



# Hindustan Urvarak & Rasayan Limited

(A Joint Venture of NTPC, CIL, IOCL, FCIL & HFCL)

Barauni, Urvarak Nagar, Begusarai-851115 (Bihar)

Ref. No.: HURL/BR/ECZ/08

Date: 27/05/2023

To

**Regional Office (Eastern Central Zone)**

Ministry of Environment, Forest and Climate Change,  
Bungalow No. A-2,  
Shyamali Colony,  
Ranchi – 834002.

**Subject:** Regarding submission of Six months EC compliance report on PARIVESH portal by of M/s Hindustan Urvarak & Rasayan Limited (HURL)-Barauni Compliance Report for October-2022 to March-2023.

Ref: (i) MOEF & CC, Environmental Clearance Letter No. J-11011/371/2016-IAII  
(I) dated: 29.08.2017.

Dear Sir,

With reference to the subject as mentioned above, please find attached herewith the Six months EC compliance report for the period October-2022 to March-2023 with all annexures and same have been uploaded on PARIVESH portal.

For & on behalf of HURL Barauni,

(Karanam Manoranjan Babu)  
Vice President (TS & PRODN)

Encl: As above.

CC: Regional officer,  
Bihar State Pollution Control Board  
Barauni Industrial area  
Begusarai.

**Karanam Manoranjan Babu**  
Vice President (Tech. Services & Prodn.)  
Hindustan Urvarak & Rasayan Ltd.  
Urvarak Nagar, Barauni, Begusarai  
(Bihar) 851115

CC: Regional Directorate – KOLKATA  
Central Pollution Control Board,  
Ministry of Environment, Forest and Climate Change, Govt. of India,  
'South end Conclave' Block-502, 5<sup>th</sup> & 6<sup>th</sup> Floor, 1582,  
Razidanga, Main Road, Kolkata-700107

# EC Conditions Six Monthly Compliance Report

(by Project Proponent)



Proposal No : IA/BR/IND2/61377/2016

## 1. Name of the Entity / Corporate Office :

File No. :	J- 11011/371/2016-IA.II(I)	Proposal Name :	New Ammonia-Urea Fertilizer project
Date Of EC. :	29 Aug 2017	EC Letter :	
Name of the Entity / Corporate Office :	HINDUSTAN URVARAK AND RASAYAN LIMITED	Email Address :	corp.nbd@hurl.net.in
Address :	Core-2, Floor-2, SCOPE Minar, Laxmi Nagar District Centre, Laxmi Nagar Delhi	Mobile No :	98688 3183

## 2. Proponent Details :

Proponent Name :	Sanjay	Designation :	GeneralManager
Telephone No. :	11-22502263	Mobile No. :	+91 9868831831
Fax No. :	11-01122502267	Email Address :	goutammajee@hurl.net.in
Website :		Pin Code :	110092
State :	Delhi	District :	East
Village/Town :			

## 3. Compliance Letter/Report (Proponent):

Compliance Period :	2023 / 01 Jun (01 Oct - 31 March)	Compliance Submission Date :	27 May 2023 11:45:03:787
Remarks :			
Site Visit Report :	N/A	Site Visit Date :	N/A
ATR Report :	N/A	ATR Date :	N/A
Additional Attachment (If Any) :	N/A	Additional Remarks (If Any) :	

## 4. Summary Status of Compliance :


Total Condition :	108		
Complied :	61	Being Complied :	6
Not Complied :	0	Partially Complied :	0
Agreed to Comply :	41		


## 5. Details of Production and Project Area :

Date of Commencement of Project/Activity :	01 Jan 2018	Project Area as Per EC Granted (In Case of Mine Lease):	480	
Actual Project Area(In Case of Mine Lease):	480			
PRODUCTION CAPACITY :				
S.No	Name of the Product	Units	As per EC granted	Production during last financial year



1	UREA	Tons per Day (TPD)	3850	0
2	AMMONIA	Tons per Day (TPD)	2200	0
3	Urea	Tons per Day (TPD)	3850	0.0
4	Ammonia	Tons per Day (TPD)	2200	0.0
5	UREA	Tons per Day (TPD)	3850	0
6	AMMONIA	Tons per Day (TPD)	2200	0




## 6. Specific Conditions (Proponent) :




S.No	Condition	Self Declaration	Remarks / Reason	Supporting Documents	Observation of IRO
1	The levels of PM10 (Urea dust), SO2, NOx, Ammonia, Ozone and HC shall be monitored in the ambient air and displayed at a convenient location near the main gate of the company and at important public places. The company shall upload the results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MoEF&CC, the respective Zonal office of CPCB and the SPCB.	Complied	Environmental Monitoring w.r.t. Air, Water and Noise is being carried out HUBERT Enviro, Chennai. Six monthly compliance report is also being sent to the Regional office of MoEF & BSPCB.		
2	Fresh water requirement shall not exceed 5.36 cum/ton of Urea production. Fresh water shall be sourced from River Ganga only after the required permission from the concerned authority. During construction phase, ground water may be used after prior permission in this regard from the concerned regulatory authority.	Complied	Fresh water will be sourced from river Ganga during plant operation, NOC has been accorded by CWC. For construction purpose, ground water is being used with NOC from Central Ground Water Authority	N/A	
3	To control source emissions, scrubber and/or other suitable pollution control device shall be installed to meet the prescribed Particulate Matter emission norms of 50 mg/Nm <sup>3</sup> , and also the NAAQS.	Agreed to Comply	Addressed in the Feasibility Report design stage & shall be complied during operation phase. Design include scrubbers, adequate height prilling tower, gas sensors/control measures to meet NAAQS norms	N/A	
4	At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office at Ranchi. Implementation of such program shall be ensured accordingly in a time bound manner.	Agreed to Comply	Enterprise Social Commitment (ESC) will be carried out as per laid down condition by the Project. Detail action plan along with budget have been taken up by HURL	N/A	
5	In plant, control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Fugitive emissions in the work	Agreed to Comply	The water sprinkling is being done on regular basis for dust suppression in and around construction site. Air Quality is being monitored in work zone environment as per the plan	N/A	

6	Planting of 5000 trees per year in 5 year in nearby villages in consultation with the local / forest dept. Survival rate of the plants shall be reported to RO, MoEF&CC in 6monthly compliance report. Conservation plant for shall be continue with.	Agreed to Comply	A detailed proposal has been obtained from the State Forest dept. and its approval is in advanced stage at HURL. Once approved the work will be awarded to State Forest Department for implementation.	N/A	
7	All the commitments made during the Public Hearing/ Public Consultation meeting held on 29th April, 2017 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.	Agreed to Comply	All the commitments made during Public Hearing/Public Consultation meeting held on 27th April, 2017 shall be satisfactorily implemented by HURL-Barauni.	N/A	
8	In urea plant, Particulate emissions shall not exceed 50mg/Nm <sup>3</sup> . Monitoring of Prilling tower shall be carried out as per CPCB guidelines.	Agreed to Comply	This has been addressed in the Feasibility Report and EMP of the Project and shall be complied with during operation phase	N/A	
9	A regular environment manager having post graduate qualification in environmental sciences/environmental engineering to be appointed for looking after the environmental management activities of the proposed plant.	Agreed to Comply	The EC conditions relating to establishment of Environmental Cell have been complied. As far as qualification in environmental sciences/engineering is concerned recruitment at HURL level underprogress	N/A	
10	Continuous online (24 X 7) monitoring system for emissions and effluent generation shall be installed for flow/discharge measurement and the pollutants concentration within the plant. Data shall be uploaded on company's website and provided to the respective RO of MoEF&CC, CPCB and SPCB.	Agreed to Comply	Online monitoring system will be implemented during operation phase At present manual display board for environment data (EC required data) display has been installed which being updated regularly.	N/A	
11	As already committed by the project proponent, no waste/treated water shall be discharged outside to ensure ZLD. The effluent discharge, if any, shall meet the standards for 'Nitrogenous Fertilizer Industry' prescribed under the Environment (Protection) Rules, 1986.	Complied	Commissioning activity is in progress. As the Project is based on Zero liquid discharge concept entire wastewater generated will be treated upto tertiary level in ETP inside the plant and will be reuse	N/A	
12	Emissions limits for the pollutants from the DG sets and the stack height shall be in conformity with the extant statutory regulations and/or the CPCB guidelines in this regard.	Complied	Attached		
13	All the commitments made during the Public Hearing/	Agreed to Comply	All the commitments made	N/A	






	Public Consultation meeting held on 29th April, 2017 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.		during Public Hearing/Public Consultation meeting held on 27th April, 2017 shall be satisfactorily implemented by HURL-Barauni.		
14	At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall be prepared and submitted to the Ministry's Regional Office at Ranchi. Implementation of such program shall be ensured accordingly in a time bound manner.	Agreed to Comply	Enterprise Social Commitment (ESC) will be carried out as per laid down condition by the Project. Detail action plan along with budget have been taken up by HURL.	N/A	
15	A regular environment manager having post graduate qualification in environmental sciences/environmental engineering to be appointed for looking after the environmental management activities of the proposed plant.	Agreed to Comply	The EC conditions relating to establishment of Environmental Cell have been complied. As far as qualification in environmental sciences/engineering is concerned recruitment at HURL level underprogress	N/A	
16	In urea plant, Particulate emissions shall not exceed 50mg/Nm <sup>3</sup> . Monitoring of Prilling tower shall be carried out as per CPCB guidelines.	Complied	This has been addressed in the Feasibility Report and EMP of the Project and shall be complied with during operation phase.	N/A	
17	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, creche 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.	Complied	Workers rest shed with toilets drinking water necessary infrastructure/Canteen has been provided.Old buildings in township are housing labourers.Medical healthcare is provided Site Ambulance available	N/A	
18	Urea dust shall be controlled by prescribed standard technique.	Complied	Addressed in the Feasibility and is complied in operation phase.The concerns are addressed while designing the prilling tower w.r.t height of UPT, gas sensors. Maintains moisture content.	N/A	
19	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Complied	Regular health check-up/monitoring of the commissioning laborers are being done and records have been	N/A	







			maintained for the same. The same is complied in the plant during operation and production phase.		
20	The Unit Shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.	Complied	This has been addressed in the Feasibility Report and RAR conducted for the Project and recommendation is complied with in the plant during operation phase & production phase incl. fire Fight facility	N/A	
21	Storage of hazardous raw material shall not exceed more than 7 days.	Complied	The hazardous raw material required are stored in the designated place away from the construction area. In operation and production stage, storage of raw materials addressed in the Feasibility Report.	N/A	
22	Planting of 5000 trees per year in 5 year in nearby villages in consultation with the local / forest dept. Survival rate of the plants shall be reported to RO, MoEF&CC in 6monthly compliance report. Conservation plant for shall be continue with.	Agreed to Comply	A detailed proposal has been prepared as per the budgetary offer obtained from the State Forest dept. and was approved. The work will be awarded to State Forest Department for implementation on ground.		
23	The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous waste (Management, Handling and Trans-Boundary Movement) Rules, 2016 and amended as on date for management of Hazardous wastes. Measures shall be taken for fire fighting facilities in case of emergency.	Complied	Authorization has been obtained from BSPCB for Authorization for collection, storage and disposal of hazardous waste. Firefighting facilities also present at site Hydrant System, Deluge Spray System etc	N/A	
24	The project proponent shall develop greenbelt in an area of 33% i.e., nearly 116 acres out of 350 acres of plant area of the project. The green belt of 30 m width around periphery shall be provided.	Agreed to Comply	Presently Commissioning activity is in progress and new peripheral boundary and internal roads partially developed. An area of nearly 116 acres is marked within plant premises for the proposed green belt		
25	As already committed by the project proponent, no waste/treated water shall be discharged outside to ensure ZLD. The effluent discharge, if any, shall meet the standards for 'Nitrogenous Fertilizer Industry' prescribed under the	Complied	Commissioning activity is in progress. As the Project is based on Zero liquid discharge concept entire wastewater generated will be treated upto	N/A	






