भारत सरकार

GOVERNMENT OF INDIA

पर्यावरण ,वन एवं जलवायु परिवर्तन मंत्रालय

MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE

Regional Office (South Eastern Zone),

1st & 2nd floor, HEPC Building, No.34, Cathedral Garden Road,

Nungambakkam, Chennai - 600034

F.No. EP/12.1/909/TN/0975

22.06.2017

To,

The Managing Director,
M/s. Anjan Drug Private Ltd.,
85-88, 105-109, 112-116,
Export Promotion Industrial Estate SIPCOT, Industrial Estate,
Gummidipoondi,
Thiruvallur District,
Tamil Nadu.

Subject: Bulk drug Di-Ethyl Di-Propyl Malonate (100 MTPM) and N-propyl Bromide (100 MTPM) and Gabapentin (5 MTPM) at 85-88,105-109,112-116, Export Promotion Industrial Estate SIPCOT, Industrial Estate, Gummidipoondi, Thiruvallur District, Tamil Nadu by M/s Anjan Drug Private Ltd.-Certified Copy of the Compliance Report-Reg.

Reference: 1) F.No.J-11011/1057/2007-IA (II), dated 27th February 2008.
2) Your letter dated 01.06.2017.

Sir,

With reference to 2nd cited above, please find enclosed herewith a certified copy of the compliance report. This has been approved by the Addl.PCCF(C) vide diary no.816 dt 21.06.2017.

Yours faithfully

(Dr.C.Kaliyaperumal)
Director (S)

Dr. C. KALIYAPERUMAL, M.E., PhD
Director (S)
Government of India
Ministry of Environment, Forests & Climate Change
Regional Office (South Eastern Zone)
HEPC Building, No.34, Cathedral Garden Road,
Nungambakkam, Chennai-600 034.

Encl: As above.

Certified Copy of the Compliance Report

Subject: Bulk drug Di-Ethyl Di-Propyl Malonate (100 MTPM) and N-propyl Bromide (100 MTPM) and Gabapentin (5 MTPM) at 85-88,105-109,112-116, Export Promotion Industrial Estate SIPCOT, Industrial Estate, Gummidipoondi, Thiruvallur District, Tamil Nadu by M/s. Anjan Drug Private Ltd.

Reference: F.No.J-11011/1057/2007-IA (II), dated 27th February 2008.

Present status of the project:

The project authorities manufacturing two products namely Di-Ethyl Di-Propyle Malonate, Gabapentin product and n-propyl Bromide is not manufactured due to various reasons.

The water for the process is supplied by State Industries Promotion Corporation of Tamilnadu (SIPCOT). As on today the water consumption is 25.5 KLD and the effluent generation is 12 KLD. The treated effluent is sent to Multiple Effect Evaporator (MEE). The condensate from MEE is reused in the cooling towers (10 KLD) and 2 KLD of the same is sent to solar evaporation pond. The salt is collected from MEE and solar evaporation pond is stored and disposed to TSDF, Gummidipoondi.

The Pollution Control Board (PCB) has directed the project authorities (PA) to establish/ install Agitated Thin Film Dryer (ATFD) facilities and for that the facilities are under construction. Civil as well as erection of equipments works for ATFD plant is almost completed and substation construction work is under progress. As informed by the PA within a month the entire activity ATFD work would be completed and also commissioned. Spent oil, waste paper and plastics are stored and disposed to authorized recyclers. The unit is under operation.

Date of monitoring: 15.06.2017.

A. Specific Conditions

S.No	Conditions	Compliance
1	The Project Authorities shall obtain the permission for drawl of water from the competent authority before commissioning of the project activities and the copy of permission shall be submitted to the Ministry's Regional Office at Bangalore.	Complied. The Project Authority (PA) have obtained permission for drawl of water from the competent authority (SIPCOT) before commissioning of the project activities and a copy of the same was submitted to the Ministry's Regional Office at Bangalore. The PA making the payment on monthly basis to M/s. SIPCOT for drawl of water and copy of the bill is enclosed as **Annexure I**.
2	The Recovery of solvents shall not be less than 95%. The project authority shall make the monitoring arrangements with all the vents to carry out the monitoring regularly and monitoring reports should be submitted to	Refer below The PA informed that the recovery of solvents such as n-propyl bromide and DEM (Di-Ethyl Malonate) are not be less than 95% and the PA have made arrangement for monitoring of

