

COMPLIANCE REPORT

(MoEF & CC File No J11011/154/2016-IAII (I) dated 29/08/2017)

For the period

April 2021 – September 2021

Submitted

to

MoEF&CC, Regional Office (ECZ), Ranchi

Ammonia Urea Fertilizer Plant

(2200MTPD Ammonia & 3850MTPD Urea)

SINDRI

November 2021



हिंदुस्तान उर्वरक एवं रसायन लिमिटेड
HINDUSTAN URVARAK & RASAYAN LTD.
(A joint Venture of NTPC, CIL, IOCL, FCIL & HFCL)



Hindustan Urvarak & Rasayan Limited

(A Joint Venture of NTPC, CIL, IOCL, FCIL & HFCL)
Office of The Project Head, Sindri Project, HURL
Old FCIL Office Complex, PO- Sindri,
Dhanbad Jharkhand-828122, Tel: -0326-2245454
GST Reg. No.: - 20AADCH9368N1Z6

Ref. No.: HURL/SND/21-22/1149

Date: 29.11.2021

Sri T. H. Mahato

Scientist D

Ministry of Environment, Forest and Climate Change,
Regional Office (ECZ), Bungalow No. A-2, Shyamali Colony,
Ranchi – 834002.

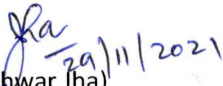
Subject: Ammonia (2200 MTPD) Urea (3850 MTPD) Fertilizer Project at Sindri in District Dhanbad, Jharkhand of M/s Hindustan Urvarak & Rasayan Limited (HURL)-Compliance Report for April 2021- September 2021.

Ref: (i) MoEF&CC, Environmental Clearance Letter No. J11011/154/2016-IAII (I) dated 29.08.2017.

Dear Sir,

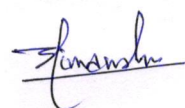
With reference to the subject as mentioned above, please find attached herewith the compliance report for the period April 2021 - September 2021.

Yours faithfully


(Kameshwar Jha)
Group General Manager
Hindustan Urvarak & Rasayan Ltd. (HURL)
Old FCIL Office Complex, Sindri
PO-Sindri, Dist.- Dhanbad-828122
Telephone – 0326-2245454

COMPLIANCE OF EC CONDITIONS FOR THE PERIOD April 2021 – September 2021

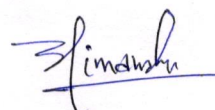
Sl. No.	COMPLIANCE CONDITIONS	Status
A	SPECIFIC CONDITIONS	
i)	Emissions-limits for the pollutants from the Diesel Generator Sets and the stack height shall be in conformity with the extant statutory regulations and/or the CPCB guidelines in this regard.	The electricity is being supplied through DVC for construction purpose in the Ammonia-Urea Fertilizer project at HURL, Sindri. The statutory emission norms shall be met by using New Generation EDG set during operating phase of the plant. Adequate stack height shall be provided to ensure to meet statutory regulations & guidelines.
ii)	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 ³ , and also the NAAQS.	This has been taken care in the Detailed Project Report of the Project and shall be complied with, during plant operation. Design consideration include scrubbers, adequate height of prilling tower and other gas sensors/control measures in the proposed plant to meet emission norms as per NAAQS.
iii)	Fresh water requirement shall not exceed 5.36 cum/ton of Urea production. Fresh water for plant operation shall be sourced from Damodar River 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.	The water supply through existing FCIL's pump house from Damodar River to project site is being used for the construction activities. At present, about 2700KL/day water is required for dust suppression & construction activities. 6.6 MGD water drawal agreement has already been done with DVC (copy attached – Annexure- I). However, Fresh water requirement shall not exceed 5.36 cum/ton of Urea production and the same has been included in the Detailed Project Report of the Project.
iv)	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.	Presently, construction activity is in progress. As the project is considered and executed with provisions of ZLD and therefore there will be no discharge outside the project boundary. Entire waste water generated will be treated upto tertiary level in the ETP inside the plant & shall be sent to RO for further reuse.
v)	The project proponent shall develop Greenbelt in an area of 33% i.e. nearly 132 acres out of 400 acres of plant area of the project. The greenbelt of 30 m width around periphery shall be provided.	We have already planned for development of green belt in 33% area around plant periphery and is under implementation. Work Order for plantation in 45.46 acres of land has been placed to Department of Forest GoJ (copy attached – Annexure- II). The conditions for provision of Green Belt shall



