b>NO</b>	
1.22	Stream crossings?	<b>NO</b>	All raw materials and waste streams are pumped through pipe lines above ground level.
1.23	Abstraction or transfers of water from ground or surface waters?	<b>YES</b>	Total water required shall be met from Municipal (GVMC) supply. Total water required shall be 960 KLD.
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	<b>NO</b>	
1.25	Transport of personnel or materials for construction, operation or decommissioning?	<b>YES</b>	The construction material shall be drawn from local sources within 10 km. There is no transport of personnel, as the construction workers shall be drawn from local villages.
1.26	Long-term dismantling or decommissioning or restoration works?	<b>NO</b>	
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	<b>NO</b>	
1.28	Influx of people to an area in either temporarily or permanently?	<b>YES</b>	The proposed expansion will increase the employment potential.
1.29	Introduction of alien species?	<b>NO</b>	
1.30	Loss of native species or genetic diversity?	<b>NO</b>	There are no major losses of tree/shrub species.
1.31	Any other actions?	<b>NO</b>	

**2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):**

S.No.	Information/checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)	<b>YES</b>	Land area: 213 acres Sy. No.s 29 to 45, 83/1 and 83/3, RR Venkatapuram Village, Pendurti Mandal, Visakhapatnam District, Andhra Pradesh.
2.2	Water (expected source & competing users) unit: KLD	<b>YES</b>	Total water required shall be met from Municipal (GVMC) supply. Total water required shall be 960 KLD. <b>(Water Balance Enclosed in Annexure III)</b>
2.3	Minerals (MT)	<b>NA</b>	
2.4	Construction material – stone, aggregates, sand / soil (expected source – MT)	<b>YES</b>	Shall be sourced from the local villages.
2.5	Forests and timber (source – MT)	<b>NO</b>	
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (T), energy (MW)	<b>YES</b>	<p>The required energy shall be drawn from Transco. Standby DG sets of 1 X 1500 kVA and 1 x 1000 kVA are proposed in addition to existing 1 x 500 kVA and 4 x 1000 kVA. It is proposed to replace existing 1 x 1000 kVA out of 4 x 1000 kVA with 1 x 1500 kVA capacity after expansion.</p> <p>It is proposed to establish Furnace Oil fired boiler of capacity 1 x 5 TPH in addition to existing 1 x 5 TPH and 1 x 8TPH Furnace Oil fired boilers.</p> <p>It is proposed to keep existing 1 x 8 TPH Oil fired boiler as standby after expansion.</p> <p>No additional Thermic fluid heaters are proposed. The existing 1 x 10 Lac K. Cal/r anf 1 x 12 Lac K.Cal/hr thermic fluid heaters will meet the requirement after expansion.</p> <p>Total fuel requirement will be around 9 TPD (Furnace Oil).</p>
2.7	Any other natural resources (use appropriate standard units)	<b>NA</b>	

**3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.**

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)	<b>YES</b>	Hazardous chemicals shall be used for manufacturing of Polystyrene and Expandable Polystyrene. MSIHC rules shall be followed during storage, transportation and handling of raw materials. Hazardous chemicals and solvent shall be stored and handled in closed systems.
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases).	<b>NO</b>	
3.3	Affect the welfare of people e.g. by changing living conditions?	<b>YES</b>	Shall increase the employment potential for locals and affect the living conditions for betterment.
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,	<b>NO</b>	No sensitive receptors are present in the immediate vicinity of the site. The project shall not have any significant impact on vulnerable groups of people.
3.5	Any other causes	<b>NO</b>	

**4. Production of solid wastes during construction or operation or decommissioning (MT/month)**

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
4.1	Spoil, overburden or mine wastes	<b>NO</b>	
4.2	Municipal waste (domestic and or commercial wastes)	<b>YES</b>	Wastes from canteen, other commercial wastes like paper, empty containers etc.
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	<b>YES</b>	Hazardous waste generation during construction shall be limited to waste oils, batteries and containers of paints etc. The quantity of hazardous wastes generated during operation contain ETP sludge, process wastes etc.
4.4	Other industrial process wastes	<b>YES</b>	Enclosed at <b>Annexure IV</b>
4.5	Surplus product	<b>NO</b>	
4.6	Sewage sludge or other sludge from effluent treatment	<b>YES</b>	Sludge from Effluent treatment plant shall be sent to TSDF.
4.7	Construction or demolition wastes	<b>NO</b>	Construction activities involve creation of Production Blocks, Utilities and enhancement of effluent treatment system.
4.8	Redundant machinery or equipment	<b>NO</b>	
4.9	Contaminated soils or other materials	<b>NO</b>	All pipe lines including pipe lines of waste streams are above ground level to eliminate the possibility of any contamination due to seepage and for ease of maintenance.
4.10	Agricultural wastes	<b>NO</b>	
4.11	Other solid wastes	<b>YES</b>	

**5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr)**

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	<b>YES</b>	Furnace Oil will be used as fuel. Emissions details are enclosed in <b>Annexure V</b>
5.2	Emissions from production processes	<b>NO</b>	
5.3	Emissions from materials handling including storage or transport	<b>NO</b>	Material transfer takes place in closed pipeline system.
5.4	Emissions from construction activities including plant and equipment	<b>YES</b>	Dust may rise during transport of material and construction activity. The dust emissions shall be mitigated by water spraying on the roads within the premises.
5.5	Dust or odors from handling of materials including construction materials, sewage and waste	<b>NO</b>	Domestic wastewater sent to STP and treated wastewater reused for greenbelt development with plant premises.
5.6	Emissions from incineration of waste	<b>NO</b>	
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	<b>NO</b>	
5.8	Emissions from any other sources	<b>NO</b>	



**6. Generation of Noise and Vibration, and Emissions of Light and Heat:**

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	<b>YES</b>	Material transport and construction equipment shall be source of noise, while transfer pumps, DG sets are the sources of noise during operation.
6.2	From industrial or similar processes	<b>YES</b>	Noise generated from DG sets shall be controlled by providing Acoustic Enclosures.
6.3	From construction or demolition	<b>YES</b>	Noise during construction shall be due to construction equipment and emergency DG sets.
6.4	From blasting or piling	<b>NO</b>	
6.5	From construction or operational traffic	<b>NO</b>	The increased traffic shall not have any significant impact.
6.6	From lighting or cooling systems	<b>NO</b>	
6.7	From any other sources	<b>NO</b>	

**7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:**

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	<b>NO</b>	All the hazardous materials will be stored in MS drums, in a covered shed and no contamination of soil is expected. Same philosophy will be followed for the after expansion
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	<b>NO</b>	All the waste from domestic operations sent to STP and treated wastewater reused for greenbelt development with plant premises.
7.3	By deposition of pollutants emitted to air into the land or into water	<b>NO</b>	
7.4	From any other sources	<b>NO</b>	
7.5	Is there a risk of long term build up of pollutants in environment from these sources?	<b>NO</b>	

**8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment**

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances	<b>YES</b>	All Inbuilt Safety precautions will be adopted and there will not be any damage to environment or human health
8.2	From any other causes	<b>NA</b>	
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. Floods, earthquakes, landslides, cloudburst etc)?	<b>NO</b>	

**9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality**

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
9.1	Lead to development of supporting facilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: <ul style="list-style-type: none"> <li>• Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.)</li> <li>• housing development</li> <li>• extractive industries</li> <li>• supply industries</li> <li>• other</li> </ul>	<b>YES</b>	The proposed expansion shall enhance the socio economic status of the area by increasing the demand for housing, improving the employment.
9.2	Lead to after-use of the site, which could have impact on the environment	<b>NO</b>	
9.3	Set a precedent for later developments	<b>NO</b>	
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	<b>NO</b>	The baseline environmental status of the surrounding areas is within the prescribed limits as observed from the Secondary data.