	Environment (Protection) Rules, 1986.		tertiary level in ETP inside the plant and will be reuse		
26	In plant, control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Fugitive emissions in the work	Complied	This has been addressed in the Feasibility Report and EMP of the Project and is complied with in the plant during operation and production stage.	N/A	
27	Continuous online (24 X 7) monitoring system for emissions and effluent generation shall be installed for flow/discharge measurement and the pollutants concentration within the plant. Data shall be uploaded on company's website and provided to the respective RO of MoEF&CC, CPCB and SPCB.	Complied	It will be implemented during operation phase & production phase. At present manual display board for environment data (EC required data) display has been installed and data is being updated regularly		
28	The levels of PM10 (Urea dust), SO2, NOx, Ammonia, Ozone and HC shall be monitored in the ambient air and displayed at a convenient location near the main gate of the company and at important public places. The company shall upload the results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MoEF&CC, the respective Zonal office of CPCB and the SPCB.	Complied	Environment Monitoring w.r.t. Air, Water and Noise during construction phase is carried out by MoEF&CC recognized, NABL accredited environment laboratory of the HUBERT Enviro Chennai which is hired by PD		
29	To control source emissions, scrubber and/or other suitable pollution control device shall be installed to meet the prescribed Particulate Matter emission norms of 50 mg/Nm <sup>3</sup> , and also the NAAQS.	Complied	This has been addressed in the Feasibility Report of the project during design stage of the plant itself and is complied in operation phase.	N/A	
30	Fresh water requirement shall not exceed 5.36 cum/ton of Urea production. Fresh water shall be sourced from River Ganga only after the required permission from the concerned authority. During construction phase, ground water may be used after prior permission in this regard from the concerned regulatory authority.	Complied	Fresh water supply will be sourced from river Ganga during plant operation & production phase. Requisite NOC has been accorded by Central Water Commission. Construction activity completed.		
31	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, creche 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.	Complied	For workers, rest shed with toilets, drinking water, Canteen has been provided. Old buildings in township are housing labourers. Medical healthcare is being provided, ambulance available at site.	N/A	

32	The Unit Shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.	Agreed to Comply	Recommendation of Feasibility Report & RAR for the Project and shall be complied within the plant during its operation. Proposed Plant is equipped with control of failures/hazards.	N/A	
33	Urea dust shall be controlled by prescribed standard technique.	Agreed to Comply	Addressed in Feasibility Report & EMP of the Project and shall be complied with during operation. Concerns addressed while designing the prilling tower: Height, gas sensors, PM monitor to control.	N/A	
34	Emissions limits for the pollutants from the DG sets and the stack height shall be in conformity with the extant statutory regulations and/or the CPCB guidelines in this regard.	Complied	Attached		
35	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Complied	Regular health check-up of the construction labourers are being done and records have been maintained for the same. The same shall also be complied with in the plant during operation of plant	N/A	
36	Storage of hazardous raw material shall not exceed more than 7 days.	Being Complied	Currently Project is in construction phase, During plant operation, storage of raw materials addressed in the Feasibility and EIA (HAZID & ENVID) report. Complied with the stated condition	N/A	
37	The project proponent shall develop greenbelt in an area of 33% i.e., nearly 116 acres out of 350 acres of plant area of the project. The green belt of 30 m width around periphery shall be provided.	Agreed to Comply	Presently, construction activity is in progress & new peripheral boundary, internal roads are yet to be developed. Tree plantation around periphery will be complied after completion of roads and bound		
38	The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous waste (Management, Handling and Trans-Boundary Movement) Rules, 2016 and amended as on date for management of Hazardous wastes. Measures shall be taken for fire fighting facilities in case of emergency.	Being Complied	The process of Authorization for collection, storage and disposal of hazardous waste under the Hazardous & other Waste Rules, 2016 has been initiated.	N/A	
39	To control source emissions, scrubber and/or other suitable	Complied	This has been addressed in the		





	pollution control device shall be installed to meet the prescribed Particulate Matter emission norms of 50 mg/Nm <sup>3</sup> , and also the NAAQS.		Feasibility Report of the project during design stage of the plant itself and shall be complied during operation phase. Design considerations include scrubbers, adequate		
40	Fresh water requirement shall not exceed 5.36 cum/ton of Urea production. Fresh water shall be sourced from River Ganga only after the required permission from the concerned authority. During construction phase, ground water may be used after prior permission in this regard from the concerned regulatory authority.	Complied	Fresh water supply will be sourced from river Ganga during plant operation & production phase. Requisite NOC has been accorded by Central Water Commission (CWC). Fresh water consumption will be as per		
41	As already committed by the project proponent, no waste/treated water shall be discharged outside to ensure ZLD. The effluent discharge, if any, shall meet the standards for 'Nitrogenous Fertilizer Industry' prescribed under the Environment (Protection) Rules, 1986.	Agreed to Comply	Presently Commissioning activity is in progress. As the Project is based on Zero liquid discharge concept entire wastewater generated will be treated upto tertiary level in ETP inside the plant and w		
42	The project proponent shall develop greenbelt in an area of 33% i.e., nearly 116 acres out of 350 acres of plant area of the project. The green belt of 30 m width around periphery shall be provided.	Agreed to Comply	Presently Commissioning activity is in progress and new peripheral boundaries and internal roads are partially developed. Tree plantation around periphery will be complied as per the given condition a		
43	Planting of 5000 trees per year in 5 year in nearby villages in consultation with the local / forest dept. Survival rate of the plants shall be reported to RO, MoEF&CC in 6monthly compliance report. Conservation plant for shall be continue with.	Agreed to Comply	A detailed proposal has been prepared as per the budgetary offer obtained from the State Forest dept. and was approved by HURL. The work is awarded to State Forest Department for implementation on the		
44	All the commitments made during the Public Hearing/ Public Consultation meeting held on 29th April, 2017 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.	Agreed to Comply	All the commitments made during Public Hearing/Public Consultation meeting held on 27th April, 2017 shall be satisfactorily implemented by HURL-Barauni.	N/A	
45	At least 2.5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical breakup/details shall	Agreed to Comply	The Enterprise Social Commitment (ESC) will be implemented according to the specified conditions outlined		


	be prepared and submitted to the Ministry's Regional Office at Ranchi. Implementation of such program shall be ensured accordingly in a time bound manner.		by the Project. HURL is responsible for developing a detailed action plan and budget. Currentl		
46	A regular environment manager having post graduate qualification in environmental sciences/environmental engineering to be appointed for looking after the environmental management activities of the proposed plant.	Complied	The EC conditions relating to establishment of Environmental Cell have been complied with and the following arrangement for environment cell is in place. 1) At present environment cell is headed by M		
47	Continuous online (24 X 7) monitoring system for emissions and effluent generation shall be installed for flow/discharge measurement and the pollutants concentration within the plant. Data shall be uploaded on company's website and provided to the respective RO of MoEF& CC, CPCB and SPCB.	Agreed to Comply	Continuous online(24x7) monitoring system will be implemented during operation phase & production phase. At present manual display board for environment data (EC required data) display has been instal		
48	The Unit Shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.	Complied	This has been addressed in the Feasibility Report and RAR conducted for the Project and recommendation shall be complied with in the plant during operation phase & production phase. Proposed Plant is		
49	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Complied	Regular health check-up/monitoring of the commissioning laborers are being done and records have been maintained for the same. The same shall also be complied with in the plant during operation & prod		
50	Storage of hazardous raw material shall not exceed more than 7 days.	Complied	The hazardous raw material required for commissioning activities are being stored in the designated place away from the construction area. During plant operation and production stage, storage of raw		
51	Urea dust shall be controlled by prescribed standard technique.	Complied	This has been addressed in the Feasibility Report and EMP of the Project and shall be complied with during operation phase.		
52	In urea plant, Particulate emissions shall not exceed	Complied	Particulate Emissions are	N/A	

	50mg/Nm <sup>3</sup> . Monitoring of Prilling tower shall be carried out as per CPCB guidelines.		within the 50 mg/Nm <sup>3</sup> . Urea Prilling tower Emissions are being monitored as per the CPCB Guidelines.		
53	The levels of PM <sub>10</sub> (Urea dust), SO <sub>2</sub> , NO <sub>x</sub> , Ammonia, Ozone and HC shall be monitored in the ambient air and displayed at a convenient location near the main gate of the company and at important public places. The company shall upload the results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MoEF&CC, the respective Zonal office of CPCB and the SPCB.	Complied	Environmental Monitoring w.r.t. Air, Water and Noise during construction/operation phase is being carried out by MoEF&CC recognized & NABL accredited environmental laboratory of the HUBERT Enviro		
54	In plant, control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Fugitive emissions in the work	Complied	This has been addressed in the Feasibility Report and EMP of the Project and shall be complied with in the plant during operation and production stage.		
55	The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous waste (Management, Handling and Trans-Boundary Movement) Rules, 2016 and amended as on date for management of Hazardous wastes. Measures shall be taken for fire fighting facilities in case of emergency.	Complied	Authorization has been obtained from BSPCB for Authorization for collection, storage and disposal of hazardous waste under the Hazardous & other Waste (Management, Handling and Trans-Boundary Movement		
56	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, creche 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.	Complied	<ul style="list-style-type: none"> <li>For workers, rest shed with necessary infrastructure such as toilets, drinking water has been provided at identified locations.</li> <li>Canteen facilities have been provided by contractors near rest shed</li> </ul>		
57	Emissions limits for the pollutants from the DG sets and the stack height shall be in conformity with the extant statutory regulations and/or the CPCB guidelines in this regard.	Complied	Attached		



## 7. General Conditions (Proponent):


S.No	Condition	Self Declaration	Remarks / Reason	Supporting Documents	Observation of IRO
1	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad	Complied	The same has been complied and receiving copy sent	N/A	