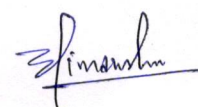
Sl. No.	COMPLIANCE CONDITIONS	Status
		<p>be complied with and will be in place by the time of Commissioning of the Plant. The Green Belt Development Plan is attached as Annexure-III. The total 132 acres area to be covered in green belt development. Out of this, in 82.05 acres jungle area is already existing within plant premises and HURL has placed Work Order for plantation in 45.46 acres of land to Department of Forest GoJ, dated 07.05.2021.</p> <p>Further, for Phase-II plantation i.e 56.26 acres which is at present for the temporary construction phase, the representative of DFO have visited the Phase-II plantation area and estimation of plantation to be received from DFO for the plantation of 56.26 acres.</p>
vi)	5000 trees per year in 5 year shall be planted in nearby villages with the consultation of the villagers. Survival rate of plants shall be reported to RO, MoEF&CC in 6 monthly compliance reports.	HURL already has taken up a proposal of 6664 trees plantation from NGO & letter (Ref: HURL/SND/21-22/447) has been sent to DC office Dhanbad for approval & consent for community plantation.
vii)	All the commitments made during Public Hearing/Public Consultation meeting held on 24 th April, 2017 shall be satisfactorily implemented and adequate budget provision should be made accordingly.	<p>The commitments made during Public Hearing/Public Consultation meeting held on 24th April, 2017 shall be implemented, it is already considered in the project cost. Details of Expenditure on public hearing issue has been attached in annexure – IV .</p> <p>Further, Signing MoU (MoU for- Education & skill development, Infrastructure for basic necessities, societal empowerment- women empowerment, creation of sustainable livelihood opportunities/avenues, sustainable agriculture and other rural areas activities) and taking up the mutually identified and agreed projects, through respective Departments of Dhanbad District Administration is at advance stage of finalization and approvals The MOU is being executed for a period of two years during which HURL and the Dhanbad district administration shall mutually collaborate with each other and HURL shall make available sufficient funds for working in the identified areas for the welfare of the communities</p>

Handwritten signature

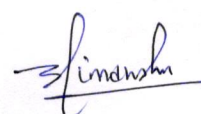
Sl. No.	COMPLIANCE CONDITIONS	Status
		surrounding the Sindri project. This period can however be extended by mutual consent of both the parties upon such terms and conditions, which they may mutually agree at the time of extension.
viii)	At least 2.5% of the total cost of the project shall be earmarked 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.	ESC programme will be carried out in accordance with the proposed MOU as explained in (vii) above. A budget of over Rs. 50 crores have been kept aside for the FY 2021-22 in order to meet the commitments towards ESC as well as the issues raised during the public hearing. HURL is committed to provide similar adequate budgets in the subsequent years also. Identified area wise details of proposed expenditure on ESC including PH issues are attached here with as Annexure-V .
ix)	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.	The EC conditions relating to establishment of Environmental Cell have been complied with and the following arrangement for environment cell is in place. At present environment cell is working with: Mr. Himanshu Sharma, Safety Officer & Mr. O. P. Kushwaha, Sr. Manager, Reporting to Mr. Kameshwar Jha, Group General Manager. Further, Process has been initiated for appointment for Manager and Assistant Manager (Environment & Quality Control).
x)	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.	This will be complied during plant operation phase, the action for which has already been initiated.
xi)	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.	This has already been addressed in the Detailed Project Report and RRA conducted for the Project and recommendation shall be complied during plant operation. Proposed plant is equipped with adequate measures for



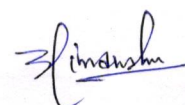
Sl. No.	COMPLIANCE CONDITIONS	Status
		control of failure/hazards. Fire fighting facilities are implemented as per norms.
xii)	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Regular Occupational health surveillance of the construction workers is being done by LSTK contractor and records are maintained. The same shall also be complied during plant operation as per Factories Act.
xiii)	Storage of hazardous raw material shall not exceed more than 7 days.	Project is at construction phase and no hazardous raw materials are being handled right now. However, we have developed the plan for storage & disposal of hazardous materials as per norm and guidelines of CPCB / JSPCB.
xiv)	Urea dust shall be controlled by prescribed standard technique.	This has already been addressed in the Detailed Project Report and EMP of the Project and shall be complied during the plant operation.
xv)	In Urea Plant, particulate emissions shall not exceed 50mg/Nm ³ . Monitoring of Prilling Tower shall be carried out as per CPCB guidelines.	This has already been addressed in the Detailed Project Report and EMP of the Project and shall be complied during the plant operation.
xvi)	The levels of PM10 (Urea dust), SO ₂ , NO _x , 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 MoEF&CC and SPCB.	Environmental Monitoring w.r.t. Air, Water and Noise during construction phase is being carried out by the CPCB recognised Laboratory in consultation with JSPCB since April 2018. (Six Monthly <i>Monitoring Report for the period April 2021 – September 2021 is attached as Annexure- VI</i>) The results have been uploaded on HURL's website and updated periodically. Simultaneously, it also sent to the regional office of MoEF&CC, Govt. of India the respective Zonal office of MoEF&CC, Govt. of India and JSPCB. Monitored Data have been displayed at the Main Gate of HURL Plant. Photographs attached as Annexure- VI
xvii)	In-plant control measures for checking fugitive emissions from all the vulnerable	This has already been addressed in the Detailed Project Report and EMP of the Project