**(III) Environmental Sensitivity**

S.No.	Areas	Name/ Identity	Aerial distance (within 15 km.) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	NA	
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	YES	Kailasakonda Forest – 0.5 km –E Narava RF – 5.2 km – E Yerrakonda RF – 4.3 km – NE Kambalakonda RF – 5.4 km – NE Meghadri Gedda Reservoir – 2 km – NW
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	NA	
4	Inland, coastal, marine or underground waters	NO	
5	State, National boundaries	NO	
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	NO	
7	Defense installations	NO	
8	Densely populated or built-up area	YES	Nearest habitation from the site is RR Venkatapuram village.
9	Areas occupied by sensitive man-made land uses ( <i>hospitals, schools, places of worship, community facilities</i> )	NA	
10	Areas containing important, high quality or scarce resources ( <i>ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals</i> )	NO	
11	Areas already subjected to pollution or environmental damage. ( <i>those where existing legal environmental standards are exceeded</i> )	NO	
12	Areas susceptible to natural hazard which could cause the project to present environmental problems ( <i>earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions</i> )	NO	



**(IV) Proposed Terms of Reference for EIA studies**

**Scope of Work of EIA**

The standard terms of reference (page 181-187) issued by the Ministry of Environment Forest and Climate change shall be followed for preparation of EIA report. Any additional study proposed by the EAC shall also be completed.

Ref: Standard Terms of Reference (TOR) for EIA/EMPO report for projects/activities requiring environmental clearance under EIA notification, 2006, MoEFCC, GOI, and April 2015.

I hereby give the undertaking that data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at our risk and cost.

Date: 22/12/2017

Place: Visakhapatnam



Signature of the applicant  
With Name and Full Address  
(Project Proponent/Authorized Signatory)

**P P Chandra Mohan Rao**  
Director-Operations  
LG Polymers India Pvt. Ltd.  
RR Venkatapuram Village,  
Pendurti Mandal,  
Visakhapatnam District,  
Andhra Pradesh – 530 029.

# **LG POLYMERS INDIA PVT. LTD.**

**SY. NO.S 29 TO 45, 83/1 AND 83/3,  
RR VENKATAPURAM VILLAGE, PENDURTI MANDAL,  
VISAKHAPATNAM DISTRICT, ANDHRA PRADESH**

## **ANNEXURES**

LG Polymers India Pvt. Ltd.  
Sy. No.s 29 to 45, 83/1 and 83/3,  
RR Venkatapuram Village, Pendurti Mandal, Visakhapatnam  
District, Andhra Pradesh – 530 029  
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[N\\_Satyanarayana@lgpi.co.in](mailto:N_Satyanarayana@lgpi.co.in)

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**SUBMITTED TO  
MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE  
GOVERNMENT OF INDIA  
INDIRA PARYAVARAN BHAWAN, JOR BAGH ROAD, NEW DELHI**

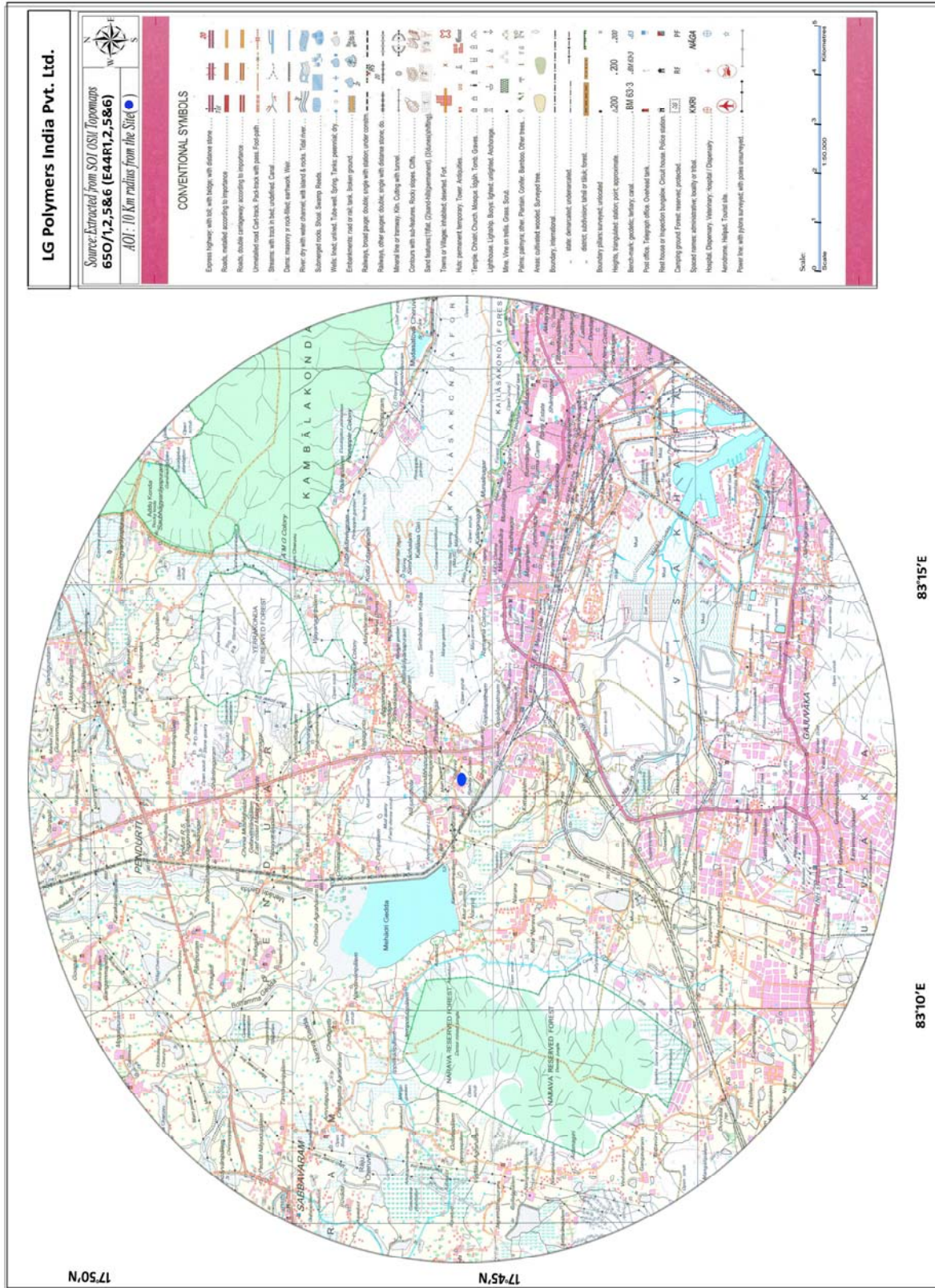


Fig A.1 Location Map of LG Polymers India Pvt. Ltd.





**ANNEXURE - I**

M/s. LG Polymers India Pvt. Ltd. has valid consent for operation vides order no. APPCB/VSP/VSP/14082/HO/CFO/2017 dated 19.01.2017 valid till 31.12.2021. It is proposed to expand the manufacturing capacity from 415 TPD to 655 TPD in an existing area of 213 acres. The capital cost for expansion is Rs. 168 crores, towards, additional production block, utilities and enhancement of treatment system at Sy. No.s 29 to 45, 83/1 and 83/3, RR Venkatapuram Village, Pendurti Mandal, Visakhapatnam District, Andhra Pradesh. The proposed expansion has employment potential of 300 nos. The proposed list of products and manufacturing capacity is presented in **Table A-1**.

