

## COMPLIANCE REPORT ABCIL FOR THE PERIODS ENDING 1<sup>ST</sup> DEC, 2014

A.	SPECIFIC CONDITIONS:	PRESENT STATUS
(i)	All the mercury cell operation shall be based on membrane cell and mercury cell based operation shall be carried.	ABCIL have Membrane Cell operation for Caustic Soda production. Mercury Plant operation was stopped in Dec 2006.
(ii)	The company shall install Waste Air De-chlorination (WAD) system with Sodium bi-sulphite for neutralizing chlorine emissions as waste gases from cell house and brine recycle and saturation. Demister shall be provided in Hydrochloric Acid Plant vents. The vent gases from Sodium hydrochloride plant and HCl acid plant shall be controlled at source by effective absorption system so that Chlorine concentration in the vent gases shall not exceed 5 ppm.	ABCIL have Waste Air De-chlorination system to control the chlorine emission at source by effective absorption system. The chlorine concentration is below 5 ppm.
(iii)	The Company shall install Chlorine gas detectors to detect leakage of Chlorine at liquid Chlorine storage tanks, Sodium hypo plant, HCl synthesis unit and Electrolysis area. The Company shall install on-line analyzer in HCl plant and hypo stack with recording facility.	ABCIL have chlorine detection at liquid chlorine storage, Sodium hypo plant, HCl synthesis and electrolyser. Apart from above, company have installed chlorine detectors system at 25 different locations.
(iv)	Cyclone & ESP to the CFBC boiler of power plant with inter locking facility, Dust extractor & bag filter to coal handling plant and pneumatic & closed ash collection & conveying system shall be provided in power plant for control of particulate emission below 100mg/Nm <sup>3</sup> .	ABCIL have Cyclone Separator, ESP, dust extraction and bag filter for coal handling. The particulate emission is below 100 mg/NM <sup>3</sup> . Stack analysis 74.0. mg/Nm <sup>3</sup> against 100 mg/Nm <sup>3</sup> .
(v)	The company shall provide the monitoring arrangement with vents and regular monitoring shall be carried out and reports submitted to Jharkhand SPCB, CPCB and	Yes, Reports are being submitted. SOX- 11.40 Micro gm /m <sup>3</sup> against – Max of 80 Micro gram/m <sup>3</sup>

	<b>SPECIFIC CONDITIONS:</b>	<b>PRESENT STATUS</b>
	Ministry's Regional Office at Bhubaneshwar.	NOX- 12.2 Micro gm /m <sup>3</sup> against – 80 Micro gram/m <sup>3</sup> RSPM(PM 10) – 62.2 micro gm/m <sup>3</sup> against 100.0Microgram/m <sup>3</sup> RSPM (PM 2.5 )- 48.4 against 60microgram/m <sup>3</sup>
(vi)	Fugitive emissions in the work zone environment, product and raw materials storage area shall be regularly monitored. The emissions shall conform to the limits imposed by Jharkhand SPCB.	Yes , monitoring is being done which is within specified limit as prescribed by SPCB
(vii)	The water requirement and waste water generation shall not exceed 9888 KLD and 840 KLD respectively.	ABCIL is complying the norms The water requirement and waste water generation is less than 8794 KLD and 442 KLD respectively
(viii)	The company shall install full fledged effluent treatment plant to treat the waste water generated from the plant including RO system to recycle or reuse all the treated wastewater.	Company have installed the centralized ETP plant including R.O is also operated and the water obtained from the system is reused in the plant.
(ix)	Green belt shall be developed in 24:62 ha out of total 81.94 ha to mitigate the effects of fugitive emissions all around the plant. The development of green belt shall be as per the Central Pollution Control Board guidelines.	Company already has green belt area more than 24.62 hactares . All non plant area covered under green belt.
(x)	The fly ash generated from the power plant shall be handled pneumatically and disposed of it accordance with the provisions of Fly Ash Notification, 2003.	Yes , Complying the norms
(xi)	The hazardous wastes generated from the plant shall be disposed of in accordance with the Hazardous Waste	Yes, Complying the norms

	<b>SPECIFIC CONDITIONS:</b>	<b>PRESENT STATUS</b>
	(Management and Handling) Rules 1989 and as amended.	
(xii)	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.	Yes, Complying the norms
(xiii)	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Yes, Complying the norms
(xiv)	Training shall be imparted to all employees on safety and health aspects of chemicals handling. As informed to the Ministry, OHSAS 18001 shall be continued. 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.	Yes, Complying the norms
(xv)	Usage of PPEs by all employees/ workers shall be ensured.	Yes, Usage of PPE is ensured and strictly followed.
(xvi)	The company shall strictly follow all the recommendations mentioned in the charter on Corporate Responsibility for Environmental Protection (CREP) for Caustic Soda plant.	Yes,
(xvii)	The company shall comply with all the commitments made during public hearing held on 28 <sup>th</sup> August, 2008.	Yes, complying the commitments made during public hearing
(xviii)	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile	Yes, complying the best practices