S.No	Conditions	Compliance
	Ministry's regional office at Bangalore.	all vents. The vapours generated from the reactors are sent to a dedicated vapour recovery system for recirculation of solvent. The monitored data was not submitted to Regional Office and have agreed to submit in future.
3	Solvent vapours emitted during purification process from purification tanks as fugitive emissions shall be reduced as far as possible. All venting equipment shall have vapour recovery system. All the storage tanks will be under negative pressure to avoid any leakages. Breather valves, N_2 blanketing and secondary condensers with brine chilling system shall be provided for all the storage tanks to minimize vapour losses. All liquid raw material shall be stored in storage Tanks and Drums.	Complied. Solvent vapours emitted during purification process from purification tanks as fugitive emissions are reduced as far as possible All venting equipment are having vapour recovery system. All the storage tanks are under negative pressure to avoid any leakages. Breather valves, N_2 blanketing and secondary condensers with brine chilling system are provided for all the storage tanks to minimize vapour losses. All liquid raw materials are stored in storage Tanks and Drums. Photographs of the scrubber vent, Storage tanks and brine chilling system are attached as **Annexure II**
4	Dedicated scrubbers and stacks of appropriate height as per the Central Pollution Control Board guidelines shall be provided to control the emissions from various vents. The scrubbed water shall be sent to ETP for further treatment.	Complied. The PA have provided two dedicated scrubbers (Scrubbers with a stack height of 12 m in DEDPM plant and in Gabapentin plant) are provided as per the Central Pollution Control Board guidelines to control the emissions from various vents. The wastewater from the scrubbing system is directly sent to ETP for further treatment.
5	The project authority shall obtain membership of TSDF for disposal of the hazardous wastes. The copies of membership certificate should be submitted to the Ministry and its Regional Office at Bangalore. The hazardous wastes shall be disposed off as per the procedure laid in the Hazardous Wastes (Management and Handling) Rules, 2003.	Refer below The PA have obtained membership from Treatment, Storage and Disposal Facilities (TSDF) for disposal of the hazardous wastes and the copies of membership certificate was not submitted to the Ministry and its Regional Office at Bangalore. Now, they have submitted the same during this visit. The hazardous wastes is disposed off as per the procedure laid in the Hazardous Wastes (Management and Handling) Rules, 2003. Hazardous waste and

S.No	Conditions	Compliance
		the agreement copy is attached as **Annexure III**.
6	The process emissions VOCs and particulate matter from various 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 unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	Complied. The PA have installed online VOC analyser to monitor the VOC emissions. As informed by the PA at no time, the emission level has gone beyond the stipulated standards. The PA assured that in the event of failure of pollution control system(s) adopted by the unit, the unit will be immediately put out of operation and will not be restarted until the desired efficiency has been achieved. Photographs of the VOC analyzer system is attached as **Annexure IV**
7	Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits imposed by TNPCB.	Complied. Fugitive emissions in the work zone environment, product, raw materials storage area etc are regularly monitored and the emissions levels conforming to the limits stipulated by TNPCB.
8	During transfer of materials spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic waste and storm drains.	Complied. During transfer of materials spillages are avoided generally and garland drains are provided to avoid mixing of accidental spillages if any with domestic waste and storm drains.
9	Green belt shall be developed at least in 33 % of plant area to mitigate the effect of fugitive emissions all around the plant as per the guidelines of Central Pollution Control Board.	Refer below The PA have taken up plantation along the compound wall and within the project sites also. So far about 1000 trees of different spaces has been planted. However, there is some vacant land. The undersigned directed the PA to take up plantation and for that they have agreed to plant after the monsoon. Photographs of the greenbelt are shown in **Annexure V**.
10	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Complied. Occupational health surveillance of the workers are regularly carried out and records maintained as per the Factories Act.
11	The company shall make the arrangement for protection of possible hazards during manufacturing process	Complied. The following safety measures are adopted for protection of possible

S.No	Conditions	Compliance
	in material handling.	hazards during manufacturing process in material handling. • Temperature sensors and controls are provided on the reactors • Emergency relief valves are provided on all reactors • Hydrocarbon analyzers are placed on all process rooms • Fire hydrant systems are placed as per National Building Code • Fire pumps (Electrical and Diesel driven pumps) are also provided with firewater storage tank.