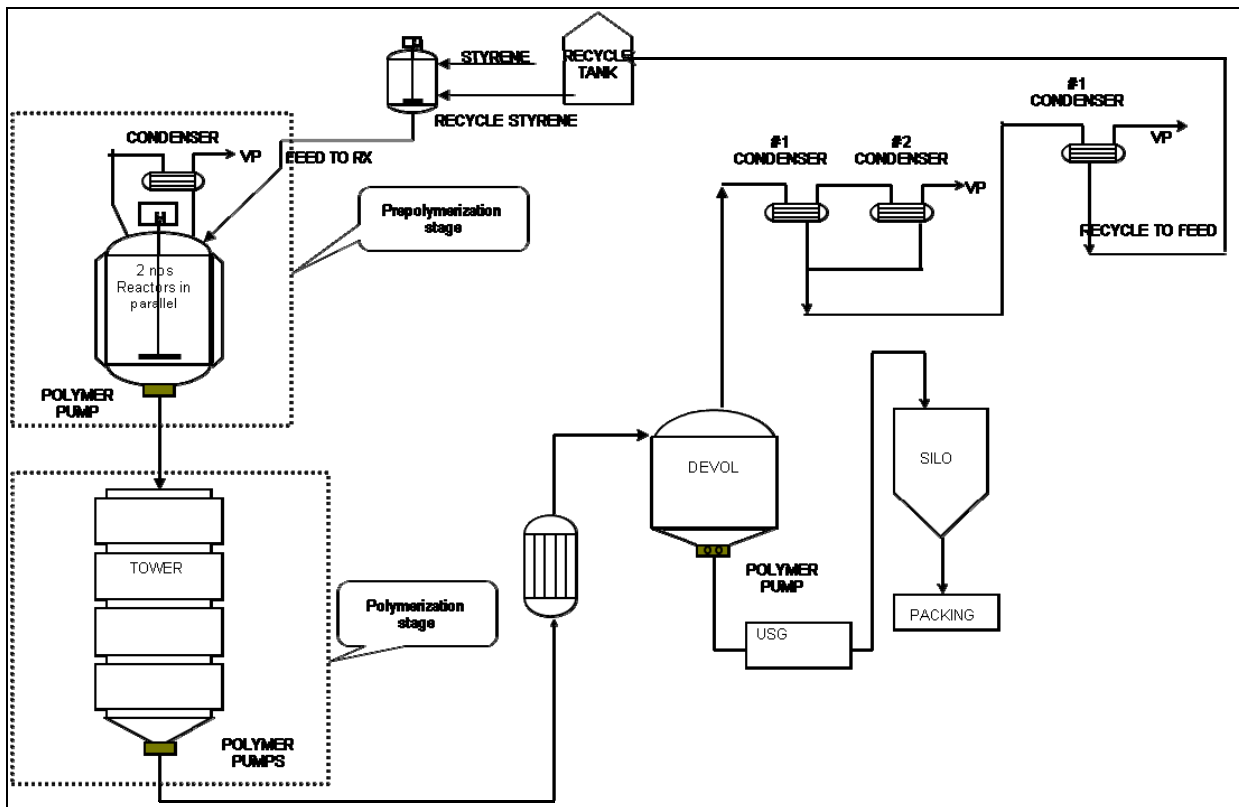
**Table A-1 Manufacturing Capacity**

S.No	Name of Product	Capacity (TPD)		
		Permitted	Proposed	Total After Expansion
1	Polystyrene	313	137	450
2	Expandable Polystyrene	102	103	205
	<b>Total</b>	<b>415</b>	<b>240</b>	<b>655</b>



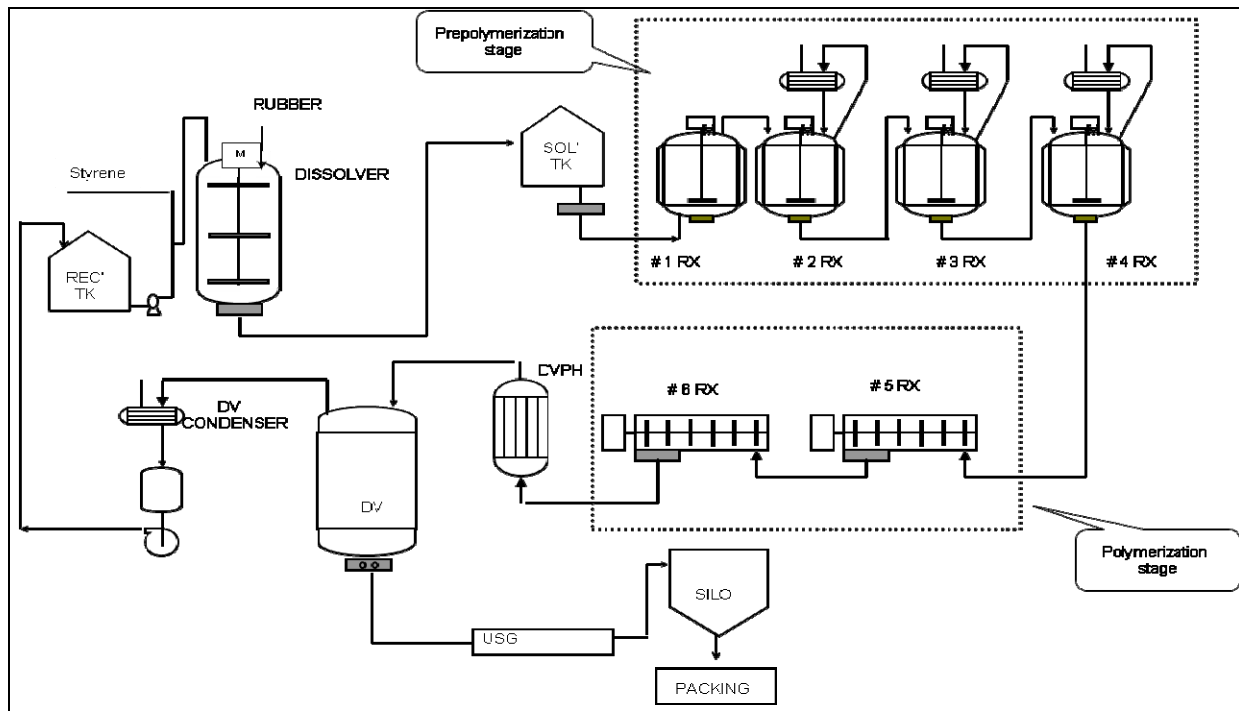
**Process Description of Polystyrene:**

**1. General Purpose Polystyrene (GPPS):** GPPS is produced by continuous bulk polymerization of styrene monomer carried in two stages through Reactor and Tower process. The final polymer extruded and palletized to cylindrical solids granules in USG system. Product is packed in 25 kg bags. Unconverted styrene recycles back into process.



**Fig A.1 Process Flow Diagram of General Purpose Polystyrene**

**2. High Impact Polystyrene (HIPS):** HIPS is produced by continuous bulk polymerization of styrene monomer in series of reactors in presence of polybutadiene rubber and pelletized to cylindrical solid granules in USG system. Product is packed in 25 kg bags. Unconverted styrene recycles back into process.



**Fig A.2 Process Flow Diagram of High Impact Polystyrene**

### 3. Expandable Polystyrene

#### Batch preparation and polymerization

Raw materials are added to the reactors as per recipe and reactor temperature is increased to 90° C and continuously stirred until desired bead size is obtained. Afterwards, pentane is added into beads and the mass is heated further and cooled. After cooling, the reactor mass will be transferred to acidification tank.

