Name of the Project: Tata Fertilizer Plant at Babrala, Sambhal, UP - Environmental Clearance

Project code: UP-1-22-1989 (Chemical fertilizer)

Clearance Letter No. : J-11011/4/80-IA II (I) dated 16.06.1989

Period of Compliance Reports: 01 April 2015 – 30 Sept 2015

Specific / General Condition:

S. No.	Conditions	Compliance Status as on 01 Oct 2015
1	The project authority must strictly adhere to the stipulation made by Uttar Pradesh State Pollution Control Board	Industry is complying all the stipulations of UPPCB. Post De-botlleneck project consent orders for Air & water has been renewed by UPPCB up to Dec-2015. Compliance reports are regularly being submitted to Board.
2	The emissions from various process unit must conform to the standards prescribed by the Government or the Central/State Pollution Control Board. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure or any pollution control system adopted by the unit, the respective unit should be put out of operation immediately and should not be restarted until the control systems are rectified to achieve the desired efficiency.	Emission from various stacks / prilling tower conforms to standards as stipulated by UPPCB, Monthly, Quarterly and yearly reports are being submitted regularly to MoEFCC Regional office and UPPCB. In CPP Stacks, HRSGU- SOx - BDL, NOx – 69.7–97.3 (Avg.80.9) ppm, SPM - <5mg/nm3; Service Boiler- SOx -BDL, NOx–24.2–35.0 (Avg. 30.3) ppm, SPM- <5mg/nm3. Both stack emission at 15% excess oxygen. In Ammonia Plant Stacks (Primary Reformer), SOx - BDL, NOx- 49.8–198.6 (Avg.131.7) ppm, SPM - <5mg/nm3; (Fire Heater) SOx- BDL, NOx-15.7–47.5 (Avg. 31.1) ppm, SPM-<5mg/nm3. Both stack emission at 3% excess oxygen.
3	The project authority must conform to the standards prescribed for Urea dust emissions from Urea Prilling Tower by the Central/State Pollution Control Board	Urea dust emissions conform to the standards, stipulated by UPPCB. Compliance reports are regularly being submitted to MOEFCC and UPPCB. In Urea Plant Stack (Prilling Tower), SPM (as Urea Dust) – 43.2 – 48.4 (Avg. 46.2) mg/nm3
4	The project authority must explore the possibility of recycling the waste water to the maximum extent possible. The liquid effluent coming out of the fertilizer complex should strictly conform to the standards prescribed by the State Government or Central Pollution Control Board before its discharge to the perennial rivulet. The process plant effluent should be discharged through pipelines/covered drains.	Effluents generated in Urea & ammonia plants are treated within the respective plants and treated waste water is recycled & used as boiler feed water after minor treatment in DM plant. About 75% effluent (process & steam condensates) water is recycled back to the process & remaining waste water after suitable treatment is being used for irrigation in green belt & conforms to standards stipulated by State / Central Pollution Board.
5	The project authority must prepare a well designed scheme for solid waste disposal generated during various process operations or in the treatment plant. The plan for disposal should be submitted to this Ministry within a period of 03 months for review.	LDPE lined concrete pit has been provided for the storage of spent catalysts generated from process & sold to the authorized vendors from CPCB and MoEFCC registered recyclers & Re-processors