	/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions, representations, if any, were received while processing the proposal.		to your good office.		
2	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.	Complied	Date of Financial Closure:11.10.2018 CCEA GOI formally approved the revival of the Sindri,Gorakhpur&Barauni on 13.07.2016.Date of final approval of the BarauniProject:16.07.2016 DateofStart:18.05.2016	N/A	
3	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated is 18th November, 2009 shall be followed.	Agreed to Comply	All efforts are being made to contain PM10 & PM2.5 Measures include cordoning off the construction site, intermittent water sprinkling, allowing the construction vehicles with PUC certificate etc.	N/A	
4	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management, pollution control measures shall not be diverted for any other purpose. (xiii) A copy of the clearance letter shall be sent by the project propone	Agreed to Comply	Proposed project cost: Rs.7043 crores Rs. 8387.99 crores Revised as per addendum II. Copy of EC letter has been submitted by HURL to concerned Panchayat, Zila Parisad/Municipal Corporation etc.		
5	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF& CC by-mail.	Complied	The environmental statement for the financial year ending 31st march 2022 in Form-V has already been submitted.		
6	The Project authorities shall strictly adhere to the stipulations made by the State Pollution Control Board (SPCB), State Government and any other statutory authority.	Agreed to Comply	HURL shall strictly comply with the conditions laid by BSPCB, Bihar State Government and any other Statutory Authority during construction and operation phase of the plant.	N/A	
7	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water	Complied	Rain water harvesting is provided to collect water from all the plant buildings viz. admin, control	N/A	



	for the process activities of the project to conserve fresh water.		rooms and laboratory as well as surface run off to ensure effective RWH & ground water recharge.		
8	No further expansion or modifications in the Plant shall be carried out without prior approval of the MoEF&CC. In case of deviations or alterations in the project proposal from those submitted to MoEF&CC 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	Agreed to Comply	This condition will be complied with as stated. There has been no expansion/ modification in the proposed plant other than approved ones by MoEF&CC.	N/A	
9	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 upwind and downwind direction as well as. Where maximum ground level concentrations are anticipated.	Being Complied	AAQMS location is decided in consultation with Bihar State Pollution Control Board 06 Nos. of AAQMS have been installed out of which one station is up-wind (East) & one station is in down-wind (West)	N/A	
10	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by mail) to the respective Regional Office of MoEF& CC, the respective Zonal Office of Environmental Clearance and six-monthly compliance status reports shall be posted on the website of the company.	Complied	The same is complied with Environment monitoring work from May2018 by M/s PDIL and all reports from Start to till to Sept-2022 have been submitted in the in the 06 monthly compliance report regular.	N/A	
11	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.	Agreed to Comply	Plant once operational, CSR activities with local villages & administration will be undertaken as per norms Presently, HURL/Contractor has engaged skilled/ unskilled workers from surrounding areas.	N/A	
12	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 the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Agreed to Comply	Noise levels are being monitored at six locations and all recorded values are within the norms. Equipment meeting statutory w.r.t. noise and vibrations has been preferred		
13	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Agreed to Comply	Presently in construction phase, monitoring function of specified parameters are being done by MoEF&CC recognized	N/A	







			environmental laboratory of Projects and Development India Ltd (PDIL), Noida.		
14	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://moef.nic.in">http://moef.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 conce	Complied	Advertisement was published in newspapers dated 28 Mar'17 about environmental clearance granted to HURL Barauni project EC letter at HURL'S website <a href="http://www.hurl.net.in">www.hurl.net.in</a> MOEF website at <a href="http://moef.nic.i">http://moef.nic.i</a>	N/A	
15	The company shall undertake all eco-developmental measures including community welfare measures for overall improvement of the environment.	Agreed to Comply	Once the plant becomes operational, CSR activities as per norm / Law will be undertaken by involving local villages and administration as per rule and government guidelines.	N/A	
16	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.	Agreed to Comply	This condition will be complied with during plant operation and production phase.	N/A	
17	The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing be implemented.	Complied	HURL has taken care of compliance with all the pollution control measured at every single step wherever possible at design stage itself. This includes provision of suitable UPT, scrubbers, stacks etc.	N/A	
18	The Project authorities shall strictly adhere to the stipulations made by the State Pollution Control Board (SPCB), State Government and any other statutory authority.	Complied	HURL shall strictly comply with the conditions laid by BSPCB, Bihar State Government and any other Statutory Authority during construction and operation phase of the plant.	N/A	
19	No further expansion or modifications in the Plant shall be carried out without prior approval of the MoEF&CC. In case of deviations or alterations in the project proposal from those submitted to MoEF&CC for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental	Complied	This condition will be complied with as stated. There has been no expansion/ modification in the proposed plant other than approved ones by MoEF&CC.	N/A	




	protection measures required, if any				
20	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.	Agreed to Comply	This condition will be complied with during plant operation and production phase. Also licensor training were imparted to plant personnel at commissioning stage.	N/A	
21	The company shall undertake all eco-developmental measures including community welfare measures for overall improvement of the environment.	Agreed to Comply	Once the plant becomes operational, CSR activities as per norm / Law will be undertaken by involving local villages and administration as per rule and government guidelines.	N/A	
22	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad /Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions, representations, if any, were received while processing the proposal.	Complied	The same has been complied and receiving copy had earlier been sent to your good office.	N/A	
23	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF& CC by-mail.	Complied	The environmental statement for the financial year ending 31st march 2022 in Form-V has already been submitted.		
24	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://moef.nic.in">http://moef.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 conce	Complied	The advertisement was published in the newspapers dated 28 march 2017 to inform the public about the environment clearance granted to ammonia urea fertilizer project at HURLBarauni & upload on website	N/A	
25	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 the Environment (Protection) Act,	Complied	Noise levels are being monitored at six locations and all recorded values are within the norms. New generation equipment meeting statutory w.r.t.noise and vibrations has been		

	1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).		preferred for installation		
26	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.	Complied	Date of Financial Closure:11.10.2018 CCEA GOI formally approved the revival of the Sindri,Gorakhpur&Barauni on 13.07.2016.Date of final approval of the BarauniProject:16.07.2016. DateofStart:18.05.2016	N/A	
27	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Being Complied	Presently in commissioning phase, monitoring function of specified parameters are being done by MoEF&CC recognized environmental laboratory PDIL.A quality control laboratory is under construction.	N/A	
28	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.	Agreed to Comply	Once the plant becomes operational, CSR activities as per norms / Law will be undertaken by involving local villages and administration as per rule and government guidelines.	N/A	
29	The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing be implemented.	Complied	HURL has taken care of compliance with all the pollution control measured at every single step wherever possible at design stage itself. This includes provision of suitable UPT, scrubbers, stacks etc.	N/A	
30	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management, pollution control measures shall not be diverted for any other purpose. (xiii) A copy of the clearance letter shall be sent by the project propone	Agreed to Comply	Proposed project cost: Rs.7043 crores Rs. 8387.99 crores Revised as per addendum II. Copy of EC letter has been submitted by HURL to concerned Panchayat, Zila Parisad/Municipal Corporation etc.		
31	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 upwind and downwind direction as well as. Where maximum	Complied	The locations of ambient air quality monitoring have been decided in consultation with BSPCB.06 Nos. of AAQMS have been installed in the project area.	N/A	



	ground level concentrations are anticipated.				
32	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.	Complied	Rain water harvesting is provided to collect water from all the plant buildings viz. admin, control rooms and laboratory as well as surface run off to ensure effective RWH & ground water recharge.	N/A	
33	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated is 18th November, 2009 shall be followed.	Complied	All efforts are being made to contain the PM10 & PM2.5 values within the standard limits at construction site.Measures include cordoning off the construction site, intermittent water sprinkling etc.	N/A	
34	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by mail) to the respective Regional Office of MoEF& CC, the respective Zonal Office of Environmental Clearance and six-monthly compliance status reports shall be posted on the website of the company.	Complied	The same is complied with Environment monitoring work from May2018 by M/s PDIL and all reports from Start to till to Sept-2022 have been submitted in the in the 06 monthly compliance report regular.	N/A	
35	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://moef.nic.in">http://moef.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 conce	Complied	The advertisement was published in the newspapers dated 28 march 2017 to inform the public about the environmental clearance granted to ammonia urea fertilizer project at HURL-Barauni. In addition to		
36	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.	Complied	Date of Financial Closure: 11.10.2018 Cabinet Committee on Economic Affairs (CCEA), Govt of India formally approved the revival of the Sindri, Gorakhpur & Barauni on 13.07.2016. Date of final approv		
37	The Project authorities shall strictly adhere to the stipulations made by the State Pollution Control Board (SPCB), State Government and any other statutory authority.	Complied	HURL shall strictly comply with the conditions laid by BSPCB, Bihar State Government and any other Statutory Authority during construction and	N/A	

			operation phase of the plant.		
38	No further expansion or modifications in the Plant shall be carried out without prior approval of the MoEF&CC. In case of deviations or alterations in the project proposal from those submitted to MoEF&CC 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	Complied	This condition will be complied with as stated. There has been no expansion/ modification in the proposed plant other than approved ones by MoEF&CC.	N/A	
39	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 upwind and downwind direction as well as. Where maximum ground level concentrations are anticipated.	Complied	The locations of ambient air quality monitoring have been decided in consultation with the Bihar State Pollution Control Board (BSPCB) and HURL officials for monitoring of Air Quality during construct		
40	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated is 18th November, 2009 shall be followed.	Complied	All efforts are being made to contain the PM10 & PM2.5 values within the standard limits at construction site. Measures include cordoning off the construction site, intermittent water sprinkling, allo		
41	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 the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Complied	Noise levels are being monitored at six locations and all recorded values are within the norms. (Data attached as Annexure-1)		
42	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.	Being Complied	Rain water harvesting system is provided to collect water from all the plant buildings viz. admin, control rooms and laboratory as well as surface run off to ensure effective rain water harvesting and		
43	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.	Agreed to Comply	Training is an essential aspect and ongoing Activity. All Employees are imparted on safety and health aspects of chemicals handling.		
44	The company shall comply with all the environmental protection measures and safeguards proposed in the documents	Agreed to Comply	This condition will be complied in totality as stated. HURL has taken		

	submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing be implemented.		care of compliance with all the pollution control measured at every single step wherever suggested/possible at design stage itself		
45	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.	Agreed to Comply	Once the plant becomes operational, CSR activities as per norms / Law will be undertaken by involving local villages and administration as per rule and government guidelines.		
46	The company shall undertake all eco-developmental measures including community welfare measures for overall improvement of the environment.	Agreed to Comply	Once the plant becomes operational, CSR activities as per norm / Law will be undertaken by involving local villages and administration as per rule and government guidelines.	N/A	
47	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Being Complied	The EC conditions relating to establishment of Environmental Cell have been complied with and the following arrangement for environment cell is in place.		
48	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management, pollution control measures shall not be diverted for any other purpose. (xiii) A copy of the clearance letter shall be sent by the project propone	Agreed to Comply	This has been addressed in the Feasibility Report of the Project and being complied.	N/A	
49	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad /Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions, representations, if any, were received while processing the proposal.	Complied	The same has been complied and receiving copy had earlier been sent to your good office.	N/A	
50	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by mail) to the respective Regional Office of MoEF& CC, the respective Zonal Office of	Complied	The same is being complied with Environmental monitoring work has commenced from May 2018 by M/s PDIL and the results of monitoring data from October 2022		

	Environmental Clearance and six-monthly compliance status reports shall be posted on the website of the company.		to March 2023 have been provided in the Six-		
51	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF& CC by-mail.	Agreed to Comply	The environmental statement for the financial year ending 31st march 2023 in Form-V will be submitted before due date. Also, it will be ensured to put the same on Company's website.	N/A	

I ' HINDUSTAN URVARAK AND RASAYAN LIMITED ' hereby give undertaking that the specific / general condition is entered by me is correct.

