

Half yearly compliance report for the period - Oct'2016 to March'2017
on the conditions specified in Environmental Clearance
issued by Ministry of Environment and Forests & Climate Change.

Ref: Ministry's EC Letter No: J – 11011/114/2004-IA II (I); DATED: 06th July' 2005

A. SPECIFIC CONDITIONS:

S. No.	Conditions	Compliance Details
1.	The gaseous emissions (SO _x , NO _x , & HCl) particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system (s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.	Complied. All the gaseous emissions and particulate matter levels are being monitored and the levels are within the limits. At no time the emission levels has not gone beyond the stipulated limits. Online continuous emission monitoring systems installed and connected to CPCB & TSPCB website. Engaged an external NABL & MoEF & CC approved laboratory for conducting emission monitoring on monthly basis. Monthly reports are being submitting to TSPCB every month. Reports enclosed as Annexure-1 . In the event of failure of any pollution control measures, operations will be shut down by the unit and will not restart until it is rectified.
2.	Ambient air quality monitoring stations shall be set up in the downwind direction as well as where maximum ground level concentration are anticipated in consultation with the SPCB.	Complied. As per the suggestions of TSPCB, online continuous ambient air monitoring system installed in the down wind direction where the maximum ground level concentration is anticipated and connected to CPCB & TSPCB website. Engaged an external NABL & MoEF & CC approved laboratory for monitoring of ambient air in three locations in the plant as per CPCB guidelines (twice a week 24 hourly for 12parameters). Reports enclosed as Annexure-2 . Three continuous ambient VOC monitoring stations installed at up wind/ downwind & cross wind directions and is being monitored continuously.
3.	The company shall install cyclone and wet scrubber to control the particulate emissions from the boiler. A stack height of 30m shall be provided to the boilers. Company shall provide water quenching system followed by ventures and alkaline scrubbers to scrub he flue gases from the incinerator.	Complied. Cyclone dust collector followed by Bag filters with 30.60mt height stack provided for boiler. Water quenching Venturi scrubber followed by packed bed alkali scrubber with automatic pH adjustment and with 30mts height stack provided for Incinerator. Operations of these equipments are being ensured through standard operating procedures by trained employees.
4.	Spent solvents shall be recovered as far as possible & recovery shall not be less than 95 percent. During purification process, solvent vapors are emitted from purification tanks as fugitive emissions. Action shall be taken to reduce the emission as far as possible. Use of toxic solvents like Methylene Chloride (M.C.) etc. shall be minimum All venting equipment shall have vapor recovery system.	Complied. All spent solvents are recovered within the premises. Secondary condensers with chilled water/brine circulation system installed for improving the solvent recovery. Breather valves with nitrogen blanketing system and vent condensers installed for all solvent storage tanks. Low boiling solvent storage tanks are insulated. Sprinkler system installed for solvent storage tanks. Vent condensers with chilled water circulation system installed for process equipment. Usage of methylene chloride is minimum in the facility.

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5.	Industry shall switch over to aqueous based coating film in place of use of Methylene Chloride in coating operation, in a phased manner.	Complied. The unit is manufacturing active pharmaceutical ingredients (bulk drugs) hence no coating operations involved in the manufacturing process in the unit.
6.	Industry shall switch over to use of non-halogenated solvents in place of halogenated solvents in a phased manner.	Complied. R&D team is working on alternatives for halogenated solvents. Will ensure that whenever it is feasible will switchover to non-halogenated solvents. Usage of methylene chloride is minimum in the facility.
7.	a The company shall undertake following Waste Minimization measures: Metering and control of quantities of active ingredients to minimize waste.	Complied. Raw material requirement is optimized during process development stage itself. Exact quantities are dispensed and issued to production as per the process requirement (BPCR). Reagents All liquid reagents/solvents are metered and transferred through closed transfer system. Dispensing & Charging of raw materials shall be monitored by in-process quality assurance team along with warehouse & process team.
	b Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.	Complied. Emphasis is made to reuse by products from the process or sale to end users. Spent Sulphuric acid is being converted into Gypsum and sent to cement industry. Some of the solvents are recovered and reused in the production. Fly ash generated at boiler is being disposed to brick manufacturing units.
	c Use of automated filling to minimize spillage.	Complied. Level gauges and level controllers provided for storage tanks. All bulk volumes are transferred / filled / handled through closed transfer system/charge tanks with level controllers. Low volumes are transferred through AOD pumps/Peristaltic pumps.
d	Use of “Close Feed” system into batch reactors.	Complied. All bulk liquids are transferred /charged through closed pipelines into process reactors/charge tanks with level controllers. Low volumes are transferred through closed pipelines with the help of AOD pumps/Peristaltic pumps.
	e Venting equipment through vapor recovery system.	Complied. Vent condensers with chilled water circulation system provided to all solvent storage tanks. Reactor and centrifuge vents are connected to vent condensers followed by two stage scrubbers.
	f Use of high pressure hoses for equipment cleaning to reduce wastewater generation.	Complied. Pneumatic high pressure hose guns are provided at each process area for process equipment cleaning. Spray ball cleaning system installed for process reactors. Separate mobile high-pressure (up to 200 bar) pump with hose and nozzles is provided.

