

## Six Monthly Compliance Status Report

Annexure -1

**Name of Project :** Expansion of Multi-Purpose Fluorinated Specialty ( Organic)  
Chemicals Plant at Village- Jhiwana, Tehsil- Tijara, District- Alwar ( Rajasthan)

**Project Code:IV/ENV/R/IND-83/620/2008**

**Clearance Letter No.:J-11011/472/2007-1A II (I) dated 19<sup>th</sup>/25<sup>th</sup> Mar-2008**

**Period of compliance Report: April'18 to Sept'2018**

**A. SPECIFIC CONDITIONS :**

S. N.	Conditions	Compliance Status
(i)	<p>The gaseous emissions (HCl, HF, Cl<sub>2</sub>, SO<sub>2</sub> &amp; NOX) and particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time. Ventury scrubbers and HCl absorption system shall be provided to scrub the vapours of HCl, HF, Cl<sub>2</sub> etc. and treated scrubbed wastewater shall be recycled and reused in the process. 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. Inter-locking facility and on-line monitoring system shall also be provided and <b>data shall be submitted to the Ministry's Regional Office at Rajsthan / RSPCB / CPCB regularly.</b></p>	<p>Stack monitoring in CMS, HF, MPP &amp; HFC 134a plant is done fortnightly &amp; Ambient air monitoring is done twice in a week. All parameters are also analysed by the MOEF approved lab every quarter since July 2013 . CPP stack is also monitored once in three months by MOEF approved lab. Emission is well within the RPCB specified standards. Monitoring data are being submitted to RPCB, Jaipur on Monthly/ Quarterly basis.</p> <p>Ventury Scrubber &amp; absorption system exists for absorbing HCL &amp; Cl<sub>2</sub> in CMS plant, HF in HF &amp; HFC 134a plant, HF, HCL &amp; Cl<sub>2</sub> in MPP Plant. HCl 30%, Dilute HF (40-60%) &amp; Sodium hypochlorite solution are sold as by - product.</p> <p>Pollution Control equipment are interlocked with the process. In case of failure of these equipment, process stops. On-line system in all stacks is in place.</p> <p>Stack analysis reports of CMS, HF, HFC134a, CPP, TO, MPP plant and Ambient air are attached as Annexure 2 &amp; 3 and Annexure E-1 to E-12</p>
(ii)	<p>Fugitive emissions in the work zone environment, product, raw material storage area shall be regularly monitored and reports submitted to the <b>Ministry's Regional Office at Rajasthan / RSPCB / CPCB.</b> The emissions shall conform to the limits imposed by RSPCB.</p>	<p>Ambient Air monitoring is being done twice in week &amp; data are being submitted to RPCB, Jaipur on Monthly / Quarterly basis. All parameters are also being analysed by the MOEF approved lab quarterly. Analysis report of approved lab is attached as Annexure E1 to E-4</p> <p>Analysis report of Ambient air is attached as Annexure-3.</p> <p>Work zone monitoring is also being done by using dragger tubes. . The analyzed results are much below the TLV level of individual chemicals. Analysis report is attached as Annexure 3a.</p> <p>The same is also verified by officials from CIFB time to time.</p>