***E-Sign***

**HINDUSTAN URVARAK AND RASAYAN LIMITED**

**Date : 27 May 2023 11:45:03:787**

**\*\*Note : N/A - Not Available**

**PRINT**

□

**Compliance of EC conditions for the period of October 2022 - March 2023 for proposed Ammonia - Urea (2200MTPD & 3850MTPD) Plants of HURL at Barauni, Bihar**

**ANNEXURE- I**

This Compliance Report is the fulfillments of the condition of the Environmental Clearance (EC) vide File No. EC [IA/BR/IND2/61377/2016, J-11011/371/2016-IA II(I)] dated 29.08.2017 for the period of October 2022 to March 2023. This report has been prepared by Projects and Development India Limited (PDIL) by collecting respective samples in consultation with the Hindustan Urvarak and Rasayan Limited (HURL) officials. During the above mentioned period the analysis of the environmental parameters has been conducted by the MoEF&CC recognized laboratory at PDIL, Noida under the strict supervision of the Government Analysts.

The project is located at Barauni with the capacity of 2200MTPD Ammonia and 3850MTPD Urea in the District Begusarai in the State of Bihar. The plant was commissioned on 18<sup>th</sup> October 2022 and the commercial production has started from 19<sup>th</sup> October 2022 with the Brand name APNA UREA.

The compliance report fulfills the 19 nos. of Specific Conditions and 17 nos. of Standard Conditions led by Ministry of Environment, Forests and Climate Change (MoEF&CC). Rainwater Harvesting and Ground Water charging has been proposed as per Standard Guidelines:

- Guidelines on Artificial Recharge of Water, Central Water Ground Board, Ministry of Water Resources, Gol (2000)
- Manual on Artificial Recharge of Ground Water, Central Water Ground Board, Ministry of Water Resources, Gol (2007)
- Rain Water Harvesting and Conservation: Manual, Consultancy Services Organization, CPWD, Gol (2002)

The Environmental Monitoring report of 6 months w.r.t. Air, Water and Noise have been presented separately with the average values. The Air Quality results have been presented through a self explanatory table with the NAAQ Standards w.r.t. the parameter PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, SO<sub>2</sub>, C<sub>6</sub>H<sub>6</sub>, Benzo(α)pyrene, CO, NH<sub>3</sub>, O<sub>3</sub>, Ni, As and Pb. The sampling & analysis have been done as per the procedures specified in USEPA, IS, APHA (air) 2<sup>nd</sup> Edition & CPCB manual. Three sets, each of Ground Water Samples and Surface Water Samples have been collected, analyzed in a self explanatory table and compared with Drinking Water Standards IS10500:2012. The analysis consists of maximum eight nos. of physical parameters, thirteen nos. of chemical parameters, maximum ten nos. of heavy metals and three nos. of miscellaneous parameters. The samples were collected and analyzed as per the procedures specified in "Standard Methods for the Examination of Water and Waste Water" published by American Public Health Association (APHA) 23<sup>rd</sup> Edition, 2017. All the parameters are within the limits specified under Drinking Water Standard (IS:10500:2012). Noise Quality has also been measured at six different locations in the periphery of the project area. The results have been presented through self explanatory table consisting of the Standard NAAQS w.r.t. noise.

The above report with respect to Air, Water and Noise represents the average values of different sampling stations collected at different time during the study period of October 2022 to March 2023.

*The reasons of high level of PM may be attributed by heavy vehicular movement, construction activities, withered road condition, industries, burning of coal nearby HURL premises. However, a 'little' change in the pattern has been found due to seasonal variation.*


- To suppress the PM concentration, regular water sprinkling should be carried out.
- Deployment of vacuum type dust cleaning machine for internal and approach connecting roads.
- A green belt should be developed all around the factory premises which remove particulate matter from the air by trapping.

Compliance of EC conditions for the period of October 2022 - March 2023 for proposed Ammonia - Urea (2200MTPD & 3850MTPD) Plants of HURL at Barauni, Bihar

ANNEXURE- I

**TABLE -1**  
**Location of Air Quality Monitoring Stations**

Sl. No.	Location of Station	Coordinates	Frequency	Distance & Direction
1.	Admn. Building HURL (SA1)	25 <sup>0</sup> 24'46.38"N 86 <sup>0</sup> 01'39.77"E	Twice/Week	-
2.	Simariya Village (SA2)	25 <sup>0</sup> 24'58.94"N 86 <sup>0</sup> 00'16.86"E	Twice/Week	W & 2.4 km
3.	HURL Township (SA3)	25 <sup>0</sup> 26'35.08"N 86 <sup>0</sup> 01'53.85"E	Twice/Week	N & 3.4 km
4.	Chakballi Mahana Road (SA4)	25 <sup>0</sup> 25'08.92"N 86 <sup>0</sup> 02'38.37"E	Twice/Week	NE & 1.6 km
5.	Chakiya Village (SA5)	25 <sup>0</sup> 24'11.73"N 86 <sup>0</sup> 01'06.99"E	Twice/Week	SW & 1.4 km
6.	Bihat Village(SA6)	25 <sup>0</sup> 25'45.63"N 86 <sup>0</sup> 01'25.90"E	Twice/Week	NNW & 2.0 km

  
आकोश छोकर  
सरकारी विश्लेषक  
पर्यावरणीय प्रयोगशाला  
(केन्द्रीय प्रदूषण नियंत्रण बोर्ड)  
प्रोजेक्ट्स एण्ड डेवलपमेंट इण्डिया लिमिटेड  
(भारत सरकार का उपक्रम)

Compliance of EC conditions for the period of October 2022 - March 2023 for proposed Ammonia - Urea (2200MTPD & 3850MTPD) Plants of HURL at Barauni, Bihar

ANNEXURE - I

HURL, BARAUNI, AIR QUALITY DATA (Year: 2022-2023)


Period	Parameters	Admn. Building HURL (SA1)	Simariya Village (SA2)	Near HURL Township (SA3)	Chakballi Mahana Road (SA4)	Chakiya Village (SA5)	Bihat Village (SA6)	NAAQ Standards Annual/24/8/1 Hly. Avg.
Avg. (October 2022)	PM <sub>10</sub>	84.9	83.1	66.1	74.1	81.5	83.9	60/100
	PM <sub>2.5</sub>	42.7	41.9	33.5	38.1	41.6	41.8	40/60
	SO <sub>2</sub>	13.3	12.8	11.4	13.3	14.8	13.6	50/80
	NO <sub>x</sub>	17.3	16.1	14.2	18.0	21.1	20.8	40/80
	C <sub>6</sub> H <sub>6</sub>	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	05
	Benzo (a)pyrene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	01
	CO	0.24	0.22	0.17	0.23	0.27	0.26	02/04
	NH <sub>3</sub>	BDL	BDL	BDL	BDL	BDL	BDL	100/400
	O <sub>3</sub>	18.1	18.1	16.8	18.4	20.8	21.4	100/180
	Ni	BDL	BDL	BDL	BDL	BDL	BDL	20
	As	BDL	BDL	BDL	BDL	BDL	BDL	06
	Pb	BDL	BDL	BDL	BDL	BDL	BDL	0.5/1.0
Avg. (November 2022)	PM <sub>10</sub>	116.5	114.1	93.4	104.0	113.4	117.4	60/100
	PM <sub>2.5</sub>	61.7	61.1	49.1	55.0	60.8	60.8	40/60
	SO <sub>2</sub>	13.1	13.2	12.0	13.7	15.1	14.8	50/80
	NO <sub>x</sub>	23.7	24.0	21.1	26.2	31.0	29.9	40/80
	C <sub>6</sub> H <sub>6</sub>	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	05
	Benzo (a)pyrene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	01
	CO	0.37	0.37	0.30	0.40	0.48	0.45	02/04
	NH <sub>3</sub>	BDL	BDL	BDL	BDL	BDL	BDL	100/400
	O <sub>3</sub>	25.6	26.8	25.3	27.8	31.3	31.8	100/180
	Ni	BDL	BDL	BDL	BDL	BDL	BDL	20
	As	BDL	BDL	BDL	BDL	BDL	BDL	06
	Pb	BDL	BDL	BDL	BDL	BDL	BDL	0.5/1.0
Avg. (December 2022)	PM <sub>10</sub>	131.2	127.8	107.1	119.0	124.8	127.1	60/100
	PM <sub>2.5</sub>	66.1	65.3	53.4	60.3	65.6	65.0	40/60
	SO <sub>2</sub>	14.5	14.2	12.7	14.5	16.1	15.7	50/80
	NO <sub>x</sub>	24.1	24.5	21.4	27.4	32.1	30.9	40/80
	C <sub>6</sub> H <sub>6</sub>	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	05
	Benzo (a)pyrene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	01
	CO	0.65	0.64	0.50	0.66	0.69	0.70	02/04
	NH <sub>3</sub>	BDL	BDL	BDL	BDL	BDL	BDL	100/400
	O <sub>3</sub>	30.3	32.3	30.1	33.0	34.7	35.1	100/180
	Ni	BDL	BDL	BDL	BDL	BDL	BDL	20
	As	BDL	BDL	BDL	BDL	BDL	BDL	06
	Pb	BDL	BDL	BDL	BDL	BDL	BDL	0.5/1.0
Avg. (January 2023)	PM <sub>10</sub>	124.7	119.2	98.7	108.9	110.3	109.9	60/100
	PM <sub>2.5</sub>	63.2	61.4	49.9	56.5	56.9	53.7	40/60
	SO <sub>2</sub>	12.6	12.9	11.4	13.1	14.2	14.1	50/80
	NO <sub>x</sub>	25.2	25.7	22.0	27.8	32.0	30.1	40/80
	C <sub>6</sub> H <sub>6</sub>	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	05
	Benzo (a)pyrene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	01
	CO	0.56	0.52	0.39	0.53	0.59	0.61	02/04
	NH <sub>3</sub>	BDL	BDL	BDL	BDL	BDL	BDL	100/400
	O <sub>3</sub>	27.5	29.2	26.8	29.4	31.2	31.1	100/180
	Ni	BDL	BDL	BDL	BDL	BDL	BDL	20
	As	BDL	BDL	BDL	BDL	BDL	BDL	06
	Pb	BDL	BDL	BDL	BDL	BDL	BDL	0.5/1.0
Avg. (February 2023)	PM <sub>10</sub>	144.7	126.5	96.9	162.5	115.9	118.0	60/100
	PM <sub>2.5</sub>	70.6	63.9	47.0	75.3	58.5	56.6	40/60
	SO <sub>2</sub>	13.2	13.4	11.8	13.6	14.4	14.2	50/80
	NO <sub>x</sub>	24.7	24.9	21.5	26.8	31.9	29.9	40/80
	C <sub>6</sub> H <sub>6</sub>	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	05
	Benzo (a)pyrene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	01
	CO	0.60	0.55	0.41	0.56	0.64	0.70	02/04
	NH <sub>3</sub>	190.1	<20	<20	168.8	38.7	45.0	100/400
	O <sub>3</sub>	25.1	25.9	24.2	26.9	28.6	28.6	100/180