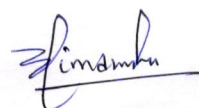
Sl. No.	COMPLIANCE CONDITIONS	Status
	sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed, handling & conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits stipulated by the SPCB.	and shall be complied during plant operation. The water sprinkling is being done on regular basis for fugitive dust suppression in and around construction site. Air Quality is being monitored in work zone environment as per monitoring plan for assessment of pollution level during construction phase. The plan has been prepared in consultation with JSPCB.
xviii)	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.	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 are in process and shall be obtained by March,2022. This has already been addressed in the Detailed Project Report and EMP of the Project and shall be complied during plant operation.
xix)	Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile-sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.	LSTK contractor is responsible for this activity as per provision of contract and HURL is monitoring it regularly. M/s HURL has earmarked old buildings of FCIL & HFCL in the neighbouring area of Project Site for housing of construction labourers. The necessary arrangement for all facilities such as fuel for cooking, toilets, safe drinking water, etc is done in the labour camps. Medical healthcare at construction site is being provided by experienced Doctor & first aider, two nos. ambulance is also available to shift the critical cases to nearby specialized hospitals. Biodegradable wastes such as leaves/branches of trees/bushes at site cut during site preparation are being collected and dumped in area earmarked for construction of composting pits. Excavated soils have been collected in the



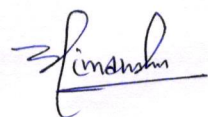
Sl. No.	COMPLIANCE CONDITIONS	Status
		<p>form of heaps away from construction site to dispose suitably in the low-lying area within FCIL premises.</p> <p>Other construction wastes are being kept at designated place & shall be disposed after completion of construction activity as per provisions of Construction and Demolition Waste Management Rules, 2016.</p>
B	GENERAL CONDITIONS	
i)	The Project authorities shall strictly adhere to the stipulations made by the State Pollution Control Board (SPCB), State Government and any other statutory authority.	HURL shall strictly comply with the conditions laid by JSPCB, Jharkhand State Government and any other Statutory Authority during construction and operation phase of the plant.
ii)	No further expansion or modifications in the plant shall not 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.	Noted, there is no modification planned at this stage. However, approval of the MoEF&CC, Govt. of India shall be obtained before any changes / alteration in the project.
iii)	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.	<p>The locations of ambient air quality monitoring stations have been decided in consultation with the Jharkhand State Pollution Control Board (JSPCB) for monitoring of Air Quality during construction phase.</p> <p>Six (06) Nos. of AAQMS have been installed in the project area out of which two stations are selected in up-wind, South-East and two stations are selected in down-wind, North-West directions, one station is selected in North-East and other one station is selected in South-West.</p>
iv)	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated is November, 2009 shall be followed.	The fugitive dust emission is being contained within the limits of National Ambient Air Quality Emission Standards at construction site. This will also be complied with during operational phase.
v)	The overall noise levels in and around the plant area shall be kept well within the	The noise levels are within the standard limits at construction site. All construction



Sl. No.	COMPLIANCE CONDITIONS	Status
	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).	equipment deployed at site is ensured to have engineering controls on sources of noise generation. The construction workers at site are equipped with ear muffs for working in noisy area. This condition will also be complied with during operation phase of the plant.
vi)	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.	This condition will be complied with as detailed in Annexure VII . Inside the plant, roofs of all buildings have the provision of Rainwater Harvesting.
vii)	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.	This condition will be complied with during operation phase of the plant.
viii)	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.	This condition being complied with during construction phase & also will be complied during operation phase.
ix)	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.	As per definition of CSR Act, this is applicable once the plant becomes operational and profit making. CSR activities will be undertaken by involving local villages and administration as per the extant Government guidelines for CSR.
x)	The company shall undertake all eco-developmental measures including community welfare measures for overall improvement of the environment.	Once the plant becomes operational all eco-developmental measures including community welfare measures for overall improvement of the environment will be undertaken by involving local villages and administration as per rule and Government guidelines.
xi)	A separate Environmental Management	This has been addressed in the Feasibility