(iii)	Spent solvents shall be recovered as far as possible & recovery shall not be less than 95 percent. Action shall be taken to reduce the emissions as far as possible. Use of toxic solvents like Methylene Chloride (M.C.) etc. shall be minimum. All venting equipment shall have vapour recovery system.	Vapor recovery system is in place, vide vent condenser & vent chiller to ensure the recovery more than 95 percent.
(iv)	The company shall undertake following Waste Minimization measures:	
a	Metering and control of quantities of active ingredients to minimize waste.	The waste is the spent oil & discarded barrels. We have taken the consent for the Hazardous waste from RPCB for both these items. Spent Oil is sent to the CPCB authorized re- processor. Discarded barrels are sent to CTFD, Udaipur. A copy of membership of CTFD Udaipur is attached as Annexure-8 Hazardous waste quantity disposed during April 18 to September'18 is attached as Annexure-4
b	Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.	All our by products like Hypo, Spent sulphuric Acid, Lean HCl, Dilute HF Gypsum are easily saleable in the market and are used in other process.
c	Use of automated filling to minimize spillage.	Filling of the products are automated, through load cell, Mass flow meters & controllers.
d	Use of "Close Feed" system into batch reactors.	Close feed system into the batch process exists, with safety interlocks.
e	Venting equipment through vapor recovery system.	Vapor recovery system is in place, vide vent condenser & vent chiller to ensue the recovery as much as possible.
f	Use of high pressure hoses for equipment clearing to reduce wastewater generation.	Use of high pressure hoses are in place to minimize the waste water generation.
(v)	Total ground water requirement and effluent generation shall not exceed 2,931 m3/day and 1,582 m3/day respectively. Prior permission for the drawl of 2,931 m3/day ground water shall be obtained from the State Ground Water Board/Central Ground Water Authority (SGWB/CGWA). All the effluent shall be treated in the effluent treatment plant (ETP) and treated wastewater shall be recycled and reused in the process, green belt development and other related activities. Cooling water blow down shall be used for horticulture purpose. The domestic effluent shall be treated in Sewage Treatment Plant (STP). No effluent shall be discharged and 'zero' discharge shall be adopted.	Permission of withdrawal of 2681 M3/Day ground water has been obtained from CGWA, a copy of NOC from CGWA is attached as Annexure-9. Previous compliance report of CGWA conditions is also attached as Annexure-10 Process effluent is being treated in ETP & Domestic sewage water is treated in Sewage treatment Plant (STP). Treated water in ETP, STP & Utility effluent is sent to Horticulture water reservoir of capacity 900 KL. Part of the Utility effluent is recycled back into the process & rest is used for Horticulture via pumping & piping network installed all across the plant. We are maintaining Zero discharge from the Unit. Details of water withdrawal during Aprii'18 to September'18 and analysis report of treated water are enclosed as an Annexure-5 & 6. Treated water also being analyzed by the MOEF approved lab. Analysis report of Approved lab is attached as Annexure E-13 & E-14
(vi)	As proposed, chemical sludge from the wastewater treatment plant shall be used as raw material for feeding in HF Plant and / or disposed off to Treatment,	All the chemical sludge is being recycled to HF plant. Sludge of STP is being used for horticulture. Membership of CTFD site Udaipur has been obtained. A copy of membership of CTFD Udaipur is

	Storage and Disposal Facility (TSDF), Udaipur. Sludge from Sewage Treatment Plant (STP) shall be used as manure. Membership to Treatment, Storage and Disposal Facility (TSDF) for the disposal of solid/hazardous waste shall be obtained.	attached as Annexure-8																																				
(vii)	The fly ash shall be utilized as per Fly ash Notification, 1999, subsequently amended in 2003.	Fly ash is sent to the brick/ cement manufacturers.																																				
(viii)	Green belt shall be provided in 29.4 acres (34 %) out of total 84.2 acres land available to mitigate the effects of fugitive emissions all around the plant. Development of green belt shall be as per the Central Pollution Control Board guidelines.	<p><b>Green Belt is being maintained over 36% of the total area i.e. 30.31 acres</b></p> <p>Last Five years plantation data is as given in below table:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Old Plants</th> <th>New Planted</th> <th>Total</th> <th>Mortality</th> <th>Survival %</th> </tr> </thead> <tbody> <tr> <td>13-14</td> <td>5400</td> <td>1210</td> <td>6610</td> <td>264</td> <td>96</td> </tr> <tr> <td>14-15</td> <td>6346</td> <td>1207</td> <td>7553</td> <td>1782</td> <td>77</td> </tr> <tr> <td>15-16</td> <td>5771</td> <td>922</td> <td>6693</td> <td>204</td> <td>78</td> </tr> <tr> <td>16-17</td> <td>6489</td> <td>1673</td> <td>8162</td> <td>1788</td> <td>78</td> </tr> <tr> <td>17-18</td> <td>6374</td> <td>2243</td> <td>8617</td> <td>1478</td> <td>83</td> </tr> </tbody> </table> <p>Name of species for green belt are Peepal, Desi Neem, Philkhan (Pakhal), Kranj, Cassia Siamea, Ardu Neem, Arjun, Jamun, Gulmohar etc.</p> <p>*Above given is within premises plantation other than this SRF has planted 3,86,582 fodder and fruits trees since the inception of the project in 2006 in their NRM project under CSR in Tijara Tehsil.</p>	Year	Old Plants	New Planted	Total	Mortality	Survival %	13-14	5400	1210	6610	264	96	14-15	6346	1207	7553	1782	77	15-16	5771	922	6693	204	78	16-17	6489	1673	8162	1788	78	17-18	6374	2243	8617	1478	83
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<b>B. GENERAL CONDITIONS :</b>																																						
(i)	The project authorities shall strictly adhere to the stipulations made by the Rajasthan State Pollution Control Board.	We are submitting the Quarterly progress report to RPCB.																																				
(ii)	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	For any expansion or modification prior approval from the MoEF will be taken.																																				
(iii)	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 RSPCB.	Ambient air quality monitoring stations have been set up in the down wind direction as well as where maximum ground level concentration are anticipated in consultation with the RSPCB.																																				
(iv)	The project authorities shall strictly	The rules and regulations under Manufacture,																																				