#### Acidification and Homogenization

In acidification tank mass is treated with acid (HCl) to remove the traces of TCP, then it is passed through dewatering screen where acidic water and fines are separated. Desired

product will be sent to homogenization tank, where homogeneous slurry will be made by mixing with water and then slurry goes to centrifuge for further processing.

**Centrifuging, Drying and Screening:**

Slurry is fed to Centrifuge and EPS beads will be separated from water. Product is sent to cyclone through flash duct and sent to screening for separation in to different sizes.

**Coating and packing.**

Beads are coated with required additives in paddle mixer, and transferred to drum hoppers where they are stored and packed.

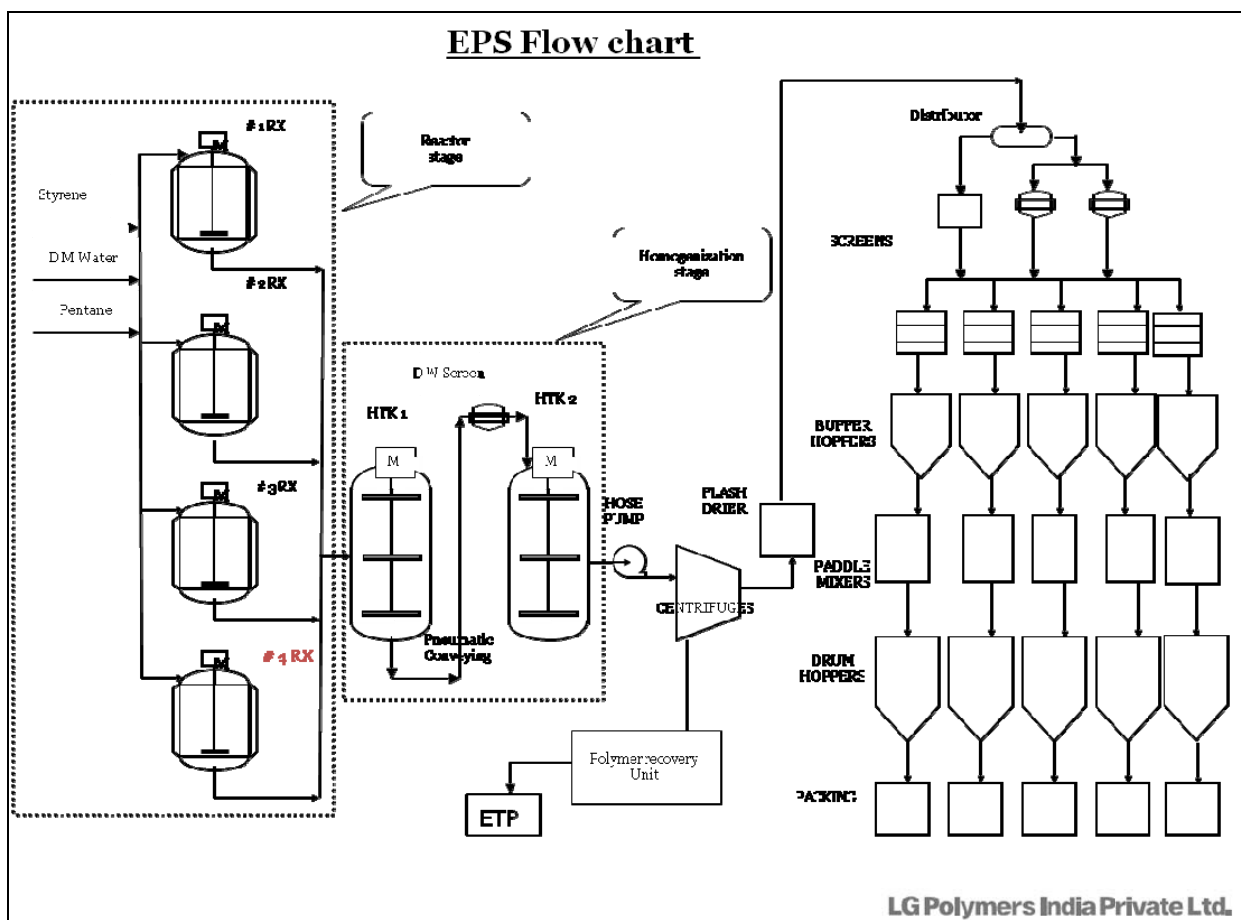


Fig A.3 Process Flow Diagram of Expandable Polystyrene

## ANNEXURE - II: Wastewater Treatment Facilities

The main sources of effluent generation from the plant are from process, blow downs from boiler and cooling tower, RO/DM Rejects and domestic wastewater. The quantity of effluents generated and mode of treatment is presented in [Table A-2](#).

**Table A-2 Quantity of Effluent Generated and Mode of Treatment**

Description	Quantity (KLD)		Mode of Treatment
	Permitted	After Expansion	
Process	185	324	Sent to Effluent Treatment Plant and treated effluent reused for greenbelt development within plant premises.
Boiler Blow downs	28	11	
Cooling Tower Blow downs		50	
RO/DM Rejects		35	
Domestic Wastewater	40	60	Sent to STP and treated wastewater reused for greenbelt development within plant premises.
<b>Total</b>	<b>253</b>	<b>480</b>	

## ANNEXURE - III: Water Balance

Water is required for process, cooling tower makeup, steam generation and domestic purposes. The required water shall be met from Municipal (GVMC) supply. The total water requirement is in the order of 960 KLD after expansion. Total water balance is presented in [Table A-3](#).

**Table A-3 Total Water Balance - After Expansion (Tentative)**

Purpose	Fresh Water (KLD)	OUTPUT (KLD)	
		Loss	Effluent
Process	324		324
Boiler Feed	74	63	11
Cooling Tower	463	413	50
RO/DM Plant	35		35
Domestic	64	4	60
<b>Total</b>	<b>960</b>	<b>480</b>	<b>480</b>

**ANNEXURE - IV: Solid Waste**

Total solid waste generated and mode of disposal is presented in [Table A-4](#).

**Table A-4 Total Solid Waste Generated and Mode of Disposal - After Expansion (Tentative)**

S.No	Description of Waste	Unit	Quantity After Expansion	Disposal method
1	Process residue	TPA	125	Cement Industry/ Authorized recyclers/TSDF
2	Oil and Grease skimming	KLPA	6	Authorized recyclers/TSDF
3	Stack Soot/flue gas cleaning residue	TPA	2	TSDF
4	Used Oil / Waste Lubricating oil	KLPA	4	Authorized recyclers
5	Lead acid batteries	No's/Year	30	Authorized recyclers/Buyback
6	Softener / DM Plant Resins	TPA	0.3	TSDF
7	ETP Sludge	TPA	300	TSDF/Brick/Tile manufacturer/Recyclers
8	STP Sludge	TPA	50	Composted and used as manure
9	Used/Discarded Filter Bags	TPA	4	TSDF for Incineration
10	Detoxified Container	TPA	6	Detoxified and reuse/Sale after detoxification
11	Detoxified Liners & Bags	TPA	1	Sale after detoxification / Authorized recyclers
12	Cotton Waste	TPA	0.5	TSDF
13	Insulation Waste	TPA	8	TSDF
14	Discarded PPE	TPA	0.5	TSDF for Incineration
15	Paper, Packing materials i.e. wood, carton , ropes	TPA	0.4	Sale to outside agencies/ recyclers/In-house incineration
16	Waste packing wood/ broken glass etc	TPA	1	Sale to outside agencies/ recyclers
17	Bio Medical Waste	TPA	0.12	Sent to Bio Medical Waste Treatment Facility
18	E- Waste	TPA	1.5	Authorized recyclers
19	Canteen Waste	Kg/day	50	Composted and used as manure/Sent to Piggery farm
20	Plastic Waste	TPA	15	Sale to outside agencies/ recyclers
21	Discarded asbestos sheets	TPA	10	TSDF
22	Wastes or Residues containing oil	KLPA	2	Authorized recyclers/TSDF
23	Waste Rubber	TPA	2	Authorized recyclers/Reprocessors
22	Wastes or Residues containing oil	KLPA	2	Authorized recyclers/TSDF