Sl. No.	COMPLIANCE CONDITIONS	Status
	Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Report of the Project and shall be complied with during plant operation.
xii)	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.	This has been addressed in the Feasibility Report of the Project and shall be complied with during plant construction & operation phase.
xiii)	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZilaParisad / Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions, representations, if any, were received while processing the proposal.	Copy of clearance letter has already been submitted to municipal corporation and District Industry Centre also. During the Public Hearing, none of the local NGOs participated, and as such, we have not furnished copy of EC to them.
xiv)	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 email) 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.	Environmental monitoring work has commenced from April 2018 by M/s PDIL and the results of monitoring data from April, 2021 - September, 2021 have been provided in this six-monthly compliance report(Annexure-VI).
xv)	The environmental statement for each financial year ending 31 st April in Form-Vas 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	Noted. The Environment Statement has already been submitted for the financial year ending 31 st March, 2021 in Form-V.



SI. No.	COMPLIANCE CONDITIONS	Status
	shall also be sent to the respective Regional Offices of MoEF&CC by email.	
xvi)	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at http://moef.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	Environment Clearance granted by Ministry vide MoEF&CC letter no J11011/154/2016-IAII(I) DATED 29/08/2017 has already been updated on Company website hurl.net.in . The same was also advertised on 16/09/2017 on page 16 in Hindustan (Hindi) and page 13 in Hindustan Times (English) published from Ranchi, Jharkhand and submitted along with the Compliance Report.
xvii)	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.	Date of Financial Closure: 26.04.2018 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 approval of the Sindri Project: 05.02.2018. Date of Start of the project: 18.05.2018

Jha
29/11/21

(Kameshwar Jha)

Group General Manager

Hindustan Urvarak & Rasayan Ltd. (HURL)

Old FCIL Office Complex, Sindri

PO-Sindri, Dist. - Dhanbad-828122

Telephone – 0326-2245454

Jha
29/11/2021

Annexure-I



Damodar Valley Corporation
Office of the Manager Reservoir Operations
Maithan Dam, Dhanbad
Jharkhand-828 207

Phone : 06540 279445

No.: MRO/Tariff Cell/ HURL - 942

Dated- 08-07-2020

To
The Authorized Signatory,
SUNIL KUMAR SINHA
M/S. HINDUSTAN URVARAK & RASAYAN LIMITED
Core- 4, 9Th Floor, Scope Minar, Laxmi Nagar, District Centre, New Delhi, Pin- 110092

Sub.: Execution of Agreement for Water withdrawal of 6.60 (Six Point Six Zero) MGD of Raw Water for M/S HINDUSTAN URVARAK & RASAYAN LIMITED Core- 4, 9Th Floor, Scope Minar, Laxmi Nagar, District Centre, New Delhi, Pin- 110092

Dear Sir,

Enclosed, please find here with a copy of the Agreement for drawal of 6.60 (Six Point Six Zero) MGD of Raw Water for Hindustan Urvarak & Rasayan Limited, on 08-July-2020 for your record.

Yours faithfully,

Md. O. W. 8/07/2020
(Md Omair)

Dated. 08-07-2020

Sr. Divisional Engineer (Civil),
Tariff Cell, MRO'S Office, DVC, Maithon

DAMODAR VALLEY CORPORATION



AGREEMENT

EXECUTED ON 8th day of July-2020

BETWEEN

DAMODAR VALLEY CORPORATION

AND

HINDUSTAN URVARAK & RASAYAN LIMITED

For Supply of RAW WATER

FOR

AMMONIA AND UREA FERTILIZER PLANT (INDUSTRIAL PURPOSE)

AT
SINDRI

FROM

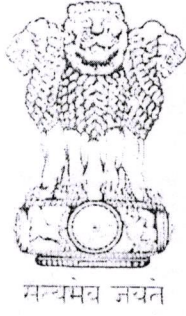
Damodar River

FOR

INDUSTRIAL (USES)

Allocated Quantity : 6.60 (Six Point Six Zero) MGD

A handwritten signature in blue ink, appearing to be 'Sindri', is located in the bottom right corner of the page.