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8.	Fugitive emissions in the work zone environment, product, and raw material storage area shall be regularly monitored. The emissions shall conform to the limits imposed by SPCB.	Complied. Fugitive emissions in the work zone environment (all process & storage areas) is being monitored and recorded with the help of in-house VOC meters on monthly basis and the values are within the stipulated limits. Installed fixed gas detectors at raw material storage & production areas. Since it is a Pharma company, raw material storage areas and production areas are always kept neat and clean.
9	The effluent generation shall not increase 92m ³ /d (37 m ³ /d of process effluent, 45m ³ /d of floor washings and reactor washings, boiler blow down, cooling tower blow down and 10 m ³ /d of domestic effluent). Effluent shall be segregated into low TDS and high TDS streams. High TDS effluent will be treated in Reverse Osmosis plant and rejects from the RO plant will be evaporated in the forced evaporation system. Permeates from the RO plant will be recycled. Low TDS effluent after primary treatment and conforming to the prescribed standards shall be sent to CETP of PETL at Patancheru in Hyderabad through tankers for further treatment. Due care shall be taken to prevent leakage of effluent while loading, unloading and transportation. Wastewater manifest system shall be provided along with every tanker for proper handling of effluent.	Complied. Effluent generation is 84.34m ³ /day which is within the stipulated limits (HTDS Effluent Process effluent: 22.86m ³ /day; low TDS effluent process Washings 6.48m ³ /day, Floor and reactor washings boiler blow downs, CT blow down: 45m ³ /day; Domestic: 10 m ³ /day). All the Effluents are being segregated into High TDS & Low TDS streams. Implemented the zero liquid discharge system for treatment and recycling of effluents within the premises. High TDS effluents are being treated in stripper followed by MEE & ATFD. Evaporation salts are disposed to TSDF for secure landfilling through manifest system. LTDS effluents are being treated in Effluent treatment plant (consists of primary treatment followed by electrochemical oxidation followed by two stage biological treatment) followed by two stage RO plant. RO permeate and MEE condensate is recycled for cooling towers make up by passing through secondary RO plant. Ro rejects are treated in MEE & ATFD. Evaporation salts are disposed to TSDF for secure landfilling through manifest system. Zero liquid discharge system was implemented in the year 2006 and delinked with CETP. Obtained the CFE & CFO from APPCB/TSPCB. No effluent is disposed to CETP-PETL, Patancheru.
10	The company shall take measures for remediation of contaminated ground water and action plan in this regard shall be submitted to this Ministry. The company shall also undertake detailed hydro geological study and submit a copy of the report to the Ministry.	Complied. The company had under taken detailed Geological, Geophysical and hydrological study and the report was submitted the same to the Ministry vide Lr. dated 27th June 2005 by M/s Ramky Enviro Engineers on 28 th June 2005 during the technical committee presentation. And also submitted the copy of the report was submitted to the Ministry of Environment & Forest – New Delhi on 25 th July 2005. The company had implemented the recommendations/suggestions given in the report. The measures are mainly meant for recharging the ground water. Constructed 08nos of rain water recharge pits, mini percolation tank, drop walls/contour bunding, check dams/rock fill dams rain water harvesting pond and artificial recharge tanks constructed. Monitoring the ground water quality at two locations which is used for manufacturing process. As per the reports there is no contamination of the ground water.

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11	Solid wastes generated in the form of ETP sludge and process sludge shall be sent for disposal to the common secured landfill site of M/s Hyderabad Waste Management Projects. Boiler ash shall be provided to the brick manufacturers	<p>Complied.</p> <p>ETP Sludge, Evaporation salts, process inorganic salts are being disposed to TSDF (Hyderabad Waste Management Project-HWMP) for secure landfilling.</p> <p>Organic liquid / solid waste being sent to cement industries for co-processing or incinerated at in house incineration system or disposed to TSDF –HWMP for incineration.</p> <p>Boiler ash is being sent to M/s. Chennakesava Ankamma Bricks (Srihari Naidu), Vattinagulapally Village, Rajendra Nagar Mandal, R.R. District, Telangana for brick manufacturing.</p>
12	The company shall develop rainwater harvesting structures to harvest the runoff water for recharge of ground water.	<p>Complied</p> <p>8 No's of rainwater harvesting pits are constructed for recharging of rainwater.</p> <p>Constructed rain water harvesting pond of 10000 KL capacity to collect the surface runoff and to reuse for greenbelt.</p> <p>Also constructed rainwater recharge ponds for recharging rain water into subsurface.</p>
13	Green belt shall be provided in 25% of the plant area to mitigate the effects of fugitive emission all around the plant. Development of green belt shall be as per the Central Pollution Control Board guidelines.	<p>Complied.</p> <p>40% of land is dedicated for green belt and developed the green belt with native species and with fruit bearing trees as per CPCB guidelines.</p> <p>Green belt area: 13.67hectares (>25%)</p>
14	The Company shall undertake eco-development measures including community welfare measures in the project area for the overall improvement of the environment. The eco-development plan shall be submitted to the APPCB within three months of receipt of this letter for approval.	<p>Complied.</p> <p>The Company had taken up eco development measures like :</p> <ol style="list-style-type: none"> (1) Clean and Green Programme to bring the awareness in school children. (2) “Vana Yagnam” to increase the green belt in the nearby community. Also actively participated and supported for TS Govt. Harithaharam initiative. (3) Donated tree sapling & tree guards for plant protection around Kothur Mandal and Mahaboob Nagar District. (4) Conducting several health camps, free medicines, nutrition programs, community outreach programs are being conducted. (5) Environmental management Programmes for environment and eco-development are being taken up at our Natco School, Rangapur. (6) Safe drinking water facilities provided by installing RO plants in the villages