**ANNEXURE - V: Stack Emissions Details**

It is proposed to establish Furnace Oil fired boiler of capacity 1 x 5 TPH in addition to existing 1 x 5 TPH and 1 x 8TPH Furnace Oil fired boilers. It is proposed to keep existing 1 x 8 TPH boiler as standby after expansion. No additional Thermic fluid heaters are proposed, existing 1 x 10 Lac K. Cal/r anf 1 x 12 Lac K.Cal/hr thermic fluid heaters will meet the requirement after expansion. DG sets of 1 X 1500 kVA and 1 x 1000 kVA are proposed in addition to existing 1 x 500 kVA and 4 x 1000 kVA for emergency power requirement during load shut down period only. Existing 1 x 1000 kVA DG set will be replaced by 1 x 1500 kVA after expansion. Boilers, Thermic fluid heaters and DG sets shall be provided with effective stack heights as controlled equipment.

**Table A-5. Stack Emission Details**

S. No	Stack Connected to	Stack Ht (m)	Dia of stack at top(m)	Temp. of exhaust gases (°C)	Exit Velocity (m/sec)	Pollutant Emission Rate (g/sec)		
						PM	SO <sub>2</sub>	NO <sub>x</sub>
<b>Existing</b>								
1	1 x 5TPH Oil fired Boiler	38	0.6	145	5.5	--	0.33	0.17
2*	1 x 8 TPH Oil Fired Boiler	34	1.0	190	6.5	--	0.37	0.21
3	1 x 10 Lac K.cal/hr Thermic Fluid Heater	30	0.5	150	8	--	0.22	0.18
4	1 x 12 Lac K. cal /hr Thermic Fluid Heater	34	0.8	150	8.2	--	0.36	0.27
5**	1 x 500 kVA DG set	5	0.2	200	6.8	0.002	0.025	0.04
6**	2 x 1000 kVA DG sets #	10	0.4	170	10	0.04	0.025	0.18
<b>Proposed</b>								
1	1 x 5TPH Oil fired Boiler	30	0.6	145	5.5	--	0.33	0.17
2**	2 x 1500 kVA DG set	30	0.2	180	10	0.02	0.03	0.5
3**	1 x 1000 kVA DG sets	30	0.4	170	10	0.04	0.025	0.18

\* 1 x 8 TPH Furnace oil fired boiler shall be kept as standby after expansion.

\*\*DG sets will be used during load shut down by Transco.

# Existing 1 x 1000 kVA out of 4 x 1000 kVA will be replaced by 1 x 1500 kVA after expansion.



ANDHRA PRADESH POLLUTION CONTROL BOARD  
Paryavarana Bhavan, A-III, Industrial Estate,  
Sanathnagar, Hyderabad-500 018  
Phone : 040-23887500, Website: www.appcb.ap.nic.in

RED CATEGORY  
CONSENT & AUTHORISATION ORDER  
BY REGISTERED POST WITH ACKNOWLEDGEMENT DUE

Consent Order No : APPCB/VSP/VSP/14082/HO/CF0/2017

Date : 19.01.2017

CONSENT is hereby granted for Operation under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorisation under Rule 6 of the Hazardous & Other Wastes (Management and Transboundary, Movement) Rules, 2016 and the rules and orders made there under (hereinafter referred to as 'the Acts', 'the Rules') to:

M/s. L.G. Polymers India Pvt., Limited  
(Change of Product mix)  
R.R. Venkatapuram Village  
Pendurthy Mandal,  
Visakhapatnam - 530 029  
Email: info@lgpi.co.in

(Hereinafter referred to as 'the Applicant') authorizing to operate the industrial plant to discharge the effluents from the outlets and the quantity of emissions per hour from the chimneys as detailed below:

i) Out lets for discharge of effluents:

Outlet No.	Outlet Description	Max Daily Discharge KLD	Point of Disposal
1.	Trade Effluents after Treatment	213	Onland for plantation after treatment in ETP.
2.	Domestic Effluents	40	Onland for plantation after treatment in STP.

ii) Emissions from chimneys:

Chimney No.	Description of Chimney	Quantity of Emissions at peak flow
1.	Attached to 10 Lakh K.Cal/yr GPPS Oil Fired Heater	2040 Nm <sup>3</sup> /hr
2.	Attached to 12 Lakh K.Cal/yr HIPS Oil Fired Heater	2600 Nm <sup>3</sup> /hr
3.	Attached to 1x5 TPH Oil Fired Boiler	5200 Nm <sup>3</sup> /hr
4.	Attached to 1x8 TPH Oil Fired Boiler (Standby)	8750 Nm <sup>3</sup> /hr
5.	Attached to 4 x 1000 KVA D.G. Sets	--
6.	Attached to 1x500 KVA D.G. Set	--

iii) HAZARDOUS WASTE AUTHORISATION (FORM - II) [See Rule 6 (2)]:

M/s. L.G. Polymers (I) Pvt. Ltd., R.R. Venkatapuram, Visakhapatnam District., is hereby granted an authorization to operate a facility for collection, reception, storage, treatment, transport and disposal of Hazardous Wastes namely:

• HAZARDOUS WASTES WITH DISPOSAL OPTION:

S. No	Name of the Hazardous waste	Stream	Quantity	Disposal Option
1.	ETP Sludge	35.3 of Schedule - I	100 TPA	TSDF, Parawada, Visakhapatnam District for secured land filling/ Co-Processing in Cement industries.



• HAZARDOUS WASTES WITH RECYCLABLE OPTION:

S. No	Name of the Hazardous waste	Stream	Quantity	Disposal Option
1.	Used / Spent Oil	5.1 of Schedule - I	2.0 KLPA	Authorised Re-processors / Recyclers.
2.	Containers of Hazardous Waste & Chemicals	33.1 of Schedule - I	2.0 TPA	After complete detoxification, it shall be disposed of to outside agencies.

This consent order is valid to manufacture the following products along with quantities indicated only:

S. No	Products*	Quantity
1.	Polystyrene	313 TPD (limited to 1,09,000 TPA)
2.	Expandable Polystyrene	102 TPD (36,000 TPA)

This order is subject to the provisions of 'the Acts' and the Rules' and orders made thereunder and further subject to the terms and conditions incorporated in the schedule A, B & C enclosed to this order.

This combined order of consent & Hazardous Waste Authorisation shall be valid for a period ending with the 31<sup>st</sup> day of December, 2021.

Sd/-  
MEMBER SECRETARY

✓ To  
M/s. L.G. Polymers India Pvt., Limited  
R.R. Venkatapuram Village  
Pendurthy Mandal,  
Visakhapatnam - 530 029

// T.C.F.B.O //

  
Joint Chief Environmental Engineer  
Unit Head-IV

**SCHEDULE - A**

- Any up-set condition in any industrial plant / activity of the industry, which result in, increased effluent / emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.
- The industry should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.
- All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.
- The industry should put up two sign boards (6x4 ft. each) at publicly visible places at the main gate indicating the products, effluent discharge standards, air emission standards, hazardous waste quantities and validity of CFO and exhibit the CFO order at a prominent place in the factory premises.
- Notwithstanding anything contained in this consent order, the Board hereby reserves the right and powers to review / revoke any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.



