



SAPSL/ ENVT/ 2022/72

16<sup>th</sup> June 2022

To  
Integrated Regional Office,  
MoEF&CC  
Additional Office Block for GPOA, 1st Floor,  
Shastri Bhawan, Haddows Road,  
Nungambakkam,  
Chennai-600006

Sub: Compliance Status Report- reg.

Ref: Environmental clearance letter No. F.No.IA-J-110011/326/2016-IA-II (I) dt. 25.07.2019.

Sir,

With reference to the above, we hereby submit the Six-month compliance report From December-2021 to May-2022 as follows.

S.No	EC conditions	EC compliance
1	Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.	We obtained Consent To Establish on 27.11.2021. Vide Proceeding No: T6 /TNPCB /F.0377CUD /RL/CUD /W &A/2021 Dated: 27.11.2021.
2	As already committed by the project proponent, Zero Liquid Discharge shall be ensured, and no waste/treated water shall be discharged outside the premises.	Zero Liquid Discharge concepts have already been implemented by the existing facility and treated water is reused for our utility make up. We assure that we will maintain the same after modification, we have proposed additional MEE, R.O and Biological Treatment Plant for catering the excess quantity generated after expansion.



3	Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.	Noted will be complied.
4	National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended time to time shall be followed.	Being followed
5	Bio-briquette shall be used as fuel in the boiler in any case, Coal/lignite shall not be used as fuel in the boiler. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines	We are operating the boiler with Bio-briquette as fuel. We have provided following APC measures to maintain the air pollution well within the norms prescribed by the Board. Proposed boiler is also operated with bio-briquette as fuel and having similar APC measures. <ul style="list-style-type: none"><li>• Cyclone separator and Bag filter for boiler stack</li><li>• Closed conveyer belt to avoid dust emission during the fuel transit to boiler.</li></ul>
6	Solvent management shall be carried out as follows <ol style="list-style-type: none"><li>a. Reactor shall be connected to chilled brine condenser system.</li><li>b. Reactor and solvent handling pump shall have mechanical seals to prevent leakages.</li><li>c. The condensers shall be provided with sufficient heat transfer area (HTA) and residence time to achieve more than 95% recovery.</li><li>d. Solvents shall be stored in a separate space specified with all safety measures.</li></ol>	The following actions were taken for the management of solvent handling in the various process operations. <ol style="list-style-type: none"><li>a. The identified reactors were connected to chilled brine condenser system having adequate heat transfer area and residence time.</li><li>b. The reactors &amp; pumps were provided with mechanical seals to avoid any leakages.</li><li>c. The condensers are provided with sufficient heat transfer area (HTA) and residence time to achieve more than 95% recovery.</li></ol>



	<p>e. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.</p> <p>f. Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.</p> <p>g. All the solvent storage tanks shall relate to vent condensers with chilled brine circulation.</p>	<p>d. Bulk storage of solvents are stored in underground. PESO (Petroleum &amp; Explosives safety Organization) licensed premises complying with all PESO safety requirements.</p> <p>e. Double earthing provided in all the electrical equipment wherever solvent handling is done.</p> <p>f. Entire plant area is declared as flame proof.</p> <p>g. Solvent storage tanks are underground to avoid vapor loss. Solvents having boiling point &lt;45°C are connected with vent condenser having chilled brine circulation.</p>
7	Total freshwater requirement shall not exceed 610 cum/day to be met from SIPCOT water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.	Being Complied.
8	Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.	All the effluent from the production block are pumped through above ground pipelines directly to the ETP, hence no effluent is mixed with storm water gutter. Photo of Storm water gutter is attached as <b>Annexure-1</b>
9	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.	Being Complied.
10	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.	Being Complied.



11	The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.	We had obtained the clearance from Chief controller of Explosives – PESO (Petroleum & Explosives safety Organization) Nagpur for storage and usage of Hazardous chemicals and the renewal is also obtained from Chennai Transportation of Hazardous Chemicals is as per the Motor Vehicle Act (MVA), 1989.
12	Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided	Since we are using bio-briquette as the boiler fuel, the fly ash generated is non-hazardous in nature. This we reused for the stabilization of Chemical sludge generated from wastewater treatment plant.
13	The company shall undertake following waste minimization measures: - a) Metering and control of quantities of active ingredients to minimize waste.  b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. c) Use of automated filling to minimize spillage d) Use of Close Feed system into batch reactors.  e) Venting equipment through vapor recovery system.  f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.	a) All the inputs and out puts were measured b) Since we are manufacturing drugs and its intermediate to avoid the cross contamination we are not using any by-products in other process. Instead we have state of art solvent recovery plant at site and a part of the spent solvent generated were recovered and reused in the process. c) Automated filling system provided to minimize spillage. d) Chemical transferring is carried out by pipeline through closed loop system. e) Reactor vents were connected to condenser circulated with chilled brine f) High pressure hose cleaning is used for equipment washing in manufacturing as well as in ETP