	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 and disposal of hazardous wastes.	Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January, 2000 are being complied with. Hazardous waste are being disposed off as per the Conditions specified in RPCB letter F(HSW)/Alwar(Tijara)/132(1)/2012-2013/844-846 dated 08.05.2017 with authorization number RPCB/HWM/2017-2018/HSW/HSW/32
(v)	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 Rajasthan State Pollution Control Board must be obtained for collection / treatment / storage / disposal of hazardous wastes.	Complying, Hazardous waste are being disposed off as per the Conditions specified in RPCB letter no F(HSW)/Alwar (Tijara)/132(1)/2012-2013/844-846 dated 08.05.2017 with authorization number RPCB/HWM/2017-2018/HSW/HSW/32
(vi)	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 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Noted. Noise Control measures have been provided. Acoustic enclosures are provided at high noise level area e.g. DG set area. Ear plug/ muff being used as a precautionary measures Ambient Noise monitoring is being done on six monthly basis to ensure & confirm the noise level is well within the prescribed standard. Analysis report is attached as an Annexure -7
(vii)	The company shall develop rainwater harvesting structures to harvest the run off water for recharge of ground water.	We have embarked upon a major NRM Project for integrated water development program in Tijara block in villages Gawalda, Alapur, Milakpur Turk, Palpur, Sirohi Kalan, Kidarpur, Bagod and others as a part of that project. In the year 2008-09, , Year 2013-14: 2.34 MCM, Year 2014-15: 1.72 MCM ,Year 2015-16: 1.24 MCM,Year 2016-17 : 2.29 MCM and Year 2017-18: 1.14 MCM water recharged
(viii)	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Six monthly occupational health check up is being carried out as per Rajasthan Factory rules.
(ix)	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.	All Safe guards recommended in the EIA/EMP were implemented & maintained. Please refer Annexure-12 in this regard.
(x)	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Separate Environmental cell exists for ensuring compliance with respect to the consent conditions, supported by well equipped (NABL accredited) laboratory. Hierarchy of Management cell is attached as Annexure-11
(xi)	Adequate funds shall be earmarked towards environmental pollution measures and judiciously used to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for	Noted. Total CSR expenditure of the site for last three year is as under FY 2015-16 Rs. 149.60 Lacs. FY-2016-17 : Rs 90.13 Lacs Fy-2017-18: Rs.66.86 Lacs

	implementing all the conditions stipulated herein shall be submitted to the Ministry, its Regional Office at Lucknow / RSPCB / CPCB. The funds so provided shall not be diverted for any other purpose.	
(xii)	The implementation of the project vis-à-vis environmental action plans shall be monitored by the Ministry's Regional Office at Lucknow / RSPCB / CPCB. A six monthly compliance status report shall be submitted to monitoring agencies.	Noted. Six Monthly compliance report is being submitted to MoEF Delhi/ Ministry's Regional Office at Lucknow / RSPCB Jaipur / RSPCB Alwar. Last report sent on 22.05.2018.
(xiii)	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 RSPCB and may also be seen at Website of the Ministry at <a href="http://envfor.nic.in">http://envfor.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 Ministry's Regional Office at Lucknow.	Complied with. Letter sent to Ministry's Regional Office at Lucknow on dated 23.5.08, CC to the Additional Director –MoEF New Delhi, MS - RPCB - Jaipur & RO – RPCB Alwar .
(xiv)	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.	Expansion for CMS (30000 to 35000 TPA) & HF plant ( 7500 to 12000 TPA) completed in October 2008. Expansion for Phase 1 of Fluorospeciality Plant completed. This has enhanced the FSP capacity from 350 to 1800 MT/Annum. HFC Plant Expansion has completed Consent to operate for HFC-134a expanded Capacity of 6000 MT/annum was received on 01.02.2011
6.0	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted that The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
7.0	The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.	Noted that The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.
8.0	Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.	Noted that Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.

9.0	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Wastes (Management and Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Noted that The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Wastes (Management and Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules.