

**Status of Compliance on Specific & General Conditions for Environmental Clearance of New Projects Stipulated by MoEF, New Delhi, for the period Nov. 2012 to April, 2013.**

Sr. No.	Status/action as on date	Status
<b>A.</b>	<b>SPECIFIC CONDITIONS</b>	
i)	The gaseous emissions (SO <sub>2</sub> , NO <sub>x</sub> , HC, HCl & HCN) and particulate matter from various process units including captive power plant 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. Dust collectors and venturi scrubbers shall be provided to control the particulate emissions.	<p><b>Complied</b></p> <p>Industry has also allotted the W.O. to recognized laboratory for carrying out monitoring &amp; analysis.</p> <p>Monthly report is enclosed and all the results are well within the limit.</p>
ii)	All the gases from the process containing HCN shall be incinerated in the existing waste gas incinerator. The company shall monitor the HCN, Dioxine and Furan and data submitted to the Ministry's Regional Office at Bhopal. Bag filter and stack of adequate height shall be provided to the incinerator to control gaseous emissions. Bag filter, water scrubber and stack to heat treatment salt plant; Ammonia absorption column to Ammonium Sulphate Recovery Plant and Cyclone separator to control particulate emissions. Double walled pipelines to HCN plants as well as other pipelines shall be provided for transferring hazardous/toxic substances. Such pipelines shall be made of anti-corrosive material with inner core-primary pipe and outer cover-secondary pipelines.	<p><b>Complied</b></p> <p>Waste gas from all plants are driven under vacuum to existing Incinerator. HCN content in flue gas is being monitored on monthly basis. Bag Filter, Water Scrubber &amp; Cyclon Separator are provided wherever required.</p> <p>Double wall pipe line for HCN transfer has been provided from HCN Plant to NaCN Plant, DPG plant &amp; Mandelonitrile Plant.</p>

<p>iii)</p>	<p>Project proponents shall monitor PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, HCl, HCN in ambient air. Adequate pollution control measures shall be provided to control gaseous emissions. Scrubbers of more than 90 % efficiency shall be installed. Vents from scrubbers and condensers shall be periodically monitored and maintained as per the best practicable technology.</p>	<p>Ambient Air quality monitoring is carried out for the parameters PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, HCN</p> <p>Analysis report submitted to concerned Govt. agency.</p> <p>No need of Scrubber as vents from HCN, NaCN, DPG &amp; Mandelonitrile plants are connected under vacuum to Incinerator.</p>
<p>iv)</p>	<p>Cyanide content in the incinerator, flue gas and treated effluent shall be monitored regularly to meet the stipulations laid down by Gujarat Pollution Control Board (GPCB). HCN detectors should be provided in HCN, NaCN and Diphenyl Guanidire, (DPG) plant.</p>	<p>Industry has already installed HCN Detectors to HCN, NaCN, DPG &amp; Mandelonitrile plants.</p> <p>Cyanide (HCN) content in flue gas from Incinerator is being monitored on monthly basis and report submitted to the concerned Govt. agency.</p>
<p>v)</p>	<p>All the storage tanks shall be under negative pressure to avoid any leakages. Closed handling systems for chemicals and solvents shall be provided. Magnetic seals shall be provided for pumps/agitators for reactors for reduction of fugitive emissions. Chilled brine based condensers shall be used to prevent emissions. Solvent traps shall be installed wherever necessary.</p>	<p><b>Complied</b></p> <p>Intermediate storage/dozing tank of HCN in HCN Plant, NaCN Plant, DPG &amp; Mandelonitrile Plant have been kept under vacuum and vent connected to existing Incinerator. Hence, there is no chance of any leakage .</p> <p>Magnetic Seals have been provided to Reactors of Mandelonitrile Plant. Reactors of other plants are closed and connected under vacuum to Incinerator. No pump is used for HCN transfer, it is done by gravity through double walled chilled brine cooled SS 316 pipe line.</p> <p>Condensers with chilled brine cooling at – 5° C. are provided wherever required,( e.g. Reactors of Mandelonitrile) to prevent emission or vent to Incinerator.</p>
<p>vi)</p>	<p>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.</p>	<p><b>Complied</b></p> <p>Utmost care is taken to avoid spillage of chemicals. All the plant areas have been already covered with Dyke Wall &amp; floor pit has also been provided to recycle/transfer spillage back to plant or to E.T. plant.</p>