INDIA NON JUDICIAL
Government of Jharkhand

e-Stamp

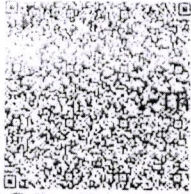
Certificate No. : IN-JH29622287996593S
Date of Registration Date : 06-Jul-2020 12:16 PM
Account Reference : NONACC (SV)/ jh9011104/ DHANBAD/ JH-DB
Unique Doc. Reference : SUBIN-JHJH901110444383440510537S
Purchased by : HINDUSTAN URVARAK AND RASAYAN LTD
Description of Document : Article 5 Agreement or memorandum of an Agreement
Property Description : AGREEMENT
Consideration Price (Rs.) : 0
(Zero)
First Party : DAMODAR VALLEY CORPORATION
Second Party : HINDUSTAN URVARAK AND RASAYAN LTD
Stamp Duty Paid By : HINDUSTAN URVARAK AND RASAYAN LTD
Stamp Duty Amount(Rs.) : 50
(Fifty only)

AGREEMENT

Supply of Raw Water

For

Industrial Use



This Agreement is made on this.....^{8th}.....Day of July-2020

BETWEEN

DAMODAR VALLEY CORPORATION, a Corporation constituted under the Damodar Valley Corporation Act being Act No. XIV of 1948 (hereinafter referred to as "the said Act") and having

its Headquarters of DVC Towers, VIP Road, Kolkata -700 054 in the state of West Bengal (hereinafter to as "the First Party", which term shall unless excluded by or repugnant to the subject or context include its successors-in-interest and assigns) of the ONE PART

AND

M/S. HINDUSTAN URVARAK & RASAYAN LIMITED, a Limited Company which is a JVC of NTPC, CIL, IOCL, FCIL & HFCL, having their registered office at Core- 4, 9th Floor, SCOPE Minar, Laxmi Nagar, District Centre, New Delhi, Pin- 110092 in the state/UT of Delhi (Hereinafter referred to as "the Second Party" which term shall unless excluded by or repugnant to the subject or context include its successors-in-interest and/or permitted assigns) of OTHER PART.

ओ. पी. कुशवाहा / O.P. KUSHWAHA
प्रबन्धक (योजना एवं प्रणाली / Manager (P & S)
हिंदुस्तान उर्वरक एवं रसायन लिमिटेड
HINDUSTAN URVASAYAN LTD.
(A Joint Venture of NTPC, CIL, IOCL, HFCL)
SINDRI, DHANBAD-828122

2002805740
No. 0
वरिष्ठ मंडलीय अभियन्ता (C)
Sr. Divisional Engineer (C)
कार्यालय, प्रबंधक जलागार प्रचालन
M.R.O. Office
धनबाद / Dhanbad

WHEREAS one of the functions of the First party under Section 12(a) of the said Act is the promotion and operation of the schemes inter-alia for the supply of water in the Damodar Valley.

AND WHEREAS under the provisions of Section 15 of the said Act the First Party is vested with power to determine and levy rates for bulk supply and retail distribution of water for industrial purposes and specify the manner of recovery of such rates.

AND WHEREAS under the provisions of section 17 of the said Act construction, operation or maintenance in the Damodar Valley of any dam or other work of any installation for extraction of water shall not be effected by any person without the consent of the First Party.

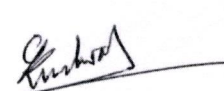
AND WHEREAS the Second Party has requested the First Party under cover of its letter No. HURL/SND/2018-19/15 dated 12/04/2018 annexed hereto, to allow it to construct, operate and/or maintain the water supply scheme and to allow it to have a supply of water from Damodar River for their AMMONIA AND UREA FERTILIZER PLANT (INDUSTRIAL PURPOSE) at Sindri, Office of the Project Head, Sindri Project, HURL, Old FCIL Office complex, P.O.- Sindri, Dhanbad, Jharkhand, Pin.- 828122 in accordance with the approved plan and drawing forwarded by Chief Engineer (Civil), DVC, Maithon vide letter no.- Nil & Letters No.- MRO/Tariff Cell/429 dated 09.05.2018 of SDE@, Tariff Cell, MRO's Office, DVC, Maithon & Letter No.- MRO/ Tariff Cell/604 dated 09.09.2019 of Dy. Chief Engineer @, Water Resources, DVC, Maithon and also the letter No. MD/DVRR/W-6(PART-VIII/2017/1053-60 dated 15.02.2018 of Member Secretary, DVRRRC, CWC, Maithon annexed hereto for Industrial purpose as laid down in the relevant provisions of the said act.