6. The industry shall file the water cess returns in Form-I as required under section (5) of Water (Prevention and Control of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along with water meter readings. The industry shall remit water cess as per the assessment orders as and when issued by Board.
7. The applicant shall submit Environment statement in Form V before 30th September every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.
8. The applicant should make applications through Online for renewal of Consent (under Water and Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the Board. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board. The person authorized should not let out the premises / tend / sell / transfer their industrial premises without obtaining prior permission of the State Pollution Control Board.
9. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to Appellate authority constituted under Section 28 of the Water(Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air(Prevention and Control of Pollution) Act, 1981.

#### SCHEDULE - B

#### WATER POLLUTION:

1. The effluent discharged shall not contain constituents in excess of the tolerance limits mentioned below:

Outlet	Parameter	Limiting Standards
1&2	pH	6.5 -8.5
	TSS	100 mg/l
	TDS	2100 mg/l
	Oil and Grease	10 mg/l
	COD	250 mg/l
	BOD	30 mg/l

2. The source of water is ground water. The following is the permitted water consumption:

Sl. No.	Purpose	Quantity (KLD)
1	Industrial cooling, boiler feed	325
2	Domestic & Gardening purposes.	40
3	Process, whereby water gets polluted and pollutants are easily bio degradable.	185
4	Processing, whereby water gets polluted and the pollutants are not easily bio - degradable.	--
<b>Total</b>		<b>550</b>

Separate meters with necessary pipe-line shall be maintained for assessing the quantity of water used for each of the purposes mentioned above for Cess assessment purpose.

3. The industry shall place the chemical drums and / or any drums in the concrete platform only. The Platform shall be provided with sufficient dyke wall and effluent collection system.

#### AIR POLLUTION

4. The emissions shall not contain constituents in excess of the prescribed limits mentioned below:

Chimney No.	Parameter	Emission Standards
1 to 4	Particulate Matter	100 mg/Nm <sup>3</sup>

5. The industry shall comply with emission limits for DG sets upto 800 KW as per the Notification G.S.R.520 (E), dated 01.07.2003 under the Environment (Protection) Amendment Rules, 2003 and G.S.R.448(E), dated 12.07.2004 under the Environment (Protection) Second Amendment Rules, 2004. In case of DG sets more than 800 KW shall comply with emission limits as per the Notification G.S.R.489 (E), dated 09.07.2002 at serial no.96, under the Environment (Protection) Act, 1986.
6. The industry shall comply with ambient air quality standards of PM<sub>10</sub>(Particulate Matter size less than 10µm) - 100 µg/ m<sup>3</sup>; PM<sub>2.5</sub>(Particulate Matter size less than 2.5 µm) - 60 µg/ m<sup>3</sup>; SO<sub>2</sub>

- 80 µg/ m<sup>3</sup>; NO<sub>x</sub> - 80 µg/ m<sup>3</sup>; NH<sub>3</sub> - 400 µg/ m<sup>3</sup> outside the factory premises at the periphery of the industry.

Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009 shall be complied. Following standards prescribed for noise shall be complied.

**Noise Levels:** Day time (6 AM to 10 PM) - 75 dB (A)  
Night time (10 PM to 6 AM) - 70 dB (A).

**GENERAL**

7. The industry shall handover the original auto renewal consent order dated 24.10.2016, having validity upto 31.12.2021 to the RO, Visakhapatnam after receipt of this order and the same stands cancelled from the date of receipt of this order.
8. The industry shall increase the percentage of usage of treated waste water into the process.
9. The industry shall not manufacture any product, other than those mentioned in this order.
10. The industry shall maintain 2 CAAQM stations with networking facility to APPCB website. The industry shall maintain existing CAAQM Station within the plant for online monitoring of PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub> & NO<sub>x</sub>.
11. The industry shall maintain VOC analyzers with recording facility and maintain records.
12. The industry shall operate Sewage Treatment Plant for treatment of domestic effluents and maintain records.
13. The industry shall consuming treated effluent in the process to maximum extent after treatment and maintain records.
14. The industry shall maintain piezowells to monitor ground water quality in and around Plant and submit trend analysis every 6 months to RO, Visakhapatnam.
15. The industry shall comply with CPCB directions dated 05.02.2014 / 02.03.2015 and guidelines issued regarding online monitoring systems issued from time to time.
16. The industry shall maintain the following records and the same shall be made available to the Board Officials during the inspection.
  - a. Daily production details, RG-I records and Central Excise Returns.
  - b. Quantity of Effluents generated and disposed.
  - c. Log Books for pollution control systems, ETP including energy meters.
  - d. Daily solid waste generated and disposed to TSDF.
17. The industry shall maintain log books on the following:
  - i. Hydraulic loads of effluent generation
  - ii. Characteristics of effluents
  - iii. Quantity of effluents generated and disposed.
  - iv. Hazardous waste generated and disposed.
  - v. Furnish consolidated daily records on the above periodically once in three months to the RO.
18. There shall not be any spillages / chemicals / effluents on ground. The drums containing chemicals & wastes shall be stored on elevated platform with a provision to collect leachate / spillages in the collection pit. In no case the drums shall be stored on the naked open ground.
19. System of leak detection and repair of pump / pipeline shall be installed in the plant and immediate response team shall be identified for preventive maintenance.
20. The industry shall dispose solid waste as follows:

S. No.	Name of the Solid / Hazardous Waste	Quantity of Hazardous waste	Disposal Option
1.	Non polymerized residues	80 KLPA	Authorized recyclers/ reprocessors
2.	Used filters and filter cloth	1.5 TPA	Authorized Recyclers/ reprocessors
3.	Waste rubber	1.5 TPA	Authorized recyclers / reprocessors
4.	Used cotton waste	0.3 TPA	TSDF
5.	Stock soot	1.5 TPA	
6.	Insulation wool	5.0 TPA	
7.	E - Waste	0.5 TPA	Authorized Dismantlers

21. The industry shall comply with all the rules, regulations, standards and directions issued by CPCB, MoEF&CC and APPCB.

22. The industry shall comply with the conditions stipulated in the CFE (Change of Product mix) order dated 19.12.2016.
23. The industry shall develop green belt in all the vacant places. In future, excess green belt over and above 33 % of total area can be utilized for industrial activity as per requirement of industry.

**SCHEDULE - C**

[see rule 6(2)]

**[ CONDITIONS OF AUTHORISATION FOR OCCUPIER OR OPERATOR HANDLING HAZARDOUS WASTES ]**

1. All the rules and regulations notified by Ministry of Environment and Forests, Government of India under the E(P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous wastes should be followed.
2. The industry shall not store hazardous waste for more than 90 days as per the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.
3. The industry shall store Used / Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal to the manufacturers / dealers on buyback basis.
4. The industry shall maintain 6 copy manifest system for transportation of waste generated and a copy shall be submitted to concerned Regional Office of APPCB. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.
5. The industry shall maintain proper records for Hazardous & other wastes stated in Authorization in FORM-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form- 4 as per Rule 6 (5) of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 and amendments thereof.
6. The industry shall submit the condition wise compliance report of the conditions stipulated in Schedule A, B & C of this Order on half yearly basis to Board Office, Hyderabad and concerned Regional Office.

Sd/-

MEMBER SECRETARY

To  
M/s. LG Polymers India Pvt Ltd.,  
R.R.Venkatapuram,  
Visakhapatnam - 530 029

// T.C.F.B.O //

  
Joint Chief Environmental Engineer  
Unit Head-IV





CONSENT & AUTHORISATION ORDER  
BY REGISTERED POST WITH ACKNOWLEDGEMENT DUE

Consent Order No : APPCB/VSP/VSP/109/HQ/2007-444

Date :08.05.2007

(Consent Order for Existing/New or altered discharge of sewage and/or trade effluents/outlet under Section 25/26 of the Water (Prevention & Control of Pollution) Act,1974 and amendments thereof, Operation of the plant under section 21 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorisation / Renewal of Authorisation under Rule 5 of the Hazardous Wastes (Management & Handling) Rules 1989 & Amendment Rules).