vii)	Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored with instruments of proper range. The fugitive emissions shall conform to the standards prescribed by the GPCB.	<p><b>Complied</b></p> <p>Fugitive emission in the work zone environment, raw-material storage area are being regularly monitored by on-line detectors. Results of all the fugitive emission parameters always meet with the GPCB norms.</p>
viii)	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.	<p><b>Complied</b></p> <p>Regular Ambient Air quality monitoring is carried out on monthly basis for the parameters PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, HCN &amp; HCl.</p>
ix)	The company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and the State Pollution Control Board. The levels of SPM, RSPM, SO <sub>2</sub> , NO <sub>x</sub> and VOC (ambient levels) and HCl emissions from the stacks shall be monitored and displayed at a convenient location near the main gate of the company and at important public places	<p><b>Complied</b></p> <p>Results of Ambient Air quality monitoring parameters are displayed near main gate,</p> <p>It is being regularly updated on web site on monthly basis.</p>
x)	Total water requirement after expansion shall not exceed 615 m <sup>3</sup> /day. Total wastewater generation after expansion shall not exceed 258 m <sup>3</sup> /day. The level of Cyanide in the treated effluent shall not exceed 0.2 mg/l. The industrial effluent generation shall not exceed 258 m <sup>3</sup> /day.	<p><b>Complied</b></p> <p>Water requirement is not exceeding 615 M<sup>3</sup>/day &amp; total wastewater generation is not exceeding 258 M<sup>3</sup>/day. The Cyanide content in treated effluent is almost below 0.20 mg/ltr.</p> <p>Details of water consumption &amp; treated water discharge is being sent to GPCB and also displayed on web-site on monthly basis.</p>
xi)	All the effluent from all the sourced shall be processed for recovery/detoxification/ recycling and then treated in the effluent treatment plant (ETP). The effluent containing Cyanide shall be treated properly. The treated effluent shall be disposed off in nearby Masma Khadi through pipeline only after meeting the norms prescribed under E (P) Rules or prescribed by the GPCB whichever is more stringent.	<p><b>Complied</b></p> <p>Effluent generated from different plants of HCC are segregated &amp; divided for the treatment in two schemes.</p> <p><u>Scheme – 1 : Cyanide containing effluent with Ammonical Nitrogen, low TDS &amp; very low COD-BOD:</u> Effluent from following plants are combined for the treatment –</p> <p>HCN, NaCN, Ammonium Sulphate &amp; SFCN – partly (only condensate water, which is major). Imino Diacetoneitrile (IDAN) (future proposed)</p>

		<p>Methylamine Acetonitrile (future proposed)</p> <p><u>Scheme – 2 : Effluent containing high TDS &amp; higher COD – BOD:</u></p> <p>a) SFCN Plant - Mother liquor after removing SFCN.  b) DPG Plant - Alkaline effluent.  c) SDCN Plant –  d) DOTG (future proposed)</p> <p>Both schemes are successfully implemented &amp; treated effluent meets all norms of GPCB.</p> <p>Analysis reports are being sent to concerned Govt. agency</p>
xii)	The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 for management of Hazardous wastes and prior permission from GPCB shall be obtained for disposal of solid / hazardous waste in the TSDF.	<p><b>Complied</b></p> <p>The industry has obtained authorization for the storage and disposal from GPCB and Industry is having valid membership of M/s Nandesari Environment Control Ltd., Baroda &amp; M/s. Bharuch Enviro Infrastructure Ltd, Ankleshwar.</p>
xiii)	The project authorities shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January, 2000. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.	<p><b>Complied</b></p>