AND WHEREAS the First Party has agreed to such construction, operation and/or maintenance of the water supply scheme and has further agreed to such supply of water to the Second Party for an initial period of five years as referred to in Clause- 16 here-in-under on the terms and conditions as hereinafter appearing.

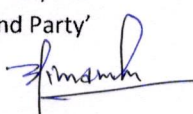
NOW THIS AGREEMENT WITNESSTH AND IT IS HEREBY DECLARED AND AGREED AS FOLLOWS:-

01. (a) PERMISSION :

(i) The "First Party" hereby grants to the "Second Party" the permission to construct, operate and/or maintain the said water supply scheme in accordance with the Plan and Drawing annexed hereto and to extract such quantities of water from Damodar River for the purpose of AMMONIA AND UREA FERTILIZER PLANT (INDUSTRIAL PURPOSE) at SINDRI as the "Second Party" may require upto 6.60 (Six Point Six Zero) MGD at the point in the Damodar River indicated in the said plan and Drawing annexed hereto and in the manner hereinafter mentioned provided the "Second Party" desiring to increase or decrease the quantity of water to be extracted as permitted aforesaid the "First Party" may require the "Second Party" to give the "First Party" THREE(3) MONTHS' notice in writing and approach DVRRRC stating the quantity of water required and the "First Party" after receipt of approval of DVRRRC will permit the additional drawal of water depending on the condition prevailing at that time provided further that failure on the part of 'the First Party' will not be construed as breach of this Agreement. the sourcing point and allocation of water by DVRRRC is function-specific. The allocation shall, in no way, be utilized /misused by 'the Second Party' by sale of water to any other consumer or its sister concern (or any agency on its behalf) for any purpose whatsoever, in the event of any such act, the same will be construed as breach of the terms and conditions of this agreement on the part of 'the Second Party' as specified in clause-17


ओ० पी० कुशवाहा / O.P. KUSHWAHA
प्रबंधक (योजना एवं प्रणाली / Manager (P & S)
हिंदुस्तान उर्वरक एवं रसायन लिमिटेड
HINDUSTAN URVASAYAN LTD.
(A Joint Venture of NTPC, CIL, IOCL, HFCL)
SINDRI, DHANBAD-828122

दी.क.


MD. O.
वरिष्ठ मंडलीय अभियन्ता (असै०)
Sr. Divisional Engineer (C)
कार्यालय, प्रबंधक जलागार प्रघालन
M.R.O. Office
दी.घा.नि. मैथन/D.V.C. Maithon

01. (b) PERMISSION : Not Applicable

(i) The "First Party" who is seized and possessed of and is otherwise well and sufficiently entitled to the plots of land measuring Nil of DVC land, more particularly described in the drawing hereto annexed, hereby grants to the "Second Party" the right to use/build at his own cost, the intake works comprising the pump house supporting structures and approaches and also lay down pipes and other works on the above mentioned piece and parcel of land.

(ii) These structures and pumping installations shall be the property of the "Second party" and shall be maintained by them.

(iii) The "Second Party" shall apply to the "First Party" for extension of the license-period of the temporarily allotted piece of land for permissive possession/occupation for the specific use if applicable as mentioned hereinabove in Cl. 01.(b).(i) before expiry of every license-period/term of 11 (eleven) months as per the subsisting rules & regulations for temporary use/permissive possession/occupation. The "Second Party" hereby agrees to comply with all the existing terms and conditions as may be decided by the Corporation from time to time and agrees to pay the license fee as may be revised time to time without raising any dispute in this regard.

(iv) For the temporary use/occupation of the said Nil of DVC land, the second party shall pay the "First party" a license fee 0 @ Rs. 6/- sq.ft. per term of 11 (eleven) months from the date of permissive possession/occupation of the said land if applicable, is made over to the 'Second Party'.

The aforesaid license-period and the rate of license fee may be altered and /or revised and/or enhanced as per discretion of 'the FIRST party' and 'the SECOND PARTY' agrees to make the payments as per the revised rate as and when made applicable.

(v) The "Second Party" shall not be entitled to transfer or let out the said land to others without the consent of the "First Party".

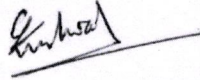
(vi) The "First Party" shall not put up any structure of its own on the aforesaid piece of land without the consent of the "Second Party" which shall not be unnecessarily withheld.

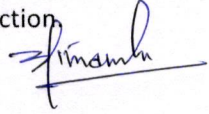
(vii) On the termination of the tenure of the temporary use and occupation period, the "Second Party" shall quit, vacate and deliver peaceful possession of the said land by removing the intake works built thereon and restoring it to its original condition at his own cost.