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प्रोजेक्ट्स एण्ड डेवलपमेंट इण्डिया लिमिटेड  
(भारत सरकार का उपक्रम)

**Compliance of EC conditions for the period of October 2022 - March 2023 for proposed Ammonia - Urea (2200MTPD & 3850MTPD) Plants of HURL at Barauni, Bihar**

	Ni	BDL	BDL	BDL	BDL	BDL	BDL	20
	As	BDL	BDL	BDL	BDL	BDL	BDL	06
	Pb	BDL	BDL	BDL	BDL	BDL	BDL	0.5/1.0
Avg. (March 2023)	PM <sub>10</sub>	132.8	111.6	86.4	142.8	105.4	107.8	60/100
	PM <sub>2.5</sub>	64.0	57.4	43.1	68.9	54.5	53.1	40/60
	SO <sub>2</sub>	12.1	12.3	10.9	12.6	13.4	13.0	50/80
	NO <sub>x</sub>	21.7	20.2	17.2	21.6	25.4	23.9	40/80
	C <sub>6</sub> H <sub>6</sub>	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	05
	Benzo (α)pyrene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	01
	CO	0.57	0.49	0.36	0.49	0.57	0.60	02/04
	NH <sub>3</sub>	173.4	<20	<20	152.5	35.2	40.3	100/400
	O <sub>3</sub>	21.9	23.4	20.4	22.7	23.8	23.8	100/180
	Ni	BDL	BDL	BDL	BDL	BDL	BDL	20
As	BDL	BDL	BDL	BDL	BDL	BDL	06	
Pb	BDL	BDL	BDL	BDL	BDL	BDL	0.5/1.0	
Average  (October 2022 - March 2023)	PM <sub>10</sub>	122.5	113.7	91.4	118.6	108.6	110.7	60/100
	PM <sub>2.5</sub>	61.4	58.5	46.0	59.0	56.3	55.2	40/60
	SO <sub>2</sub>	13.1	13.1	11.7	13.5	14.7	14.2	50/80
	NO <sub>x</sub>	22.8	22.6	19.6	24.6	28.9	27.6	40/80
	C <sub>6</sub> H <sub>6</sub>	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	05
	Benzo (α)pyrene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	01
	CO	0.50	0.47	0.36	0.48	0.54	0.55	02/04
	NH <sub>3</sub>	BDL	BDL	BDL	160.7	BDL	BDL	100/400
	O <sub>3</sub>	24.8	26.0	23.9	26.4	28.4	28.6	100/180
	Ni	BDL	BDL	BDL	BDL	BDL	BDL	20
	As	BDL	BDL	BDL	BDL	BDL	BDL	06
	Pb	BDL	BDL	BDL	BDL	BDL	BDL	0.5/1.0

NOTE: BDL = Below Detection Limit  
 (µg/m<sup>3</sup>)= PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, NH<sub>3</sub>, O<sub>3</sub>, C<sub>6</sub>H<sub>6</sub>, Benzo (α)pyrene  
 (mg/m<sup>3</sup>)= CO  
 (ng/m<sup>3</sup>)= Ni, As, Pb

  
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Compliance of EC conditions for the period of October 2022 - March 2023 for proposed Ammonia - Urea (2200MTPD & 3850MTPD) Plants of HURL at Barauni, Bihar

ANNEXURE-I

**TABLE -2**  
**Location of Ground Water Quality Sampling**

Sl. No.	Source	Geo-Coordinates	Frequency
1.	HURL's Bore Well	25°24'41.07"N, 86°01'29.16"E	Once in a Month
2.	Hand Pump - HURL Township	25°26'35.72"N, 86°01'55.71"E	Once in a Month
3.	Hand Pump - Chakiya Village	25°24'15.12"N, 86°01'08.18"E	Once in a Month

**TABLE -3**  
**Location of Surface Water Quality Sampling**

Sl. No.	Source	Geo-Coordinates	Frequency
1.	Ganga River	25°23'18.51"N, 85°59'40.08"E	Once in a Month
2.	Bihat Village (Pond)	25°25'15.67"N, 86°01'21.89"E	Once in a Month
3.	Baya Nala	25°25'57.80"N, 85°59'20.50"E	Once in a Month

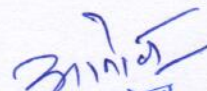
31/01/23  
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**HURL, BARAUNI, GROUND WATER QUALITY DATA (Year: 2022-2023)**  
**AVG. (OCTOBER 2022 TO MARCH 2023)**

(Results are expressed in mg/l, unless otherwise stated)

Sl. No.	Parameters	Analysis Results			Requirement (Acceptable/ Permissible Limits) (IS:10500:2012)
		HURL-Bore Well (GW1)	Hand Pump - HURL Township (GW2)	Hand Pump - Chakiya Village (GW3)	
<b>PHYSICAL</b>					
1	pH	7.38	7.55	7.38	6.5-8.5
2	Temperature (°C)	27.5	27.0	27.3	-
3	Colour, HU	<5	<5	<5	5/15
4	Odour	Agreeable	Agreeable	Agreeable	Agreeable
5	Taste	Agreeable	Agreeable	Agreeable	Agreeable
6	Turbidity (NTU)	<5	<5	<5	1/5
7	Total Suspended Solids	NIL	NIL	NIL	-
8	Total Dissolved Solids	236.7	713.3	499.2	500/2000
<b>CHEMICAL</b>					
1	P- Alkalinity as CaCO <sub>3</sub>	NIL	NIL	NIL	-
2	Total Alkalinity as CaCO <sub>3</sub>	132.3	517.3	390.0	200/600
3	Chloride as Cl	28.7	50.7	26.3	250/1000
4	Sulphate as SO <sub>4</sub>	34.3	73.3	45.7	200/400
5	Nitrate as NO <sub>3</sub>	1.3	2.1	1.7	45/NR
6	Fluoride as F	<0.4	<0.4	<0.4	1.0/1.5
7	Total Hardness as CaCO <sub>3</sub>	150.0	476.0	384.3	200/600
8	Ca. Hardness as CaCO <sub>3</sub>	84.3	318.3	252.0	75/200
9	Mg. Hardness as CaCO <sub>3</sub>	65.7	157.7	132.3	30/100**
10	Sodium as Na	27.3	77.2	43.5	-
11	Potassium as K	3.3	9.8	5.5	-
12	Silica as SiO <sub>2</sub>	12.7	13.7	11.3	-
13	Iron as Fe	0.27	0.47	0.57	0.3/NR
<b>HEAVY METALS</b>					
1	Manganese as Mn	BDL	BDL	BDL	0.1/0.3
2	Total Chromium as Cr	BDL	BDL	BDL	0.05/NR
3	Lead as Pb	BDL	BDL	BDL	0.01/NR
4	Zinc as Zn	0.26	0.26	0.30	5.0/15
5	Cadmium as Cd	BDL	BDL	BDL	0.003/NR
6	Copper as Cu	BDL	BDL	BDL	0.05/1.5
7	Nickel as Ni	BDL	BDL	BDL	0.02/NR
8	Arsenic as As	BDL	BDL	BDL	0.01/0.05
9	Selenium as Se	BDL	BDL	BDL	0.01/NR
<b>OTHERS</b>					
1	Mineral oil	Absent	Absent	Absent	0.5/NR
2	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	BDL	BDL	BDL	0.001/0.002
3	Coliform (MPN/100ml)	<100	<100	<100	-

Note: NR - No Relaxation, \*Calcium as Ca & \*\* Magnesium as Mg

  
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**HURL, BARAUNI, SURFACE WATER QUALITY DATA (Year: 2022-2023)**  
**AVG. (OCTOBER 2022 TO MARCH 2023)**

(Results are expressed in mg/l, unless otherwise stated)

Sl. No.	Parameters	Analysis Results			Requirement (Acceptable/ Permissible Limits) (IS:10500:2012)
		Ganga River (SW1)	Bihat Village (Pond) (SW2)	Baya Nala (SW3)	
<b>PHYSICAL</b>					
1	Temperature (°C)	25.4	25.7	25.8	-
2	Colour, HU	<5	<5	<5	5/15
3	Turbidity (NTU)	12.0	18.0	15.3	1/5
4	pH	7.18	7.52	7.47	6.5-8.5
5	Total Dissolved Solids	217.7	505.0	503.3	500/2000
6	Total Suspended Solids	35.7	53.0	45.3	-
<b>CHEMICAL</b>					
1	Total Alkalinity as CaCO <sub>3</sub>	161.0	254.7	277.3	200/600
2	Chloride as Cl	18.7	110.3	108.7	250/1000
3	Sulphate as SO <sub>4</sub>	12.0	33.3	31.0	200/400
4	Nitrate as NO <sub>3</sub>	1.2	2.8	2.1	45/NR
5	Fluoride as F	<0.4	<0.4	<0.4	1.0/1.5
6	Total Hardness as CaCO <sub>3</sub>	159.7	176.3	241.3	200/600
7	Calcium Hardness as CaCO <sub>3</sub>	116.0	107.0	135.3	75/200*
8	Magnesium Hardness as CaCO <sub>3</sub>	43.7	69.3	106.0	30/100**
9	Dissolve Oxygen	7.3	6.8	6.6	-
10	COD	3.5	7.4	6.4	-
11	BOD <sub>3</sub> (3 days at 27° C)	1.2	2.7	2.1	-
12	Sodium as Na	17.5	115.8	95.3	-
13	Potassium as K	2.2	15.0	12.2	-
<b>HEAVY METALS</b>					
1	Iron as Fe	0.07	0.15	0.11	0.3/NR
2	Manganese as Mn	BDL	BDL	BDL	0.1/0.3
3	Total Chromium as Cr	BDL	BDL	BDL	0.05/NR
4	Lead as Pb	BDL	BDL	BDL	0.01/NR
5	Zinc as Zn	0.18	0.35	0.25	5.0/15
6	Cadmium as Cd	BDL	BDL	BDL	0.003/NR
7	Copper as Cu	BDL	BDL	BDL	0.05/1.5
8	Nickel as Ni	BDL	BDL	BDL	0.02/NR
9	Arsenic as As	BDL	BDL	BDL	0.01/0.05
10	Selenium as Se	BDL	BDL	BDL	0.01/NR
<b>OTHERS</b>					
1	Mineral oil	Absent	Absent	Absent	0.5/NR
2	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	BDL	BDL	BDL	0.001/0.002
3	Coliform Organisms (MPN/100ml)	1110	1187	1457	-

Note: NR - No Relaxation, \*Calcium as Ca & \*\* Magnesium as Mg

*(Signature)*  
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Compliance of EC conditions for the period of October 2022 - March 2023 for proposed Ammonia - Urea (2200MTPD & 3850MTPD) Plants of HURL at Barauni, Bihar