<p>xiv)</p>	<p>The company shall undertake following Waste Minimization measures :-</p> <p>a) Metering and control of quantities of active ingredients to minimize waste.</p> <p>b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.</p> <p>c) Use of automated filling to minimize spillage.</p> <p>d) Use of 'Close Feed' system into batch reactors.</p> <p>e) Venting equipment through vapour recovery system.</p> <p>f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.</p>	<p><b>Complied</b></p> <p>Waste minimization measures have already been taken care as follows:</p> <p>a) Industry has already implemented Sophisticated close charging system with instrumentation to metering &amp; control of active ingredients.</p> <p>b) Ammonium Sulphate – by-product generated from HCN Plant is being sold as fertilizer.</p> <ul style="list-style-type: none"> <li>- Sodium Cyanide waste &amp; mother liquor of NaCN are used for Sodium Ferrocyanide manufacture.</li> <li>- Acidic waste water (dilute HCl) generated from DPG Plant during the manufacture of Ferrous Chloride is being used as raw-material.</li> </ul> <p>c) To minimize the spillage, all finished products, e.g. Sodium Cyanide, Diphenyl Guanidine &amp; Sodium Dicyanamide etc. are filled in drums/bags automatically. Spillage is almost eliminated.</p> <p>d) Raw-materials and process chemicals feeding system into batch reactors are in a closed system with sophisticated instrumentation.</p> <p>e) Venting equipments, e.g. Condensers, Scrubbers &amp; Incinerators have been provided to reactor to destruct hazardous vapour &amp; hence there will be no toxic/hazardous release to atmosphere.</p> <p>f) Company is already using water at high pressure for cleaning the equipment.</p>
<p>xv)</p>	<p>Solvent management shall be as follows :</p> <p>a) Reactor shall be connected to chilled brine condenser system</p>	<p>Company had adopted following measures for Solvent management</p> <p>a) All reactors are either connected to chilled brine condensers or to incinerator with negative pressure.</p>

	<p>b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.</p> <p>c) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery</p> <p>d) Solvents shall be stored in a separate space specified with all safety measures.</p> <p>e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.</p> <p>f) Entire plant where solvents are used shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.</p>	<p>b) Mechanical seals are provided wherever required in reactors and pumps.</p> <p>c) Condensers are provided with sufficient HTA &amp; residence time to achieve more than 95% recovery.</p> <p>d) Separate space has been already provided as per requirement of Petroleum Act for storage of solvent.</p> <p>e) Unit has provided proper earthing for all electrical equipments.</p> <p>f) Where ever flammable chemicals are being used, flame-proof motors &amp; fittings are provided.</p>
xvi)	<p>Hazardous waste like ETP sludge, incinerator ash and spent activated carbon etc. shall be sent to TSDF site of M/s Nandesari Environment Control Ltd. (NECL). Authorization and Membership to TSDF shall be obtained from the concerned department and submitted to Ministry's Regional Office at Bhopal. Used oil shall be sold to authorized reprocessors/recyclers only.</p>	<p>Industry has already obtained the Authorization for Hazardous waste from GPCB &amp; Hazardous waste generated from process &amp; ETP are sent to M/s Nandesari Environment Control Ltd, Baroda &amp; M/s. Bharuch Enviro Infrastructure Ltd, Ankleshwar. We have sold 400 ltr. Of used oil in September, 2012.</p>
xvii)	<p>Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</p>	<p>Occupational Health Surveillance of all workers &amp; employees is being done regularly by industry at least once in a year by Company's qualified Medical Officer &amp; also by an external agency, Dr Agarwal Diagnostic Centre, Kalyan, Mumbai. Records of this activity is being maintained as per Factory Act.</p>
xviii)	<p>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. Usage of personnel protective equipments (PPEs) by all employees/workers shall be ensured.</p>	<p><b>Complied</b></p> <p>Safety training is given to all employees on joining, followed by written test &amp; refresher safety training is also given to all employees minimum once in two years, which includes use of PPE's.</p> <p>Pre-employment &amp; routine medical examination for all employees on handling of chemicals is being undertaken regularly.</p>
xix)	<p>Detailed Risk assessment study shall be carried out and recommended mitigation measure shall be implemented. The company shall make the arrangement for protection of possible fire hazards in case of emergency.</p>	<p>Detailed Risk Assessment Study was carried out by M/s Gujarat Safety Council</p>

		<p>Recommended mitigation measures are being implemented on regular basis.</p> <p>Company has made arrangement for the protection of possible fire hazard right from the beginning. Fire water pipe line network with fire water pond &amp; pumps have been provided to meet any emergency. Different types of required fire extinguishers have been provided in all plants &amp; other strategic locations. Fire fighting training is also given to employees.</p>
xx)	Standards notified for the pesticides and cyanide units under the Environment (Protection) Act, 1986 and amended time to time shall be followed by the Unit.	<p><b>Complied</b></p> <p>Industry meet with the Standards notified for the pesticides &amp; cyanide units under the Environment (Protection) Act - 1986 &amp; it will meet with amendment from time to time.</p>
xxi)	The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP).	<b>Complied</b>
xxii)	Green belt developed in about 25 acres (45%) out of 56 acres total land shall be properly maintained in and around the plant site as per the CPCB guidelines.	<b>Complied</b>
xxiii)	Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.	<p><b>Complied</b></p> <p>Industry has already made Provision for the housing for the construction labourers in the Company's Housing Colony, which is very close to plant &amp; which has all required facilities as described.</p>
<b>B.</b>	<b>GENERAL CONDITIONS</b>	
i)	The project authorities shall strictly adhere to the stipulations made by the Gujarat (GPCB) Pollution Control Board.	<b>Complied</b>
ii)	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	<p><b>Complied</b></p> <p>Company assures that no further expansion or modification in the plant shall be carried out without prior approval of MoEF. A fresh reference shall be made for any deviation &amp; change in the plant.</p>