B. General Conditions

S.No	Conditions	Compliance
1	The project authorities shall strictly adhere to the stipulations of the SPCB/state government or any statutory body.	Refer below. The PA informed that all the stipulations of the SPCB/state government or any other statutory body are being implemented. The consent validity was upto March 2016 and the PA have submitted an application for renewal and it is yet to be issued.
2	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. The PA has not gone for an expansion without MoEF& CC approval. Now they are going for an expansion and the details are given in **Annexure - IA**.
3	The project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended. Authorization from the SPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes.	Complied. The PA strictly complying with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended. Authorization from the SPCB has been obtained for collection, treatment, storage, and disposal of hazardous wastes and it is valid upto August 2020. · Also have obtained membership with TSDF.
4	Ambient air quality monitoring stations shall be setup in the downwind	Complied. The PA have installed Continuous

S.No	Conditions	Compliance
	direction as well as where maximum ground level concentrations are anticipated in consultation with the State Pollution Control Board.	ambient air quality monitoring station as per the directions of TNPCB and the real time monitored data is transmitted to care air centre of TNPCB. Monitoring reports are attached as **Annexure VI.** Manual monitoring is carried out by the PCB once in year at six locations.
5	For control of process emissions, stacks of appropriate height as per the Central Pollution Control Board guidelines shall be provided. The scrubbed water shall be sent to ETP for further treatment.	Complied. For control of process emissions, 30m height stacks (as per the Central Pollution Control Board guidelines 22m height is sufficient)is provided. The scrubbed water is sent to ETP for further treatment.
6	The company shall undertake following Waste Minimization measures: •Metering of quantities of active ingredients to minimize waste. • Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. • Maximizing recoveries • Use of automated material transfer system to minimize spillage. • Use of "Closed Feed" system into batch reactors.	Complied. The company is undertaking the following Waste Minimization measures. • Metering and weighing facilities are provided. •Sodium Bromide is the only by-product from the facility which is stored and sold to other vendors •Maximizing recoveries •Use of automated material transfer system to minimize spillage •Use of "Closed Feed" system into batch reactors.
7	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 shall be obtained for collections/treatment/Storage/disposal of hazardous wastes.	Complied. The project authorities strictly complying 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 is obtained for collections/treatment/ Storage/disposal of hazardous wastes.
8	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 Environment (Protection) Act, 1986	Complied. The overall noise levels in and around the plant area is 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 are monitored during day and night

S.No	Conditions	Compliance
	Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	time and the levels are within the limit as per the standards. **Annexure VIII**
9	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the environmental management and monitoring functions.	Refer below. There is no separate environmental management cell and the approved laboratory is used for monitoring the environmental parameters in addition to the continuous online ambient air quality monitoring station and VOC online continuous monitoring.
10	Financial provision should be made in the budget of the project for implementation of the above suggested environmental safeguards. Fund so earmarked shall not be diverted for any other purposes.	Complied. An amount of Rs.7 Crores was spent so-far on various environmental management programs such as implementation of scrubbers, stacks and ETP.
11	The project authorities shall provide rainwater harvesting system and ground water recharge.	Complied. The PA have established two rainwater harvesting facilities including to harvest the roof top rain water. Photographs of the rainwater harvesting structures are presented in **Annexure IX**.
12	The implementation of the project vis-a-vis environmental action plans shall be monitored by Ministry's Regional Office /SPCB / CPCB. A six monthly compliance status report shall be submitted to monitoring agencies.	Refer below. The PA is submitting the compliance report to SPCB in addition to online real time monitored data of ambient air quality and VOC. However six monthly compliance reports were not submitted to Ministry's Regional Office and have agreed to submit in future.
13	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 and may also be seen at website of the Ministry at http://envfor.nic.ln. 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.	Complied. The PA had given an advertisement in two local newspapers and copies of the same were submitted to the Regional Office of MoEF. **Annexure X.**
14	The project authorities shall inform the	Refer below.

S.No	Conditions	Compliance
	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.	The PA did not inform the date of financial closure and final approval of the project by the concerned authorities as well as the date of start of the project to the Regional Office of the Ministry.

This has approval of the Addl. PCCF(C) vide diary no.816 dt 21.06.2017.

(Dr.C.Kaliyaperumal)
Director (S)

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