CONSENT is hereby granted under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974, under section 21 of Air (Prevention & Control of Pollution) Act 1981 and Authorisation under the provisions of HW (M & H) Rules (hereinafter referred to as 'the Acts', 'the Rules') and the rules and orders made thereunder to

M/s. L.G. Polymers India Pvt Limited  
R.R. Venkaapuram Village  
Pendurthy Mandal,  
Visakhapatnam  
Email: [info@lgpi.co.in](mailto:info@lgpi.co.in)

(hereinafter referred to as 'the Applicant') authorizing to operate the industrial plant to discharge the effluents from the outlets and the quantity of Emissions per hour from the chimneys as detailed below.

i) Out lets for discharge of effluents:

Outlet No.	Outlet Description	Max Daily Discharge	Point of Disposal
1.	Trade Effluents after Treatment	320 KLD	On land for plantation.
2.	Domestic Effluents	40 KLD	Septic Tank Followed by soak pit.

ii) Emissions from chimneys:

Chimney No.	Description of Chimney	Quantity of Emissions at peak flow
1.	Attached to 10 Lakh K.Cal/yr GPPS Oil Fired Heater	2040 Nm <sup>3</sup> /hr
2.	Attached to 12 Lakh K.Cal/yr HIPS Oil Fired Heater	2600 Nm <sup>3</sup> /hr
3.	Attached to 5 TPH furnace Oil Fired Boiler.	5200 Nm <sup>3</sup> /hr
4.	Attached to 8 TPH Furnace Oil Fired Boiler (Standby)	8750 Nm <sup>3</sup> /hr
5.	Attached to Process Emissions from Zinc Stearate Mixing Unit	-
6.	Attached to 4 x 1000 KVA D.G. Sets	--
7.	Attached to 500 KVA D.G. Set	--

iii) HAZARDOUS WASTE AUTHORISATION (FORM - II) [See Rule 3(C) & 5 (5)]

- Number of Authorisation and date of issue - APPCB/VSP/VSP/109/HWM, Dt:08.05.2007
- The Vice President -Production, M/s. LG Polymers India Pvt Ltd., is hereby granted an authorisation to operate a facility for collection, reception, storage, transport and disposal of the following wastes with quantities as below:

S.No	Name of the Hazardous waste	Stream	Quantity of Hazardous waste per annum.	Disposal Option
1.	Catch Pot Styrene	1.4 of Schedule-I	4.8	Recycle back into the process.
2.	Semi Polymerised Styrene		1.2	

3.	ETP Sludge	34.4 of Schedule-I	48 TPA	TSDf, Pharma City, Parawada
4.	Used Oil	5.1 of Schedule-I	8 KL	Send to Authorised agencies for reprocessing and recovery.
5.	Tank bottom sludge of fuel oil storage tanks	3.3 of Schedule - I	200 Kg / 4Yr	
6.	Detoxified Containers and container liners	33.3 of Schedule-I	3 TPA	Authorised agencies of APPCB.
7.	Used lead acid batteries	22 of Schedule-IV	6 Nos	Return to dealer / manufacturer on buy back basis (or) to authorised recyclers.
8.	Waste electrical cables	21 of Schedule-IV	0.3 Tons	Authorised re-processors of APPCB.
9.	Oil soaked cotton	5.2 of Schedule-I	0.35 Tons	TSDf, Pharma city, Parawada.

at their premises located at R.R.Venkatapuram, Visakhapatnam.

This consent order is valid to manufacture the following products along with quantities only.

S. No	Products	Quantity
1.	Polystyrene	235 TPD
2.	Expandable Polystyrene	45 TPD

This order is subject to the provisions of 'the Acts' and the Rules' and orders made thereunder and further subject to the terms and conditions incorporated in the schedule A, B & C enclosed to this order.

This combined order of consent & Hazardous Waste Authorisation shall be valid for a period ending with the 31<sup>st</sup> day of December 2007.

Sd/-  
MEMBER SECRETARY

To  
The Vice President (Production),  
M/s. LG Polymers India Pvt Ltd.,  
R.R.Venkatapuram,  
Visakhapatnam -530 029.

//T.C.F.B.O//

  
21/12/07  
SENIOR ENVIRONMENTAL ENGINEER (CFO)

*Handwritten initials*



## SCHEDULE – A

1. **The applicant shall make applications for renewal of Consent (under Water and Air Acts) and Authorisation under HWM Rules at least 60 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts for obtaining Consent & HW Authorisation of the Board.**
2. The industry shall immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions etc.
3. a) All the fugitive emissions shall be controlled with proper measures.  
b) The applicant shall also install the equipment such as wind speed recorder, wind direction recorder.
4. The applicant shall not change or alter either the quality or the quantity or the rate of the discharge or the route of discharge and shall not change or alter either the prescribed quality or the rate of emission without the previous written permission of the Board.
5. The applicant shall, not later than 30 days from the date of issue of this consent order, certify in writing to the Board that the applicant has installed or provided for an alternative electric power source sufficient to operate all facilities installed by the applicant, to comply with the terms and conditions of this consent. In absence of alternative electric power source sufficient to operate all facilities installed by the applicant, to comply with the terms and conditions of this consent, production shall be stopped.
6. Any up-set condition in any plant/plants of the industry, which result in, increased effluent discharge and/ or violation of standards stipulated in this order or the emission of any Air Pollutant into the environment in excess of the standards laid down by the Board, occurs or is apprehended to occur due to accident, or other unforeseen act or event, the person-in-charge of the premises, from where such discharge / emission occurs or is apprehended to occur shall forthwith intimate the fact of such occurrence or the apprehension of such occurrence to this Board, by fax / email under intimation to the Collector and District Magistrate.
7. In case of such episodal discharges / emissions mentioned in item 6 above, the industry should take immediate action to bring down the discharge / emission below the limits prescribed in this order.
8. A good house keeping shall be maintained both within the factory and in the premises. All hoods, pipes, valves, sewers and drains shall be leak proof. Floor washings shall be admitted into the effluent collection system only and shall not be allowed to find their way into storm drains or open areas.
9. a) The industry shall carryout analysis of waste water discharges or emissions through chimneys, for the parameters mentioned in Schedule – B of this order at regular intervals.  
b) The industry shall maintain following records to accessible to the Board, whenever required.
  1. Analysis reports of waste water/ emissions.
  2. Log book for operation of pollution control systems.
  3. Inspection book
10. The applicant shall set up THREE Ambient Air Quality Monitoring Stations for continuous recording of relevant critical parameters mentioned in Schedule - B as per the CPCB guidelines and submit monthly reports.
11. Separate power connection with energy meter shall be provided for the Pollution Control Equipments and record of power consumption and chemicals consumption for the operation of pollution control equipment shall be maintained separately.
12. The applicant shall comply with the directives/orders issued by the Board in this order and at all subsequent times without any negligence on his part. The applicant shall be liable for such legal action against him as per provisions of the Law/Act in case if non-compliance of any order/directive issued at any time and/or violation of the terms and conditions of this consent order.
13. The applicant shall furnish to the visiting officer and / or the Board any information regarding the construction, installation or operation of the effluent treatment system / air pollution control equipment / secured storage area of Hazardous Waste and such other particulars as may be pertinent for preventing and controlling pollution.
14. The industry is liable to pay compensation for any environmental damage caused by it, as fixed by the Collector and District Magistrate as Civil liability.
15. All the rules & regulations notified by Ministry of Environment and Forests, Government of India in respect of management, handling, transportation and storage of hazardous chemicals and wastes shall be followed.
16. All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 shall be followed.
17. The occupier shall educate the workers and nearby public of possible accidents and remedial measures.
18. For any accident or spillage of hazardous wastes causing damage to the Environment, the occupier or the transporter as the case shall be held responsible.
19. In case of closure of industry, the un-used/not consumed raw materials falling under the category of Hazardous Chemicals and mentioned in Manufacture, Storage and Import of