(viii) Neatness and cleanliness of the area occupied should be observed by the "Second Party"

02. APPROVAL OF PLAN & DRAWING INSPECTION:

The installation of the "Second Party" required for extraction of water at the point on the Damodar River indicated in the said plan and Drawing shall be duly approved by the "First Party" before erection provided the "First Party" or its representatives duly authorized in that behalf shall, from time to time, and at all times be entitled to enter such installations of the "Second Party" for inspection.


ओ० पी० कुशवाहा / O.P. KUSHWAHA
प्रबंधक (योजना एवं प्रणाली / Manager (P & S)
हिंदुस्तान उर्वरक एवं रसायन लिमिटेड
HINDUSTAN URVASAYAN LTD.
(A Joint Venture of NTPC, CIL, IOCL, HFCL)
SINDRI, DHANBAD-828122


Md. Oms
वरिष्ठ मंडलीय अभियन्ता (असै०)
Sr. Divisional Engineer (C)
कार्यालय, प्रबंधक जलागार प्रचालन
M.R.O. Office
दा.वा.नि. मैथन/D.V.C. Maithon

03. (a) EXCESS DRAWAL :

No drawal in excess of the water, as permitted shall be made by "the second party" without obtaining the specific prior written permission/approval of DVRRC and subject to such terms and conditions as "the First Party" may like to impose. Notwithstanding, whatever is mentioned in this agreement regarding excess drawal, it is hereby agreed and accepted by the second party that, for the quantities of water consumed in excess of the approved monthly drawal and for any other unauthorized drawal of water, sanctioned quantum will be charged @ normal rate plus overdrawal/unauthorized drawal in excess of sanctioned drawal on monthly basis will be charged @ 2 (Two) times the normal rate.

(b) LESS DRAWAL:

The less drawal of water by 10% or more of the agreement quantity during any 5 (five) consecutive years will automatically call for revision of the agreement quantity. The revised agreement quantity will be reduced to average of preceding 5 yrs' actual drawal, without making any further reference to the consumer incorporating the actual average drawal. However, the consumer may opt to apply to DVRRC for increase the quantity as per provision under Clause -1(a) hereinabove.

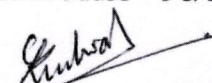
04. MODE OF MEASUREMENT & METERS :

For the purpose of measurement of the quantity of water extracted, the "Second Party" shall under this Agreement, with the prior Approval of the First Party, install at such points as may be indicated by 'the First Party', as many meters or as equal to the different type or types of uses of water so as to register the quantity of water for the purpose of determining the water drawal pattern (excess/less drawal) of the Second Party in such units of measurement as may be adopted by "the First Party"

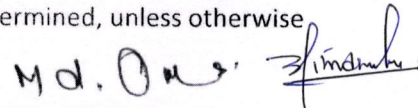
from time to time provided that for the purpose of checking the accuracy of the meter/meters installed by "the Second Party", "the First Party" may install check meters or other mutually agreed upon check measures and "the Second Party" shall provide all facilities such as log book etc. required by "the First Party" for such installation or such check.

It shall be responsibility of the 'Second Party' to repair/rectify/replacement of meter/meters within a period of 30 days from the date of detection of the fault by either party. And that 'the second party' has to submit a report certified by the representative of the first party every year regarding their compliance with proper and satisfactory functioning of meter with proper logging of meter readings which will be given due importance during periodic review of water utilization by DVRRC. Non-compliance of above may tantamount to cancellation of water allotment.

The reading of the meters referred to above shall be jointly taken by the accredited representative of the consumer and Corporation on/or as near as practicable to the last day of each English calendar month or as decided by the corporation and the reading so taken shall be binding, final and conclusive between the consumer and the Corporation as to the quantity of water drawal by the consumer, provided that in the event of any meter being found defective and the quantity of drawal of water during the period when the meter was defective shall be determined, unless otherwise mutually agreed as detailed in clause - 6 & 10 here-in-under.



ओ० पी० कुशवाहा / O.P. KUSHWAHA
प्रबन्धक (योजना एवं प्रणाली) / Manager (P & S)
हिन्दुस्तान उर्वरक एवं रसायन लिमिटेड
MURVASAYAN LTD.