6	The project authority must keep Ammonia storage to the minimum in a well designed and well protected Horton-sphere / Storage tank which should conform to the stipulations made by Chief Inspector of Factories of the State Government. At no time the Ammonia Storage quantity shall exceed more than seven days requirement.	Two Number of well designed & well protected storage tanks have been provided for the storage of ammonia. Ammonia storage quantity does not exceed more than seven days requirement at any time.
7	No change in design of stacks should be made without the prior approval of State Pollution Control Board. Alternate Pollution Control System and proper design (steam injection system) in the stacks should be provided to minimize the excess emissions due to failure in any system in the plant. The project authority will provide proper control system for abnormal emissions during start up or shut down operations.	We insure that no change in design of stacks shall be made without prior approval of state pollution Control Board. Steam injection system has been provided in the main flare stack to minimize the emissions during the failure of any system in the plant during start up or shut down operations.
8	A minimum of five air quality monitoring stations will be set up at different locations within the plant and in the nearby areas. The air quality will be monitored as per standard procedure on a weekly interval basis. All the stacks of the plant will be provided with continuous automatic stack monitoring equipment and stack emission levels will be recorded and submitted to the State Pollution Control Board once in three months and this Ministry once in six months. The air quality monitoring stations should be selected on the basis of modeling exercise to represent the short terms ground level concentration.	Five ambient air quality monitoring stations have been provided and ambient air quality is monitored twice in a week with standard procedures. Monitoring reports are being submitted regularly to UPPCB & MoEFCC on monthly, quarterly & six monthly basis. The ambient air quality stations - SOx - BDL, NOx- 2.8 – 37.0 (Avg. 9.5) µg/Nm³ RSPM– 6.0–246.0 (Avg. 58.3) µg/Nm³, NH3–13.0–268.0 (Avg. 73.8) µg/Nm³. (RSPM value was high due to local village activities and hot dry windy weather during May to June months). We have installed on-line analyzers in captive power and steam generation plant. Ambient air quality monitoring stations have been provided on the basis of modeling exercise.
9	The liquid effluent quality must be measured on a daily basis. A minimum of five water quality monitoring stations must be set up in consultation with the State Pollution Control Board. If the effluent quality at any time, exceeds the standards prescribed, the corresponding units of the plant which are contributing to the excessive pollutant load quality of pollutants discharged from the unit are brought down to the required levels.	Five Water monitoring stations have been set up with the consultation of Regional Officer, Pollution Control Board and these monitoring stations are approved by UPPCB, Lucknow. Treated effluent water quality is being monitoring on daily basis as per MINAS. Real time and Online continuous Effluent Monitoring System installed at outlet of final treated effluent and data is being communicated to CPCB/ UPPCB.
10	The ground water quality of this particular area will be measured at a few locations near the plant site and later once in month at the same points. The points should be selected in consultation with State/Central Ground Water Board. Data with regard to the ground water availability, its use for different purposes and recharge capacity should be complied and submitted to this Ministry within six months.	The ground water quality is monitored on monthly basis and quarterly reports are being submitted on regular basis. Approval from State ground water board has been taken.
11	A Disaster Management Plan duly approved by the NODAL agency should be submitted within a period of six months.	Revised Disaster Management plan has been submitted to the Nodal Agency (Director of Factories, Kanpur) for approval vide letter No. TCL/F&S/45/14-15/05 (26th Dec 2014).

12	An exclusion zone of four kilometers as notified by the Government of Uttar Pradesh under Section 3(3) of the Uttar Pradesh (Construction Works Regulations) Act, 1988 for stopping unsystematic distribution of land and unplanned construction of buildings must be strictly followed in consultation with U.P. Government.	Construction of the buildings and land distribution in the exclusion zone is under the control of District Authorities. We are regularly communicating to the concerned authorities.
13	The project authority must develop a green belt of 100 meter wide in keeping with the design submitted in EIA report of December, 1988.	We have provided about 100 meter wide green belt around the periphery of the complex. About 37.2 % area of total land inside the factory complex is under green cover which contains about 2.90 Lakh trees.
14	The project authority must set up full-fledged laboratory with the required facilities for collection and analysis of samples.	A full-fledged laboratory has been set up in the fertilizer complex with all required facilities and experienced person. Laboratory is NABL accredited also.
15	The additional area under the control of the company which is not being used for plant utilities may be afforested and funds for this purpose should be suitably provided.	Additional area lying outside will be returned back to the UPSIDC.
16	A separate environmental management cell with suitably qualified people to carry out various functions related to environmental management should be set up under the control of a senior technical person who will directly report to the head of organization.	A separate Environmental Management cell has been set up with suitable qualified & experienced team under control of senior technical person who reports directly to the head of organization.
17	Rehabilitation plan and its implementation schedule for the people displaced due to the proposed project will be submitted to this Ministry within three months for review.	Rehabilitation plan has already been submitted. Pl refer our letter No.TCL/FD/EMC/53/99 dated 05.07.1999.
18	Adequate fund provision (capital and recurring expenditure) should be made for the implementation of above stipulations and this should not be diverted for any other purposes.	Adequate fund provisions are made for the implementation of above conditions.
19	The ministry of environment & Forest or any other competent authority may stipulate any further condition after reviewing the impact assessment report or any other report prepared by the project authorities.	We agree
20	The above condition will be enforced, inter-alia, under the Water (Prevention & Control of Pollution) Act 1971, The Air (Prevention & Control of Pollution) Act 1986.	We agree
21	The ministry reserves the rights to vary the conditions or withdraw the clearance as and when necessary in the interest of Environmental pollution.	We agree