ANNEXURE-I

**TABLE -4**  
**Location of Noise Quality Monitoring Stations**

Sl. No.	Location of Station	Coordinates	Frequency
1.	Admn. Building HURL (SN1)	25°24'46.38"N 86°01'39.77"E	Hourly
2.	Simariya Village (SN2)	25°24'58.94"N 86°00'16.86"E	Hourly
3.	HURL Township (SN3)	25°26'35.08"N 86°01'53.85"E	Hourly
4.	Mahana Village (SN4)	25°25'08.92"N 86°02'38.37"E	Hourly
5.	Chakiya Village (SN5)	25°24'11.73"N 86°01'06.99"E	Hourly
6.	Bihat Village(SN6)	25°25'45.63"N 86°01'25.90"E	Hourly


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Compliance of EC conditions for the period of October 2022 - March 2023 for proposed Ammonia - Urea (2200MTPD & 3850MTPD) Plants of HURL at Barauni, Bihar

ANNEXURE - I

HURL, BARAUNI, NOISE QUALITY DATA (Year: 2022-2023)

Period	Parameters	Admn. Building HURL (SA1)	Simariya Village (SA2)	Near HURL Township (SA3)	Mahana Village (SA4)	Chakiya Village (SA5)	Bihat Village (SA6)	Prescribed Limits in dB(A) as per NAAQS
October 2022	24-hrs Avg L <sub>eq</sub> . Value dB(A)	51.9	50.3	48.2	49.4	50.3	52.4	-
	Day time L <sub>eq</sub> . Value dB(A)	53.4	51.8	49.7	50.9	51.8	53.9	75/55
	Night time L <sub>eq</sub> . Value dB(A)	44.7	42.8	41.6	42.4	42.5	45.0	70/45
November 2022	24-hrs Avg L <sub>eq</sub> . Value dB(A)	51.8	47.9	46.4	48.3	50.4	51.1	-
	Day time L <sub>eq</sub> . Value dB(A)	53.2	49.0	47.6	49.6	51.7	52.5	75/55
	Night time L <sub>eq</sub> . Value dB(A)	45.4	43.9	41.7	43.0	44.5	45.0	70/45
December 2022	24-hrs Avg L <sub>eq</sub> . Value dB(A)	51.5	50.4	48.4	50.1	50.6	50.9	-
	Day time L <sub>eq</sub> . Value dB(A)	53.0	51.9	49.8	51.6	52.1	52.3	75/55
	Night time L <sub>eq</sub> . Value dB(A)	44.2	42.8	42.0	42.0	43.5	44.8	70/45
January 2023	24-hrs Avg L <sub>eq</sub> . Value dB(A)	52.4	50.0	48.0	51.4	51.8	50.8	-
	Day time L <sub>eq</sub> . Value dB(A)	53.9	51.5	49.3	53.0	53.2	52.2	75/55
	Night time L <sub>eq</sub> . Value dB(A)	45.2	43.2	42.4	43.2	45.3	44.8	70/45
February 2023	24-hrs Avg L <sub>eq</sub> . Value dB(A)	52.5	50.3	49.3	50.1	51.2	52.2	-
	Day time L <sub>eq</sub> . Value dB(A)	53.9	51.8	50.7	51.5	52.6	53.7	75/55
	Night time L <sub>eq</sub> . Value dB(A)	45.1	43.1	42.5	44.5	44.4	45.1	70/45
March 2023	24-hrs Avg L <sub>eq</sub> . Value dB(A)	54.3	50.2	50.0	51.3	52.2	51.9	-
	Day time L <sub>eq</sub> . Value dB(A)	55.8	51.6	51.4	52.6	53.7	53.3	75/55
	Night time L <sub>eq</sub> . Value dB(A)	46.6	44.8	43.0	45.6	44.9	45.2	70/45
Avg. (October 2022 - March 2023)	24-hrs L <sub>eq</sub> . Value dB(A)	52.4	49.9	48.4	50.1	51.1	51.6	-
	Day time L <sub>eq</sub> . Value dB(A)	53.9	51.3	49.8	51.5	52.5	53.0	75/55
	Night time L <sub>eq</sub> . Value dB(A)	45.2	43.4	42.2	43.5	44.2	45.0	70/45

  
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Environment statement for the financial year 2022-2023 for proposed Ammonia - Urea  
(2200MTPD & 3850MTPD) Plants of HURL at Barauni, Bihar

ANNEXURE-I

**Period of Monitoring:** Financial Year: 2022-2023  
**Location:** Admn. Building-HURL (Near Construction Site)

PERIOD	No. of Observations	Parameters (Average Concentration)						
		PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )	Ammonia (µg/m <sup>3</sup> )	Ozone (µg/m <sup>3</sup> )
NAAQ Standards →		60/100	40/60	50/80	40/80	02/04	100/400	100/180
April 2022	9	79.8	42.5	12.0	25.8	0.50	BDL	17.3
May 2022	9	76.5	41.1	10.6	22.6	0.44	BDL	16.4
June 2022	8	70.9	38.1	10.3	20.4	0.36	BDL	13.9
July 2022	9	68.8	34.6	10.6	13.1	0.30	BDL	12.2
Aug. 2022	9	62.2	31.0	10.3	11.6	0.20	BDL	12.5
Sept. 2022	8	67.0	33.6	10.2	22.8	0.23	BDL	13.9
Oct. 2022	8	84.9	42.7	13.3	23.5	0.24	BDL	18.1
Nov. 2022	8	116.5	61.7	13.1	29.8	0.37	BDL	25.6
Dec. 2022	9	131.2	66.1	14.5	29.9	0.65	BDL	30.3
Jan. 2023	9	124.7	63.2	12.6	26.2	0.56	BDL	27.5
Feb. 2023	8	144.7	70.6	13.2	24.2	0.60	190.1	25.1
March 2023	8	132.8	64.0	12.1	23.8	0.57	173.4	21.9
Min. Conc.		62.2	31.0	10.2	13.8	0.20	173.4	12.2
Max. Conc.		144.7	70.6	14.5	25.2	0.65	190.1	30.3
Average	102	96.7	49.1	11.9	19.9	0.42	181.8	19.6
98 <sup>th</sup> percentile		142.1	69.6	14.2	25.1	0.64	189.8	29.7

**NOTE:** BDL = Below Detection Limit  
 $C_6H_6$  & Benzo(a)pyrene = <0.01 µg/m<sup>3</sup>  
 $Ni, As, Pb$  (ng/m<sup>3</sup>) = BDL  
 $NH_3$  (µg/m<sup>3</sup>) = BDL = <20 µg/m<sup>3</sup>



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 कोन्दोय रोड  
 अलहाबाद शहर  
 प्रदूषण नियंत्रण बोर्ड  
 प्रदूषण नियंत्रण बोर्ड का कार्यालय

Environment statement for the financial year 2022-2023 for proposed Ammonia - Urea  
(2200MTPD & 3850MTPD) Plants of HURL at Barauni, Bihar

**ANNEXURE-I**

**Period of Monitoring:** Financial Year: 2022-2023  
**Location:** Simariya Village

PERIOD	No. of Observations	Parameters (Average Concentration)						
		PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )	Ammonia (µg/m <sup>3</sup> )	Ozone (µg/m <sup>3</sup> )
<b>NAAQ Standards</b> →		<b>60/100</b>	<b>40/60</b>	<b>50/80</b>	<b>40/80</b>	<b>02/04</b>	<b>100/400</b>	<b>100/180</b>
April 2022	9	62.4	31.4	9.4	12.4	0.62	BDL	19.4
May 2022	9	127.8	65.3	14.2	25.7	0.52	BDL	18.2
June 2022	8	93.2	47.5	12.1	19.9	0.42	BDL	15.1
July 2022	9	127.5	65.0	14.0	25.5	0.34	BDL	13.3
Aug. 2022	9	62.4	31.4	9.4	12.4	0.18	BDL	11.5
Sept. 2022	8	127.8	65.3	14.2	25.7	0.20	BDL	12.8
Oct. 2022	8	93.2	47.5	12.1	19.9	0.22	BDL	18.1
Nov. 2022	8	127.5	65.0	14.0	25.5	0.37	BDL	26.8
Dec. 2022	9	62.4	31.4	9.4	12.4	0.64	BDL	32.3
Jan. 2023	9	127.8	65.3	14.2	25.7	0.52	BDL	29.2
Feb. 2023	8	93.2	47.5	12.1	19.9	0.55	<20	25.9
March 2023	8	127.5	65.0	14.0	25.5	0.49	<20	23.4
<b>Min. Conc.</b>		<b>62.4</b>	<b>31.4</b>	<b>9.4</b>	<b>12.4</b>	<b>0.18</b>	<b>&lt;20</b>	<b>11.5</b>
<b>Max. Conc.</b>	<b>102</b>	<b>127.8</b>	<b>65.3</b>	<b>14.2</b>	<b>25.7</b>	<b>0.64</b>	<b>&lt;20</b>	<b>32.3</b>
<b>Average</b>		<b>93.2</b>	<b>47.5</b>	<b>12.1</b>	<b>19.9</b>	<b>0.42</b>	<b>&lt;20</b>	<b>20.5</b>
<b>98<sup>th</sup> percentile</b>		<b>127.5</b>	<b>65.0</b>	<b>14.0</b>	<b>25.5</b>	<b>0.64</b>	<b>&lt;20</b>	<b>31.6</b>

**NOTE:** BDL = Below Detection Limit

Ni, As, Pb (ng/m<sup>3</sup>) = BDL

C<sub>6</sub>H<sub>6</sub> & Benzo(a)pyrene = <0.01 µg/m<sup>3</sup>

NH<sub>3</sub> (µg/m<sup>3</sup>) = BDL = <20 µg/m<sup>3</sup>

*(Handwritten Signature)*

आचार्य ए.के.एस.  
संरक्षक प्रशासक  
पर्यावरण प्रशासन विभाग  
राज्य प्रदूषण नियंत्रण बोर्ड  
(राजधानी, दिल्ली)

Environment statement for the financial year 2022-2023 for proposed Ammonia - Urea  
(2200MTPD & 3850MTPD) Plants of HURL at Barauni, Bihar

**ANNEXURE-I**

Period of Monitoring: Financial Year: 2022-2023

Location: HURL Township

PERIOD	No. of Observations	Parameters (Average Concentration)						
		PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )	Ammonia (µg/m <sup>3</sup> )	Ozone (µg/m <sup>3</sup> )
<b>NAAQ Standards</b> →		<b>60/100</b>	<b>40/60</b>	<b>50/80</b>	<b>40/80</b>	<b>02/04</b>	<b>100/400</b>	<b>100/180</b>
April 2022	9	53.1	26.5	8.7	10.4	0.41	BDL	14.4
May 2022	9	107.1	53.4	12.7	22.0	0.35	BDL	13.4
June 2022	8	76.6	38.9	10.5	16.2	0.29	BDL	11.5
July 2022	9	105.3	52.6	12.5	21.9	0.24	BDL	10.4
Aug. 2022	9	53.1	26.5	8.7	10.4	0.14	BDL	11.3
Sept. 2022	8	107.1	53.4	12.7	22.0	0.14	BDL	12.6
Oct. 2022	8	76.6	38.9	10.5	16.2	0.17	BDL	16.8
Nov. 2022	8	105.3	52.6	12.5	21.9	0.30	BDL	25.3
Dec. 2022	9	53.1	26.5	8.7	10.4	0.50	BDL	30.1
Jan. 2023	9	107.1	53.4	12.7	22.0	0.39	BDL	26.8
Feb. 2023	8	76.6	38.9	10.5	16.2	0.41	<20	24.2
March 2023	8	105.3	52.6	12.5	21.9	0.36	<20	20.4
<b>Min. Conc.</b>		<b>53.1</b>	<b>26.5</b>	<b>8.7</b>	<b>10.4</b>	<b>0.14</b>	<b>&lt;20</b>	<b>10.4</b>
<b>Max. Conc.</b>		<b>107.1</b>	<b>53.4</b>	<b>12.7</b>	<b>22.0</b>	<b>0.50</b>	<b>&lt;20</b>	<b>30.1</b>
<b>Average</b>	<b>102</b>	<b>76.6</b>	<b>38.9</b>	<b>10.5</b>	<b>16.2</b>	<b>0.31</b>	<b>&lt;20</b>	<b>18.1</b>
<b>98<sup>th</sup> percentile</b>		<b>105.3</b>	<b>52.6</b>	<b>12.5</b>	<b>21.9</b>	<b>0.48</b>	<b>&lt;20</b>	<b>29.4</b>