- Hazardous Chemicals Rules, 1989 and Amendment Rules, 2003 shall be removed and sold to other units within 90 days from the date of closure to prevent any possibility of occurrence of an accident. In case the above hazardous chemicals have lost their properties originally acquired, then they shall be treated, as Hazardous Waste and they should be disposed off only to the agencies authorized by APPCB in a safe manner.
20. The occupier shall prepare/update Emergency preparedness plan for safe handling of hazardous waste from time to time and submit the same to APPCB. Emergency preparedness plan must be implemented immediately whenever there is fire, explosion or release of hazardous waste or hazardous waste constituents, which could endanger to human health or environment.
  21. Packaging, labeling and transportation of Hazardous Wastes shall be in accordance with the provisions of the rules issued by the Central Govt. under the Motor Vehicles Act, 1988 and other guidelines issued from time to time. The packaging and labeling shall be based on the composition and hazardous constituent of the waste, however all Hazardous Waste containers should be provided with a general label.
  22. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter shall carry a Transport Emergency (TREM) Card (as given in the guidelines for management and handling of hazardous wastes) duly filled by the Hazardous Waste generator.
  23. Containers / Container Liners of Hazardous Chemicals and Hazardous Wastes should be thoroughly detoxified before selling to the agencies authorized by APPCB. Proper records, specific to each Hazardous Chemical / Hazardous Waste containers / Container Liners should be maintained in the following way:
    - I) Number of containers received.
    - II) Date and method of detoxification.
    - III) Name of agencies to whom containers were sold with quantities.
    - IV) Transportation particulars.
  24. No Hazardous Wastes shall be mixed with any other wastes or shall be discharged to a common, other internal, external sewerage or other drainage system without prior approval of APPCB.
  25. If HDPE bags are used for storing Hazardous Wastes, it should be ensured that they are perfectly sealed mechanically or double hot sealed. If MS/HDPE bags or drums are used for storing Hazardous Wastes, these drums / bags should be ensured that they are perfectly sealed.
  26. The person authorised shall not rent, lend, sell, transfer their industrial premises without obtaining prior permission of the State Pollution Control Board.
  27. Any unauthorised change in personnel, equipment as working condition as mentioned in the application by the person authorized shall constitute a breach of his authorisation.
  28. The industry shall comply with the provisions of Batteries (Management & Handling) Rules, 2001.
  29. The industry shall put up two sign boards (6x4 ft. each) at publicly visible places at the main gate. The first sign board shall provide information on specific conditions of CFO and Hazardous Waste Authorisation. The second sign board shall display online data on quantity and nature of hazardous chemicals being used in the plant, as well as water, air emissions and solid waste generated within the factory premises.
  30. The applicant shall exhibit the Consent & HW Authorisation order of the Board in the factory premises at a prominent place for the information of the inspecting officers of the different departments.
  31. Not withstanding anything contained in this conditional letter or consent, the Board hereby reserves the right and powers under Section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 and its amendments thereof **and** under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and its amendments thereof to review any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.
  32. The authorisation issued under Hazardous Waste (Management and Handling) Rules, 1989 and its amendments thereof, shall comply with the provision of the Environment (Protection) Act, 1986.

Sd/-  
MEMBER SECRETARY

**SCHEDULE - E**

**Special Conditions**

1. The effluent discharged shall not contain constituents in excess of the tolerance limits mentioned below.

Outlet	Parameter	Limiting Standards
1.	pH	5.50 - 9.0
	TSS	100 mg/l
	TDS	2100 mg/l
	Oil and Grease	10 mg/l
	COD	250 mg/l
	BOD	30 mg/l

2. The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below:

S. No.	Purpose	Quantity
1.	Process and Washings	220 KLD
2.	Boiler Feed	30 KLD
3.	Gardening / Irrigation	470 KLD
4.	Cooling	380 KLD
5.	Domestic	40 KLD
<b>Total</b>		<b>1140 KLD</b>

3. The industry shall file the water cess returns in Form-I as required under section (5) of Water (Prevention and Control of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along with water meter readings. The industry shall remit water cess as per the assessment orders as and when issued by Board.
4. The emissions shall not contain constituents in excess of the prescribed limits mentioned below.

Chimney No.	Parameter	Emission Standards
1 to 7	SPM	115 mg/Nm <sup>3</sup>

5. The industry shall comply with ambient air quality standards of TSPM - 200 µg/ m<sup>3</sup>; RSPM - 100 µg/ m<sup>3</sup>; SO<sub>2</sub> - 80 µg/ m<sup>3</sup>; NO<sub>x</sub> - 80 µg/m<sup>3</sup>.

**Noise Levels:** Day time (6 AM to 10 PM) - 75 dB (A)  
Night time (10 PM to 6 AM) - 70 dB (A).

6. The industry shall not increase the capacity beyond the permitted capacity mentioned in this order, without obtaining CFE/CFO of the Board.
7. Industry shall improve the performance of ETP system and explore the possibility of using treated effluent for plantation purpose within their premises and submit report **within a month**.
8. Industry shall establish AAQM Stations where maximum GLC's are expected and residential area. Shall have a network of AAQM Stations in coordination with other industries in the Bowl Area in consultation with the Zonal Officer and Regional Officer
9. The applicant shall submit Environment statement in Form V before 30<sup>th</sup> September every year as per Rule No.14 of E(P) Rules, 1986 & amendments

Sd/-  
**MEMBER SECRETARY**



**SCHEDULE - C**  
*[ see rule 3(c) and 5(5) ]*  
**[ CONDITIONS OF AUTHORISATION FOR OCCUPIER OR OPERATOR HANDLING  
HAZARDOUS WASTES ]**

1. Industry shall dispose / sell the hazardous wastes to only industries / agencies authorized by the Board. They shall verify the authorization of the board given to the party before disposing their wastes to the external party.
2. Industry shall take necessary practical steps to prevention of oil spillages and carry over of oil from the premises.
3. The industry shall obtain membership from TSDF, Parawada, Visakhapatnam for disposal of hazardous waste and submit a copy of the same to this office.
4. The industry shall dispose the used lead acid batteries to the manufacturer on buy back system or to the authorized recyclers of APPCB.
5. The industry shall not store hazardous waste for more than 90 days as per HWM Rules, 2003.
6. The industry shall not dispose Waste oils/ Non-ferrous metal scrap / Used lead acid batteries to the traders.
7. The unit shall maintain 6 copy manifest system for transportation of waste generated and a copy shall be submitted to Board Office and concerned Regional Office.
8. Industry shall maintain good house keeping & maintain proper records for Hazardous Wastes stated in Authorisation (FORM II).
9. The unit shall submit the condition wise compliance report of the conditions stipulated in Schedule B and Schedule C of this order on half yearly basis to Board Office, Hyderabad and concerned Regional Office.

To

The Vice President (Production),  
M/s. LG Polymers India Pvt Ltd.,  
R.R.Venkatapuram,  
Visakhapatnam -530 029.

Sd/-  
MEMBER SECRETARY

//T.C.F.B.O//

*B. S. Ram* 21/8/07  
SENIOR ENVIRONMENTAL ENGINEER (CFO)

*ms*