iii)	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.	<b>Complied</b>  Company is meeting all requirements of emission & will maintain the same.
iv)	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 stations is installed in the up wind and downwind direction as well as where maximum ground level concentrations <i>are</i> anticipated.	<b>Complied</b>  Industry has already decided the Ambient air location in consultation with GPCB.
v)	The overall noise levels in and around the plant <i>area</i> 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 (day time) and 70 dBA (night time).	<b>Complied</b>
vi)	The project proponent shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the Ministry	<b>Complied</b>  We have provided scrubber, dust collector, bag filter & cyclone separator wherever required.
vii)	The company shall undertake rainwater harvesting measures to recharge the ground water as well as reduced consumption of water Company has undertaken rain water harvesting. One recharge bore well constructed opposite to Canteen.	<b>Complied</b>  Industry has already implemented rain water harvesting.
viii)	The company will undertake all relevant measures for improving the Socio-economic conditions of the surrounding area. CSR activities will be undertaken by involving local villages and administration.	<b>Complied</b>  Company is actively working on improving socio-economic conditions of the surrounding area by way of organising Medical Camps, Blood Donation Camps, donation to schools & villages.  Awareness training on hazards of chemicals used/ produced in plant & their preventive measures are being given to people of surrounding villages. Recently we have undertaken cleaning & maintenance of approx. 25 k.m. canal supplying water (from Sandhier to Asnabad via. Satur) to local farmers and general public at a cost of Rs. 1.5 lakhs. Also, we have donated Ceiling Fans costing Rs. 30,000/- to the CHC Olpad and distributed school-bags and books to students of Asnabad Primary School, costing Rs. 11,000/-.



ix)	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	<b>Complied</b>  Company is doing activity on eco-developmental measures in the project area. New tree plantation is done every year on Safety Day, World Environment Day & before monsoon. Recently we have undertaken cleaning & maintenance of approx. 25 k.m. canal supplying water (from Sandhler to Asnabad via. Satur) to local farmers and general public at a cost of Rs. 1.5 lakhs.
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.	<b>Complied</b>  Company has already set up Environmental Management Cell equipped with Full-fledged laboratory facility. Also appointed qualified Environmental Officer who looks after day-to-day environment monitoring & management of the Cell
xi)	The project authorities shall earmark adequate 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	Agreed  Adequate funds are provided to implement the conditions stipulated by MoEF & GPCB and shall not be diverted for other purpose.
xii)	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	<b>Complied</b>
xiii)	Company shall upload the status of compliance of the stipulated environment clearance conditions including results of the monitored data on its website & shall be updated six monthly. Company shall send all these data to Regional Office of MoEF & respective Zonal Office of CPCB & SPCB.  Pollution level data shall be displayed on the board near Security Main Gate of the Company on monthly basis.	<b>Complied</b>
xiv)	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective	<b>Agreed</b>  Company is regularly submitting six monthly report on the status of the compliance of the stipulated environmental conditions including

	Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry / CPCB / SPCB shall monitor the stipulated conditions.	results of monitored data to the Regional Office of MoEF & respective Zonal Office of CPCB & SPCB
xv)	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986,	<b>Complied</b> Environmental statement for each financial year in Form – V is being submitted to GPCB as required.
xvi)	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 of Environment and Forests 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 should be forwarded to the Regional office.	<b>Complied</b> Information on Environmental Clearance for new projects has already been advertised in two local newspapers as detailed below :  a) Gujarat Mitra on 11 10 2010.  b) Rajasthan Patrika on 11 10 2010.  Copies of these advertisements have been sent to Regional Office.
xvii)	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 commencing the land development work.	Not applicable as clearance for new products is based on manufacturing in the existing facility.