NOTE: BDL = Below Detection Limit

Ni, As, Pb (ng/m<sup>3</sup>) = BDL

C<sub>6</sub>H<sub>6</sub> & Benzo(a)pyrene = <0.01 µg/m<sup>3</sup>

NH<sub>3</sub> (µg/m<sup>3</sup>) = BDL = <20 µg/m<sup>3</sup>

*(Signature)*  
आफिस ऑफ़ डायरेक्टर  
संरक्षणीय प्रदूषण नियंत्रण बोर्ड  
भारतीय प्रदूषण नियंत्रण बोर्ड  
(केन्द्रीय प्रदूषण नियंत्रण बोर्ड का कार्यालय)  
भारतीय प्रदूषण नियंत्रण बोर्ड का कार्यालय




Environment statement for the financial year 2022-2023 for proposed Ammonia - Urea  
(2200MTPD & 3850MTPD) Plants of HURL at Barauni, Bihar

ANNEXURE-I

Period of Monitoring: Financial Year: 2022-2023  
Location: Chakballi - Mahana Road

PERIOD	No. of Observations	Parameters (Average Concentration)							
		PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>x</sub> ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )	Ammonia ( $\mu\text{g}/\text{m}^3$ )	Ozone ( $\mu\text{g}/\text{m}^3$ )	
NAAQ Standards →		60/100	40/60	50/80	40/80	02/04	100/400	100/180	
April 2022	9	84.7	43.4	11.1	18.7	0.51	BDL	19.7	
May 2022	9	82.4	42.4	11.0	16.9	0.44	BDL	18.3	
June 2022	8	70.8	36.8	10.9	14.8	0.36	BDL	15.9	
July 2022	9	69.3	34.5	11.1	14.4	0.32	BDL	14.6	
Aug. 2022	9	61.5	30.4	9.9	12.1	0.19	BDL	13.2	
Sept. 2022	8	58.1	29.3	10.1	13.0	0.19	BDL	14.4	
Oct. 2022	8	74.1	38.1	13.3	18.0	0.23	BDL	18.4	
Nov. 2022	8	104.0	55.0	13.7	26.2	0.40	BDL	27.8	
Dec. 2022	9	119.0	60.3	14.5	27.4	0.66	BDL	33.0	
Jan. 2023	9	108.9	56.5	13.1	27.8	0.53	BDL	29.4	
Feb. 2023	8	162.5	75.3	13.6	26.8	0.56	168.8	26.9	
March 2023	8	142.8	68.9	12.6	21.6	0.49	152.5	22.7	
Min. Conc.		58.1	29.3	9.9	12.1	0.19	152.5	13.2	
Max. Conc.	102	162.5	75.3	14.5	27.8	0.66	168.8	33.0	
Average		94.8	47.6	12.1	19.8	0.41	160.7	21.2	
98 <sup>th</sup> percentile		158.2	73.9	14.3	27.7	0.64	168.5	32.2	

NOTE: BDL = Below Detection Limit  
C<sub>6</sub>H<sub>6</sub> & Benzo(a)pyrene = <0.01  $\mu\text{g}/\text{m}^3$   
Ni, As, Pb ( $\text{ng}/\text{m}^3$ ) = BDL  
NH<sub>3</sub> ( $\mu\text{g}/\text{m}^3$ ) = BDL = <20  $\mu\text{g}/\text{m}^3$

  
आर.के.ए. ठाकुर  
संस्था के निदेशक  
प्रशासकीय प्रशासक (बी.डी.)  
(वि-सी.ए. प्रशासक) एन.डी.ए. सिस्टिम्स  
एन.डी.ए. सिस्टिम्स प्रा. लि.  
एन.डी.ए. सिस्टिम्स प्रा. लि.  
एन.डी.ए. सिस्टिम्स प्रा. लि.

Environment statement for the financial year 2022-2023 for proposed Ammonia - Urea  
(2200MTPD & 3850MTPD) Plants of HURL at Barauni, Bihar

ANNEXURE-I

Period of Monitoring: Financial Year: 2022-2023

Location: Chakiya Village


PERIOD	No. of Observations	Parameters (Average Concentration)						
		PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )	Ammonia (µg/m <sup>3</sup> )	Ozone (µg/m <sup>3</sup> )
NAAQ Standards →		60/100	40/60	50/80	40/80	02/04	100/400	100/180
April 2022	9	86.1	45.6	12.9	25.3	0.60	BDL	21.1
May 2022	9	85.0	43.8	12.7	22.8	0.52	BDL	19.5
June 2022	8	73.9	39.4	12.6	19.9	0.42	BDL	17.0
July 2022	9	71.7	36.6	13.0	19.2	0.38	BDL	15.8
Aug. 2022	9	65.2	32.8	11.6	16.3	0.22	BDL	14.4
Sept. 2022	8	60.8	31.5	11.6	15.3	0.23	BDL	15.8
Oct. 2022	8	81.5	41.6	14.8	21.1	0.27	BDL	20.8
Nov. 2022	8	113.4	60.8	15.1	31.0	0.48	BDL	31.3
Dec. 2022	9	124.8	65.6	16.1	32.1	0.69	BDL	34.7
Jan. 2023	9	110.3	56.9	14.2	32.0	0.59	BDL	31.2
Feb. 2023	8	115.9	58.5	14.4	31.9	0.64	38.7	28.6
March 2023	8	105.4	54.5	13.4	25.4	0.57	35.2	23.8
Min. Conc.		60.8	31.5	11.6	15.3	0.22	35.2	14.4
Max. Conc.	102	124.8	65.6	16.1	32.1	0.69	38.7	34.7
Average		91.2	47.3	13.5	24.4	0.47	37.0	22.8
98 <sup>th</sup> percentile		122.8	64.5	15.9	32.1	0.68	38.6	34.0

NOTE: BDL = Below Detection Limit

C<sub>6</sub>H<sub>6</sub> & Benzo(a)pyrene = <0.01 µg/m<sup>3</sup>

Ni, As, Pb (ng/m<sup>3</sup>) = BDL

NH<sub>3</sub> (µg/m<sup>3</sup>) = BDL = <20 µg/m<sup>3</sup>

  
 आनंद कुमार  
 आरक्षक निरीक्षक  
 पर्यावरण प्रदूषण नियंत्रण बोर्ड  
 पर्यावरण प्रदूषण नियंत्रण बोर्ड  
 (केन्द्रीय प्रदूषण नियंत्रण बोर्ड)  
 प्रदूषण नियंत्रण बोर्ड  
 (केन्द्रीय प्रदूषण नियंत्रण बोर्ड)

Environment statement for the financial year 2022-2023 for proposed Ammonia - Urea  
(2200MTPD & 3850MTPD) Plants of HURL at Barauni, Bihar

**ANNEXURE-I**

**Period of Monitoring:** Financial Year: 2022-2023  
**Location:** Bihat Village

PERIOD	No. of Observations	Parameters (Average Concentration)						
		PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>x</sub> (µg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )	Ammonia (µg/m <sup>3</sup> )	Ozone (µg/m <sup>3</sup> )
<b>NAAQ Standards</b> →		60/100	40/60	50/80	40/80	02/04	100/400	100/180
April 2022	9	83.7	42.7	12.1	24.4	0.65	BDL	25.1
May 2022	9	82.5	42.1	11.9	22.0	0.53	BDL	20.9
June 2022	8	74.7	38.5	12.0	19.0	0.43	BDL	17.7
July 2022	9	73.4	36.3	12.4	18.7	0.41	BDL	16.6
Aug. 2022	9	66.9	33.1	11.1	15.6	0.24	BDL	15.1
Sept. 2022	8	60.7	30.2	10.9	14.8	0.22	BDL	16.3
Oct. 2022	8	83.9	41.8	13.6	20.8	0.26	BDL	21.4
Nov. 2022	8	117.4	60.8	14.8	29.9	0.45	BDL	31.8
Dec. 2022	9	127.1	65.0	15.7	30.9	0.70	BDL	35.1
Jan. 2023	9	109.9	53.7	14.1	30.1	0.61	BDL	31.1
Feb. 2023	8	118.0	56.6	14.2	29.9	0.70	45.0	28.6
March 2023	8	107.8	53.1	13.0	23.9	0.60	40.3	23.8
<b>Min. Conc.</b>		<b>60.7</b>	<b>30.2</b>	<b>10.9</b>	<b>14.8</b>	<b>0.22</b>	<b>40.3</b>	<b>15.1</b>
<b>Max. Conc.</b>		<b>127.1</b>	<b>65.0</b>	<b>15.7</b>	<b>30.9</b>	<b>0.70</b>	<b>45.0</b>	<b>35.1</b>
<b>Average</b>	<b>102</b>	<b>92.2</b>	<b>46.2</b>	<b>13.0</b>	<b>23.3</b>	<b>0.48</b>	<b>42.7</b>	<b>23.6</b>
<b>98<sup>th</sup> percentile</b>		<b>125.1</b>	<b>64.1</b>	<b>15.5</b>	<b>30.7</b>	<b>0.70</b>	<b>44.9</b>	<b>34.4</b>

**NOTE:** BDL = Below Detection Limit  
 $C_6H_6$  & Benzo(a)pyrene = <0.01 µg/m<sup>3</sup>  
 $Ni, As, Pb$  (ng/m<sup>3</sup>) = BDL  
 $NH_3$  (µg/m<sup>3</sup>) = BDL = <20 µg/m<sup>3</sup>

*Signature*

आचार्य जी के अग्र  
 सरकारी विश्वविद्यालय  
 प्रयोगशाला (बीडी) सिविल इंजिनियरिंग  
 भारतीय प्रौद्योगिकी संस्थान (IIT)  
 (सिस्टीम डेवलपमेंट का विभाग)  
 मोहनगढ़ रोड  
 (मुक्ति नगर)