22. Others

a. Industry has been awarded 5 Star Rating on Environment Sustainability by British Safety Council, UK three times in a row (world's first company)

b. Industry has been certified for RC-14001, ISO-14001 & OHSAS- 18001.

c. Off- Site Emergency Plan has been prepared for Sambhal District under guidance of District Administration, Sambhal.

Name of the Project: Fertilizer Plant at Babrala, Sambhal, U. P. by M/s Tata Chemicals Ltd. - Environmental Clearance regarding use of Naphtha

Project code: UP-1-22-1989 (Chemical Fertilizer)

Clearance Letter No. : J-11011/28/1994-IA II (I)

Date: 16 May 1996

Period of Compliance Reports: 01 April 2015 – 30 Sept 2015

S. No	EC Condition	Compliance Status as on 01 Oct 2015
i	No additional storage for ammonia should be created.	It is ensured that No additional storage of Ammonia will be carried out. Two (02) double walled ammonia storage tanks at atmospheric pressure have already provided.
ii	Necessary approvals from the Chief Explosive Director should be obtained for naphtha storage.	Approval for storage of naphtha has been obtained.
iii	Green belt area should be increased to at least 20% of land under possession in consultation with local DFO preferably using native plant species (2500 trees / hectare) A green belt development plan be accordingly prepared and submitted to this ministry covering information on existing plantation and area already covered under greenery.	About 37.2 % area of total land inside the factory complex is under green cover which contains about 2.90 Lakh trees. Every year minimum 5000 new plants are being planted to maintain the green belt density as stipulated.

Name of the Project: Expansion of Fertilizer Plant by De-bottlenecking (Urea 3,000 MTPD to 3,500 MTPD & Ammonia 1,750 MTPD to 2000 MTPD) at Babrala, Sambhal, U. P. by M/s Tata Chemicals Ltd. - Environmental Clearance reg

Project code: UP-1-22-1989 (Chemical Fertilizer)

Clearance Letter No. : J-11011/112/2007-IA II (I)

Date: 01 August 2007

Period of Compliance Reports: 01 April 2015 - 30 Sept 2015

SPECIFIC CONDITIONS:

	EC Conditions	Compliance Status As On 01 Oct 2015
i	The gaseous emissions (SO2, NOx, NH3, Urea dust) particulate matter 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 restarted until the control measures are rectified to achieve the desired efficiency.	All flue gas emissions from process stacks are monitored on weekly basis and conform to the stipulated standards laid down by SPCB / CPCB. All compliance reports are submitted to SPCB and MoEF (RO) on regular basis. In CPP Stacks, HRSGU- SOx - BDL, NOx – 69.7– 97.3 (Avg.80.9) ppm, SPM - <5mg/nm3; Service Boiler- SOx -BDL, NOx–24.2–35.0 (Avg. 30.3) ppm, SPM-<5mg/nm3. Both stack emission at 15% excess oxygen. In Ammonia Plant Stacks (Primary Reformer), SOx - BDL, NOx- 49.8–198.6 (Avg.131.7) ppm, SPM - <5mg/nm3; (Fire Heater) SOx- BDL, NOx-15.7–47.5 (Avg. 31.1) ppm, SPM-<5mg/nm3. Both stack emission at 3% excess oxygen.
ii	In urea plant, particulate emissions shall not exceed 50 mg/m3. Monitoring of prilling tower shall be carried out as per the CPCB guidelines. Hydrocarbon monitors shall be installed. Acid fume blower shall be provided to control fugitive emissions. Stripper in Ammonia Plant, Distillation & Urea Hydrolyser in Urea Plant shall always be kept functional to strip Ammonia and Urea.	Prilling tower emission monitoring is being carried out on weekly basis as per CPCB Emission guidelines & quality conforms to the CPCB standard (50 mg/nm^3). Hydrocarbon monitors have been provided at key locations in ammonia and O&U plant Acid fume blower has been provided in Acid Handling & Storage area. Stripper of ammonia plant and Distillation Tower & Hydrolyser are used for treatment of process condensates generated from ammonia & urea plant. In Urea Plant Stack (Prilling Tower), SPM (as Urea Dust) – 43.2 – 48.4 (Avg. 46.2) mg/nm3.
iii	Ambient air quality monitoring stations shall be set up in the downwind direction as well as where maximum ground level concentrations are anticipated in consultation with the UPPCB and data submitted to the Ministry's Regional Office at Lucknow six monthly and UPPCB quarterly along with statistical analysis.	05 Ambient air quality monitoring have been setup and in which 03 stations are located to 120° to each other as directed in earlier NOC conditions. Air quality monitoring is being carried out twice per week & compliance reports are also being submitted to SPCB and MoEF (RO) on regular basis. The ambient air quality stations - SOx - BDL, NOx- 2.8 – 37.0 (Avg. 9.5) µg/Nm^3 RSPM– 6.0–246.0 (Avg. 58.3) µg/Nm^3, NH3–13.0–268.0 (Avg. 73.8) µg/Nm^3. (RSPM value was high due to local village activities and hot dry windy weather during May to June months).
iv	Total ground water requirement after expansion shall not exceed 45,340 m3/day and prior permission from SGWB / CGWA for the drawl of 45,340 m3/day shall be obtained. Condensate in Ammonia and urea plant shall be treated in DM Plant and recycled in the process as boiler feed water. Further efforts shall be made to recycle and reuse all the treated effluent in the process or for green belt development. Prior permission for the discharge of treated liquid effluent, if any, shall be obtained from the U. P. Pollution Control Board. Otherwise, no effluent shall be discharged outside the premises except during the rainy season after meeting the norms prescribed under the E (P) Act, 1986 and UPPCB whichever are more stringent.	Approval from SGWB for drawl of ground water has already been taken and copy of the same has already submitted to your office. All process condensates from ammonia, urea & steam are recycled as boiler feed water and balance waste water after suitable treatment in ETP is used irrigation of green belt. Every year consent for discharge of treated effluent has been taken from SPCB.

