

**SIX MONTHLY COMPLIANCE REPORTS- DEC., 2017 AGAINST
ENVIRONMENTAL CLEARANCE OF M/S BRAHMAPUTRA CRACKER AND
POLYMER LIMITED**

A. SPECIFIC CONDITIONS:

<u>Sl. No.</u>	<u>Conditions</u>	<u>Compliances</u>
i.	The gaseous emissions (SO ₂ , NO _x , and HC) from the various process units should confirm to the standards prescribed under Environment (Protection) Act, 1986 or norm stipulated by the SPCB whichever is more stringent. At no time, the emission level should go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency.	The gaseous emissions from process plant, ambient air quality, analysis report of liquid effluent and noise level for reporting period is attached as Appendix-I .
ii.	Adequate number of ambient air quality monitoring stations (SPM, SO ₂ , NO _x and HC) should be set up in the petrochemical complex in consultation with SPCB, based on the concurrence of maximum ground level concentration and downwind direction of wind. The monitoring network must be decided based on the modeling exercise to represent short term GLCs. Continuous online stack monitoring equipment should be installed for measurement of SO ₂ and NO _x . The company should install low NO _x burners in cracker furnaces, bag filters in the polymer plant and steam injection for smokeless flaring. Stack heights of 45mt for cracking plant and 60mt height for boilers in crackers should be provided for dispersion of pollutants.	Ambient Air Qualities are being monitored at four locations of BCPL, Lepetkata Petrochemical Complex, at two locations of BCPL, Lakwa, at one location of GDU & CS, Duliajan and at one location of BCPL, Railway Siding. Online Stack Equipments are available in process units viz CPP, ECU for continuous monitoring. Low NO _x Burners are incorporated at appropriate places and steam injection is also available for smokeless flaring. Height of each stack attached to heater in cracking plant is 52.5 m and height of each stack for boiler in Captive Power Plant is 66 m.
iii.	Liquid effluent (2900 m ³ /d) generated from the various sources should be treated comprehensively to conform to the load-based standards and concentration limits	A Modern Effluent Treatment Plant (ETP) is functional at BCPL, Lepetkata Petrochemical Complex to meet the specified limits prescribed



	<p>prescribed under Environment (Protection) Act, 1986 rules (MINAS standards). A unit level treatment facility should be provided to treat the concentrated waste streams such as polymer powder remover and spent caustic. The combined waste water after treatment for specific pollutants should be treated in the central waste water treatment facility to meet the State Pollution Control Board norms before discharging into the river through a closed pipeline at a point where sufficient dilution is available. The company must undertake maximum recycling/reusing of the treated effluent for process purpose in addition to green belt development and also adopt adequate water conservation measures.</p>	<p>under Environment (Protection) Act, 1986 rules. There is no polymer powder waste generated from Polypropylene Unit, however polymer powder is intermediate product from which polypropylene final product is made. Spent Caustic Treatment System is available at Effluent Treatment Plant.</p> <p>Hydrocarbon condensate from GDU & CS-Duliajan and Railway Siding Facilities are periodically shifted to ETP of BCPL, Lepetkata Main Plant by tanker for treatment. Only treated water is discharged to Brahmaputra river through a dedicated pipeline after meeting the norms. Diffuser is also installed at end of effluent discharge pipe for proper dilution of treated water. At BCPL, Lakwa plant also effluent is discharged only after meeting the norms.</p>
iv.	<p>The company should take steps to control escaping of polymer fines and mixing in effluent as well as other pollutants in the effluent streams. The polymer fines should be recovered from the effluent stream and the treated effluent should be monitored regularly before discharging into the river to prevent the harmful impact on aquatic flora and fauna.</p>	<p>Process plant has been designed in such a way that polymer fines remain in close loop and further treated effluents are monitored regularly before discharging into the river to prevent the harmful impact on aquatic flora and fauna.</p>
v.	<p>The solid waste generated in the form of spent catalyst should be supplied to the outsiders. The ETP sludge and molecular sieve dehydrator spent media should be disposed off in the secured landfill within the plant premises. The landfill site should be suitably designed with the approval of the SPCB, as the water table in the area is quite high. Landfill site should be ready along with commissioning of the project. The ground water quality around the landfill site should be monitored regularly</p>	<p>BCPL's procurement procedure ensures most of the spent catalyst, Molecular Sieves etc. are either taken back by the supplier or sold through MSTC (A Government of India Enterprise) to authorized agencies only.</p> <p>Construction of landfill site is under process with Pollution Control Board, Assam.</p> <p>Ground water quality around the landfill site would be monitored</p>