<b>HINDUSTAN URVARAK &amp; RASAYAN LTD - BARAUNI (BIHAR)</b>				
<b>DATE</b>	<b>SAMPLE POINT NAME</b>	<b>SOx</b>	<b>NOx</b>	<b>SPM</b>
		<b>(mg/Nm3)</b>	<b>(mg/Nm3)</b>	<b>(mg/Nm3)</b>
18.10.2022	HRSG - 1 Stack	ND	42.7	< 5.0
	HRSG - 2 Stack	ND	47.2	< 5.0
	Primary Reformer. Stack	ND	32.6	< 5.0
01.11.2022	HRSG - 1 Stack	ND	62.5	< 5.0
	HRSG - 2 Stack	ND	55.1	< 5.0
	Primary Reformer. Stack	ND	60.1	< 5.0
08.11.2022	HRSG - 1 Stack	ND	55.5	< 5.0
	HRSG - 2 Stack	ND	53.1	< 5.0
	Primary Reformer. Stack	ND	46.5	< 5.0
17.11.2022	HRSG - 1 Stack	ND	29.1	< 5.0
	HRSG - 2 Stack	ND	31.2	< 5.0
	Primary Reformer. Stack	ND	52.3	< 5.0
06.12.2022	HRSG - 1 Stack	ND	30.8	< 5.0
	HRSG - 2 Stack	ND	76.2	< 5.0
	Primary Reformer. Stack	ND	52.3	< 5.0
14.12.2022	HRSG - 1 Stack	ND	33.3	< 5.0
	HRSG - 2 Stack	ND	68.2	< 5.0
	Primary Reformer. Stack	ND	42.3	< 5.0
26.12.2022	HRSG - 2 Stack	ND	71.9	< 5.0
	HRSG - 1 Stack	ND	34.3	< 5.0
	Primary Reformer. Stack	ND	62.1	< 5.0
12-Jan-23	HRSG - 1 Stack	ND	25.8	< 5.0
	HRSG - 1 Stack	ND	20.3	< 5.0
	Primary Reformer. Stack	ND	44.5	< 5.0
18-Jan-23	HRSG - 1 Stack	ND	24.1	< 5.0
	HRSG - 2 Stack	ND	72.8	< 5.0
	Primary Reformer. Stack	ND	41.3	< 5.0
22-Jan-23	HRSG - 2 Stack	ND	39.5	< 5.0
	Primary Reformer. Stack	ND	44.6	< 5.0
	HRSG - 2 Stack	ND	61.2	< 5.0
28-Jan-23	HRSG - 1 Stack	ND	45.3	< 5.0
	HRSG - 2 Stack	ND	40.8	< 5.0
01-Feb-23	Primary Reformer. Stack	ND	23.8	< 5.0
11-Feb-23	HRSG - 2 Stack	ND	55.6	< 5.0
16-Feb-23	HRSG - 1 Stack	ND	46.9	< 5.0
18-Mar-23	HRSG - 2 Stack	ND	65.3	< 5.0
18-Mar-23	HRSG - 1 Stack	ND	48.1	< 5.0
18-Mar-23	Primary Reformer. Stack	ND	37.6	< 5.0
24-Mar-23	HRSG - 1 Stack	ND	96	< 5.0



Government of India  
भारत सरकार  
Central Water Commission  
केन्द्रीय जल आयोग  
Inter State Matters-2 Dte.  
अंतरराज्यीय मामले निदेशालय



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Telephone No: 011-29583207  
Email: ism2dte@gmail.com

F.No.2/4/ISM-2/2017/ 316-17

Dt. 21.12.2017

To

Commissioner (FM)  
Ministry of Water Resources, RD & GR  
Block-2, CGO Complex  
Lodhi Road  
New Delhi-110003.

**Sub:** Ratification of 0.403 Cumecs (12.7 MCM) water allocation from river Ganga for Industrial and Drinking use of Hindustan Fertiliser Plant, Barauni under Hindustan Urwarak & Rasayan Ltd., Delhi -Reg

Sir,

WRD, Govt. of Bihar vide letter dated 26.09.2017 (Copy enclosed) conveyed its consent to allocate 0.403 Cumec (12.7 MCM) water from river Ganga for Industrial and Drinking use of Hindustan Fertiliser Plant, Barauni under Hindustan Urwarak & Rasayan Ltd., Delhi subject to certain conditions, for ratification of CWC. In response, this Directorate had commented vide letter dated 30.10.2017 ( Copy enclosed) that in view of Indo-Bangladesh international Treaty on Ganga Water sharing, 1996, no withdrawal is permitted from Ganga or its tributaries during lean period ( i.e. from 1st January to 31st May) and the project authority may create the ponds for storing sufficient flood water during monsoon to meet their water requirements during the lean season. Further, it was mentioned that as there exists no inter-State agreement over sharing waters from main Ganga stream amongst co-basin States, proposed allocation will have to be counted against the share of Bihar as and when some agreement is reached with the other co-basin States.

WRD, Govt. of Bihar vide dated 28.11.2017 (copy enclosed) has now proposed to offset water requirement of Hindustan Fertilizer Plant, Barauni against water saving from 'Restoration of West Gandak Canal System (Saran Main Canal & its Distribution System )' in addition to approved allocation of 120 cusec (107.17MCM) and 160 cusec ( 142.87 MCM) from river Ganga to Bihar State Power (Holdings) Company Ltd. Patna for 4000 MW TPS at Dist. Banka and Nuclear Power Plant at Rajauli respectively conveyed through MoWR, RD & GR letter No.22/1/2012-Ganga/2117-22 dated 21.04.2015.

As per WRD, Govt. of Bihar there is still a saving of 1701.94 MCM of water under West Gandak Canal Scheme and the water requirement of 0.403 cumec (12.7 MCM) is proposed to be offset against this saving and as such current proposal would not have any bearing upon the Indo-Bangladesh International Treaty on Ganga water sharing. Govt. of Bihar had earlier submitted detailed analysis to establish water availability through saving done from the proposal of 'Restoration of Western Gandak Canal System (Saran Main Canal & its Distribution System )' duly approved by TAC of the Ministry. It was established that water requirement of 120 cusec (107.17MCM) and 160 cusec ( 142.87 MCM) for 4000 MW TPS at Banka and Rajauli respectively and transition losses of 67 cusecs could be met without affecting the water requirement of 120 cusec (107.17MCM) and 160 cusec ( 142.87 MCM) for 4000 MW TPS at Banka and Rajauli respectively.

As per the said analysis, evaporation loss from river Gandak upto its confluence with Ganges was worked out using Meyer's formula and seepage losses were calculated based on ISI code of practice IS:9452(Part II)-1980. Total loss for a flow of 280 cusecs was calculated as 67 cusecs. On proportional basis, losses on water allocation of 0.403 cumec ( 14.23 cusec) comes to be 3.41 cusec. Therefore, total water requirement from river Ganga for Industrial and Drinking use of Hindustan Fertiliser Plant, Barauni including transition losses is 17.64 cusecs (0.5 cumec).

Monthly net water saving after meeting the requirement of Banka TPS & Rajauli Nuclear Power Plant and water requirement of Hindustan Fertilizer Plant, Barauni proposed to set off against water saving is calculated as under:

Month	Saving of Water due to lining after meeting irrigation requirement		Water Requirement for Banka TPS & Rajauli NPS		Water Requirement for Hindustan Fertilizer Plant, Barauni		Net Saving of Water	
	Cusec	MCM	Cusec	MCM	Cusec	MCM	Cusec	MCM
Jan	1265.68	96.00	347	26.32	17.64	1.34	901.04	68.34
Feb	363.74	24.92	347	23.77	17.64	1.21	-0.9	-0.06
Mar	1233.54	93.55	347	26.32	17.64	1.34	868.9	65.89
Apr	2811.05	206.33	347	25.47	17.64	1.29	2446.41	179.57
May	3047.66	231.14	347	26.32	17.64	1.34	2683.02	203.48
June	3002.81	220.39	347	25.47	17.64	1.29	2638.17	193.61
July	517.71	39.27	347	26.32	17.64	1.34	153.07	11.61
Aug	2631.3	199.55	347	26.32	17.64	1.34	2266.66	171.89
Sep	2308.17	169.41	347	25.47	17.64	1.29	1943.53	142.65
Oct	2487.57	188.68	347	26.32	17.64	1.34	2122.93	161.02
Nov	3569.61	262.00	347	25.47	17.64	1.29	3204.97	235.24
Dec	3491.92	264.84	347	26.32	17.64	1.34	3127.28	237.18
Total		1996.10		309.89		15.75		1670.44

As there appears to be shortfall of water during the month of February, the project authority may be asked to make provision for storing sufficient water to make up the deficit of 0.06 MCM water during the month of February.

Since the water proposed to be utilized is from Bihar share of Western Gandak Canal, it doesn't affect the existing inter-State agreement between Uttar Pradesh and Bihar subject to the condition that Govt. of Bihar gives intimation to Govt. of Uttar Pradesh for further curtailment of 17.64 cusecs of water (in addition to approved quantum of 347 cusecs of water for Banka TPS and Rajauli nuclear power plant) from the share of Bihar in Western Gandak Canal and Govt. of Uttar Pradesh issues modified release order for releasing additional quantum of 17.64 cusecs from Gandak Barrage directly into Gandak river.

The proposal is referred to MoWR, RD & GR for according necessary clearance from international angle so that the same may be conveyed to Govt. of Bihar.

This issues with approval of *Member (WPS P)*

Encl: As above

Yours faithfully,

*Rajesh Kumar*  
(Rajesh Kumar)  
Director

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Copy for information and necessary action to :

1. Shri Arun Kumar Dwivedi, Joint Secretary, Water Resources Department, Govt. of Bihar.



# BIHAR STATE POWER TRANSMISSION COMPANY LTD., PATNA

A subsidiary company of Bihar State Power (Holding) Company Ltd., Patna  
CIN – U74110BR2012SGC018889 Website – [www.bsptcl.in](http://www.bsptcl.in)  
Head Office, Vidyut Bhawan, Bailey Road, Patna – 800021

Letter No .....505...../

Patna, Dated ..09.09.2022

SO Cell/SLDC/HURL, Barauni/05/2022

From,

Sri A K Chaudhary  
Chief Engineer (System Operation)

To,

1. Sri Dharminder Bagga  
Vice President, HURL Barauni  
Email Id:-bhatiaks@hurl.net.in

Sub: Regarding grant of permission for First time charging of 132KV BTPS-HURL T/L & synchronized operation of captive power generation unit (2x23MW) of HURL with the Grid

Ref. - (i) Director (Operation), NBPDC Letter No. COM/HURL Barauni-03/2022/190 dated 05.04.22

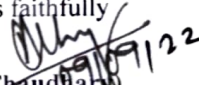
Sir,

With reference to the subject matter, the permission for synchronized operation of captive power generation unit of HURL with 132/33 kv Grid substation NTPC, Barauni (BTPS) is hereby accorded subject to following conditions:-

1. M/s HURL has to ensure the availability of real time SCADA data at SLDC, Patna within the stipulated time frame as mentioned in undertaking dated 29.08.2022.
2. Parallel operation of Captive Power plant with BSPTCL system should be as per terms & conditions of Letter mentioned under Ref. No. (i).

Encl. : As above

Yours faithfully

  
(A K Chaudhary)  
Chief Engineer (System Operation)

P.m.