v	Regular and periodical monitoring of quality and level of ground water by installing peizometric wells around the guard pond and spent catalyst disposal site shall be carried out and reports submitted to Ministry's Regional Office at Lucknow, CPCB and UPPCB.	04 Peizometer well have been installed at different locations to monitor the level of ground water. Water samples are being collected from hand pumps located in and around the fertilizer complex. Ground water quality and water level report are being submitted to MoEF (RO), CPCB and SPCB periodically. Ground Water Level during 2015-16 (H1) was in range of 4.27–6.10 Mt. Total rain fall during the 2015-16 year (April-Sept) is about 602.8 MM.
vi	Spent catalysts generated shall be properly stored in properly concreted LDPE lined disposal pit before selling to authorized recyclers / reprocessors. Waste oil shall be sold to authorized recyclers / reprocessors.	Spent catalyst (when generated) is temporarily stored in appropriate LDPE lined concreted storage pits prior to send to authorized vendor. Used and discarded oil is stored on Oil storage area which is LDPE lined concrete floor. All used and discarded oil and oily waste generated in plant is being disposed only to authorized recyclers / reprocessors.
vii	The company shall undertake adequate protection measures for handling of ammonia vapours in case of plant upset condition. Safety valve exhaust and drains shall be connected to a separate close header from which ammonia vapours shall be vented from vent stack after diluting with stream.	Adequate measures have been provided to handle the ammonia vapours in case of emergency. All PSV's and discharges are connected to flare stack and vent stacks accordingly.
viii	The company shall implement all the recommendations made in the Charter on Corporate Responsibility for Environmental Protection (CREP) for fertilizer industries.	All CREP requirements pertaining to fertilizer industry have been implemented and compliance report is being submitted to nodal agency periodically.
ix	The company shall develop rainwater harvesting structures to harvest the runoff water from the roof tops and by laying a separate storm water drainage system for recharge of ground water.	Rain water harvesting system has been developed to collect the runoff water from storm water drains. Development of Ground water recharge system has been assessed for its feasibility.
x	Green belt already developed in 28.7 % (144 ha, out of 502 ha.) shall be properly maintained and an effort shall be made to further increase the percentage by regularly planting trees at all the vacant spaces to achieve green belt in at least 33 % area to mitigate the effects of fugitive emissions all around the plant as per the Central Pollution Control Board guidelines. Density of trees at the site shall be maintained as 2,000-2,500 trees/ha.	About 37.2 % area of total land inside the factory complex is under green cover which contains about 2.90 Lakh trees. A dedicate team headed by Horticulturist is taking care the maintenance of green belt and other land scaping. Every year about 5000 tree plantation target is being taken to increase and maintain the green belt.
B GENERAL CONDITIONS		
	EC Conditions	
1	The project authorities must strictly adhere to the stipulations made by the U.P. Pollution Control Board (UPPCB) and the State Government.	All stipulations made by SPCB have been implemented and complied. Compliance reports for the Air, Water and Hazardous waste are being submitted regularly.
2	No further expansion/modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	It is ensured that without prior approval of the MoEF, further expansion / modifications in the plant shall not be carried out.
3	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 & Handling) Rules, 2003.	The authority complies with the rules and regulations with regard to handling and disposal of hazardous waste in accordance with the Hazardous Waste (Management, Handling & Trans-boundary movement) Rules, 2008.
4	The project proponent shall also comply with all the safeguards recommended in the EIA /EMP Report.	The project complies to all safeguards recommended in the EIA / EPA Report

5	The project authorities will set up a separate environmental management cell for effective implementation of all the above stipulations under control of Senior Executive.	A dedicated Environment Management Cell headed by Assistance Vice Precedent (Production) has been established to ensure the all stipulated compliances.
6	As proposed in EIA/EMP, Rs. 150.00 Crores for de-bottlenecking and Rs. 0.80 Crores for recurring cost/annum for environmental pollution control measures shall be utilized judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government and a time bound implementation schedule for all the conditions stipulated herein shall be submitted to the Regional Office of this Ministry at Lucknow. The funds so provided shall not be diverted for any other purposes.	An annual budget for Capital investment & Revenue expenditure is taken every year. This amount is utilized for plant / operational improvement and maintenance of Environment Management System. About Rs. 17.65 lakh utilized till Sept. 2015 in FY 2015-16 for implementation of Waste disposal, emissions treatment and remediation costs, operational improvements / modification, maintenance of horticulture / environmental management system.
7	The Regional Office of this Ministry at Lucknow / Central Pollution Control Board/ U. P. Pollution Control Board will monitor the stipulated conditions. A six monthly compliance status report and the monitored data along with statistical interpretation shall be submitted to monitoring agencies regularly.	A six monthly compliance status report and the monitored data along with statistical interpretation is regularly being submitted to monitoring agencies.
8	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 U. P. Pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment and Forests at http:lenvfor.nic.in. This should 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 Regional office at Lucknow.	A public notice has been given to all through publishing the news for accord of environment clearance for debottle-neck of fertilizer plant at Babrala.
9	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 commencing the land development work, if any.	All information have been submitted to MoEF (RO) vide our letter no. TCL/FW/27/2009 dated 17 April 2009.
10	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	We agree
11	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.	We agree
12	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (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.	We agree