14	The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along roadsides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department	We are maintaining 33% of green belt as per the CPCB guidelines.
15	At least 1% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	The proposal is attached as <b>Annexure-2</b> .
16	For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.	We are provided stack for DG as per CPCB guidelines and emissions well within the limits. All DG sets we provided acoustic enclosure. Analysis report by TNPCB is attached as <b>Annexure-4</b>
17	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.	Two fire hydrant station having holding capacity of 450KL each with well-established fire hydrant network which covered entire site, this includes high elevated foam monitoring tank with foam tank/foam can/foam bladder tank. Besides this fire detection and control provided at all electrical panel, production facility and Warehouse area. Dedicated fire alarm system and public announcement system provided to handle any emergency.
18	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	We are conducting medical checkups for all employees on regular basis as per the Factories Act. The report of May-2022 is attached as <b>Annexure-3</b> .



19	Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises	We have provided on-line sensors for the stacks & Ambient Air and connected to CPCB and TNPCB server. Web camera with night vision capability provided at flow meter of recycle water and connected to CPCB & TNPCB server.
<b>General Conditions</b>		
1	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board, Central Pollution Control Board, State Government and any other statutory authority.	Noted, we will abide by the law
2	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. 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.	We assure that we will not go for further expansion or modifications in the plant without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
3	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	Ambient Air Quality monitoring station were located as advised by State Pollution Control Board. Analysis report by TNPCB is attached as <b>Annexure-4</b>
4	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November 2009 shall be followed.	Being Complied.



5	The overall noise levels in and around the plant area 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 conform to the standards prescribed under Environment (Protection) Act, 1986 Rules,1989 viz. 75 dBA (daytime) and 70 dBA (night time).	We are maintaining the ambient noise level is well within the limit. The report by TNPCB & MoEF approved lab is attached as <b>Annexure-5</b>
6	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and to utilize the same for process requirements.	Rainwater Harvesting provided in non-production area. Photocopy is attached as <b>Annexure-1</b>
7	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	We are conducting training program for all employees including contract employees regarding the safety as well as health aspects by internal and external trainer. We also carried out periodical medical examinations for all employees as per factories Act. The report of May-2022 is attached as <b>Annexure-3</b> . Training detail is attached as <b>Annexure-6</b> .
8	The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.	We assure that we will abide the conditions/recommendations mentioned in the EIA and risk analysis report.
9	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration.	Company is provided 56% of direct employment and 71% of indirect employment to the local community. This have significant impact on their socio economic conditions. Besides this we have taken various CER activities by involving local villagers and administration to improve their socio-economic conditions.



10	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	We assure that we will develop green belt of 5-acre land of Cuddalore SIPCOT with rainwater harvesting facility for the recreation of local community.
11	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management pollution control measures shall not be diverted for any other purpose.	We assure that we will provide the sufficient funds towards capital cost and recurring cost to implement the conditions given by MoEF&CC as well as state government. We affirmed that the fund allotted for Environmental management and Pollution control will not be diverted any other purpose.
12	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parisad /Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	Since our company located in the SIPCOT industrial complex, public hearing is not required and hence sharing of EC to public is not applicable to us.
13	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six-monthly compliance status report shall be posted on the website of the company.	We assure that we will send the reports on the status of the implementation of the environmental protection measures along with the six-month reports to Zonal Office of MoEF&CC, CPCB and TNPCC. Copy of EC and six-monthly report is available on the website of the company <a href="http://solara.co.in/ehs">http://solara.co.in/ehs</a> .
14	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted 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 environmental clearance	We are regularly submitting Form-V to the Board. The Form-V for the year 2020-21 is attached as <b>Annexure-7</b> .





	conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.	
15	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 <a href="http://moef.nic.in">http://moef.nic.in</a> . 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 concerned Regional Office of the Ministry.	Advertisement has been made in two local newspapers and copy of the same is attached as <b>Annexure-8</b> .
16	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	This is an existing Pharmaceutical company having valid consent for manufacturing API and intermediate. The expansion is mainly for the change in the products and capacity enhancement.

Thanking you,

Yours faithfully,

For **SOLARA ACTIVE PHARMA SCIENCES LIMITED.,**

*M. Sukumar*

**M. Sukumar**  
Site Head

Enclosures: a.a

c.c: The Central Pollution Control Board, Bengaluru.  
The Joint Chief Environmental Engineer, TNPCB, Trichy.  
The District Environmental Engineer, TNPCB, Cuddalore.