B. GENERAL CONDITIONS:

S. No.	Conditions	Compliance Details
1	The project authorities shall strictly adhere to the stipulations made by the Andhra Pradesh State Pollution Control Board.	Complied. All stipulations made by the Telangana State Pollution Control Board are being complied from time to time. Valid consent order is in place and is valid up to 31.03.2021. Order copy enclosed as Annexure-3 .
2	At no time, the emissions shall exceed the prescribed limits. In the event of 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 achieved.	All the emission levels are within the limits. At no time the emission levels has not gone beyond the stipulated limits. In the event of failure of any pollution control measures, will shut down the unit and will not restart until it is rectified.
3	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Complied. Obtained the CFE & CFO for change of product mix without increase of pollution load from state Pollution Control Board as per EIA Notification-2006 and its amendments thereof. We have obtained Environmental Clearance for our proposed expansion project from MoEF&CC, vide: F.No:J-11011/181/2015-IA.II (I), dated: 02.05.2017. A copy of the same is attached as Annexure - 4 In case of any further expansion or modification proposed in the plant in near future, will obtain the prior approval from the Ministry of Environment and Forests & Climate Change.
4	The project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules. 1989 as amended in October, 1994 and January, 2000. Authorization from the SPCB shall be obtained for collection, treatment, storage, disposal of hazardous wastes.	Complied. Ensuring the compliance as per the rules and regulations stipulated under Manufacture, Storage and Import of Hazardous Chemicals Rules. 1989 as amended in October, 1994 and January, 2000. Valid Authorization is in place for collection, treatment, storage, disposal of hazardous wastes. Authorization is valid up to 31.03.2021. Order copy enclosed as Annexure-3 .
5	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 Wastes (Management and Handling) Rules, 2003. Authorization from the State pollution Control Board must be obtained for collection / treatment / storage / disposal of hazardous wastes.	Complied. Valid Authorization is in place for collection, treatment, storage, disposal of hazardous wastes. Authorization is valid up to 31.03.2021. Order copy enclosed as Annexure-3 . All the conditions stipulated under these rules are being complied.
6	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc, on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75dBA (day	Complied. Noise levels are within the stipulated limits. All the DG sets are enclosed in a separate room and fitted with silencers and acoustic enclosures to control the noise levels. Air Compressors are enclosed with acoustic panels to ensure the Noise levels are well within the standards prescribed. Noise levels are being monitored day time and night time by in-house sound level meter and also being monitored by

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	time) and 70 dBA (night time).	external NABL & MoEF&CC approved laboratory once in month. Reports enclosed as Annexure-2 .
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7	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA report.	Complied. Implemented all necessary environmental protection measures to protect the environment and ensuring continuous working of all environmental control equipment.
8	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Complied. Separate Environmental Management Cell was established with a dedicated team of 48 employees. Env. Laboratory was established equipped with all infrastructural facilities to carry out the analysis of effluents on daily basis. Online continuous monitoring systems installed for PH, EC, TOC, COD, TDS, stack emission monitoring and ambient air monitoring. However ambient air, stack emissions, Nosie, effluents, water are being carried out by external NABL & MoEF&CC approved laboratory on monthly basis.
9	The project authorities shall earmark separate funds to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	Complied. Funds allotted regularly for Environmental Management Systems Implementation. The funds so provided is not diverting for any other purpose. 22crores – capital investment for pollution control equipment. 60.0 Lakhs/Month. - Recurring expenditure 100.0 Lakhs/Annum. - Non recurring expenditure (spares, etc)
10	The implementation of the project vis-à-vis environmental action plans shall be monitored by Ministry's Regional Office at Bangalore/ SPCB/CPCB. A six monthly compliance status report shall be submitted to monitoring agencies.	Complied. Half yearly EC - Condition wise compliance reports are being submitting to Regional Office, MOEF&CC, Chennai and TSPCB. Implemented the submission of soft copies of the half yearly EC - Compliance reports to Regional Office, MoEF&CC. Development of EHS portal on company website for uploading the compliance report is in progress.
11	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at http:// envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Ministry's Regional Office at Bangalore.	Complied. Notification given in two local leading newspapers (Eenadu & Deccan Chronicle) on 16/07/05 about the Environmental Clearance accorded by the Ministry and the copies of advertisement was submitted to MoEF&CC Regional Office through company letter dated: 25.07.2005.