	<b>SPECIFIC CONDITIONS:</b>	<b>PRESENT STATUS</b>
	STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	
<b>B.</b>	<b>GENERAL CONDITIONS :</b>	
(i)	The project authorities shall strictly adhere to the stipulations of the SPCB/State government or any statutory body.	Yes
(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.	Yes, company will comply the regulations
(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.	Agreed
(iv)	The gaseous emissions (SO <sub>2</sub> , NO <sub>x</sub> , HCl, CO) and particulate matter along with RSPM levels 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	Agreed, Cl- 7.42 mg/Nm <sup>3</sup> against 15 mg/Nm <sup>3</sup> HCl mist- 13.04 mg/Nm <sup>3</sup> against 35mg/nm <sup>3</sup> SO <sub>2</sub> - 336.0 mg/Nm <sup>3</sup> NO <sub>x</sub> - 68.0. mg/Nm <sup>3</sup>

	<b>SPECIFIC CONDITIONS:</b>	<b>PRESENT STATUS</b>
	restarted until the control measures are rectified to achieve the desired efficiency.	
(v)	The locations of ambient air quality monitoring stations shall be reviewed in consultation with the State Pollution Control Board (SPCB) and additional stations shall be installed, if required, in the downwind direction as well as where maximum ground level concentrations are anticipated.	Complied
(vi)	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
(vii)	All the storage tanks will be under negative pressure to avoid any leakages. Breather valves, N <sub>2</sub> blanketing and secondary condensers with brine chilling system shall be provided for all the storage tanks to minimize vapour losses. All liquid raw materials shall be stored in storage Tanks and Drums	Being complied
(viii)	The company shall undertake following Waste Minimization measures.	Yes, Company follows the methodology of reduce, recycle of waste.
	➤ Metering and control of quantities of active ingredients to minimize waste.	
	➤ Reuse of by-products from the process as raw material substitutes in other processes.	
	➤ Use of automated filling to minimize spillage.	
	➤ Use of "Closed Feed" system into batch reactors.	
	➤ Venting equipment through vapour recovery system.	

	<b>SPECIFIC CONDITIONS:</b>	<b>PRESENT STATUS</b>
	➤ Use of high pressure hoses for equipment cleaning to reduce waste water generation.	
(ix)	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 and Hazardous Waste (Management and Handling Rules, 1989, as amended from time to time. Authorization from the SPCB shall be obtained for collection, treatment, storage, and disposal of hazardous waste.	Yes, Complied
(x)	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 (day time) and 70 dBA (night time).	Yes, Complied Noise level- 64.2 dB(A)day time 48.20 dB(A )at night
(xi)	The company shall develop rain water harvesting structures to harvest the run off water for recharge of ground water and to reduce requirement of the fresh water.	Yes, company have followed the rain water harvesting methodology for water conservation as per approved plan by Central Ground Water Department ,Ranchi
(xii)	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment. The eco-development plan should be submitted to the SPCB within three months of receipt of this letter for approval.	The company have CSR activity

	<b>SPECIFIC CONDITIONS:</b>	<b>PRESENT STATUS</b>
(xiii)	The project proponent shall also comply with all the environmental protection measures and safeguards proposed in the EIA/EMP report.	Yes, agreed
(xiv)	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Yes, Company have separate environmental cell equipped with full fledged laboratory facility.
(xv)	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.	Yes, agreed
(xvi)	The implementation of the project vis-a-vis environmental action plans shall be monitored by the concerned Regional Office of the Ministry/SPCB / CPCB. A six monthly compliance status report shall be submitted to monitoring agencies and shall be posted on the website of the Company.	It will be followed now
(xvii)	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://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 concerned Regional Office of the Ministry.	Yes ,Agreed

	<b>SPECIFIC CONDITIONS:</b>	<b>PRESENT STATUS</b>
(xviii)	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	Yes, Agreed & being complied
6.0	The Ministry or any other competent authority may stipulate any further condition (s) on receiving reports from the project authorities. The above conditions shall be monitored by the Regional Office of this Ministry.	Agreed
7.0	The Ministry may revoke or suspend the clearance if any of the above conditions is not satisfactory.	Agreed
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.	Agreed
9.0	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention and Control of Pollution) Act; 1974 the Air (Prevention and Control of Pollution) Act, 1981 the Environment (Protection) Act, 1986 and the Public Liability Insurance Act 1991 along with their amendments and rules.	Agreed