वरिष्ठ मंडलीय अभियन्ता (असै०)
Sr. Divisional Engineer (C)
कार्यालय, प्रबंधक जलागार प्रचालन
M.R.O. Office

05. SEALING OF METERS :

All meters referred to in the above mentioned Clause - 04 excepting the ones with automatic recorder on charts if any, shall be properly sealed on behalf of both the parties hereto and shall not be interfered with by either party except in the presence of the other party or its representatives duly authorized in that behalf.

06. METER READING, INSPECTION & BASIS OF PAYMENT :

The Control Valve House housing the meter/meters of 'the Second Party' shall remain in the custody of 'the second Party' and 'the First Party' through its representative duly authorized in that behalf shall at all times be entitled to enter the said Control Valve House and inspect the meter/meters. The meter reading shall be entered up daily at 9.00 hours in a register by the second Party or its representatives duly authorized in that behalf. The readings may be checked and attested by 'the First Party' or its representative duly authorized in that behalf, at convenient intervals

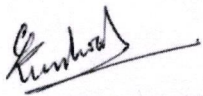
Provided that where it is not possible to record the quantity of water extracted for a particular use directly owing to the absence of a meter directly recording such quantity, the quantity extracted for such use shall be determined by taking the difference between the quantity recorded in the main meter, recording the total quantity extracted for all uses under this Agreement, and the quantity recorded for the other uses for which there may be direct meter/meters.

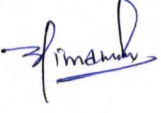
Provided further that if this meter/meters installed by 'the second party' for recording the quantity of water is/are out of order, the quantity of water extracted may be assessed by taking the average of the quantity extracted during the preceding 3 (three) months as per the reading of the meter/meters, provided further that nothing as aforesaid shall prevent the respective parties from arriving at a mutual settlement as regard the quantity of water extracted during the above period for the purpose of ascertaining excess/less drawal by the second party.

The basis of payment shall be the quantity of water extracted in a month. In other words, bills shall be raised monthly or quarterly or as decided by the corporation, based on the extracted quantity.

07. QUANTITY OF WATER CONSUMED OR EXTRACTED :

The Registers of meter reading referred to in the above mentioned Clause- 06 or the assessed quantity of water mutually agreed upon by and between both the parties hereto or the average of the quantity of water extracted during the three months as aforesaid or computed by taking the difference between the direct recording and main meter shall be the prima facie evidence of the quantity of water extracted by 'the second Party'.


ओ० पी० कुशवाहा / O.P. KUSHWAHA
प्रबंधक (योजना एवं प्रणाली) / Manager (P & S)
हिंदुस्तान उर्वरक एवं रसायन लिमिटेड
HINDUSTAN URVASAYAN LTD.
(A Joint Venture of NTPC, CIL, IOCL, HFCL)
SINDRI, DHANBAD-828122


Md. O.
वरिष्ठ मंडलीय अभियन्ता (असै०)
Sr. Divisional Engineer (C)
कार्यालय, प्रबंधक जलागार प्रचालन
M.R.O. Office
नौ. घा. नि. मैथन/D.V.C. Maithon

08. PROPRIETARY RIGHT OF METERS AND UPKEEPMENT:

Meters as mentioned in the above mentioned Clause -04 shall be the property of 'the Second Party' and 'the Second Party' shall be liable for the upkeepment of the meter and for carrying out test once a year or more to the satisfaction of the First Party about the accuracy of such meter/meters.

09. ACCURACY OF METERS :

In the event of any dispute or difference between 'the First Party' and the Second Party as to the sufficiency or accuracy or state of repair or condition of the said meter or as to the quantity of water extracted through such meter, such difference or dispute shall be referred to and determined by an Engineer to be appointed by both the parties hereto.

10. BASIS OF ASSESSMENT IN ABSENCE OF METER :

(a) It is accepted and agreed by the 'Second Party' that the total quantity of consumption of water for the month shall be computed by the first party on the basis of actual drawal of water and the bills shall be raised on such quantity as referred to in Schedule-I & II. However, the Second Party is required to install and commission the meter(s) up to the satisfaction of the First Party for ascertaining excess/less drawal as referred to in clause 3.(a) & 3.(b) hereinabove.

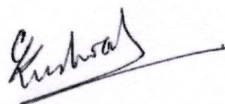
(b) If at any time the meters installed for measurement of water extracted shall at any time, cease to register correctly or be removed for repair, calibration etc., then for the period until the said meters shall have been repaired replaced or otherwise adjusted as to register the quantity of water passing through it correctly, the quantity shall be computed as per proviso of clause 06 hereinabove. The First Party, however, shall be entitled to charge and 'the Second Party' shall be liable to pay for such quantity of water as mentioned in Schedule-II and the bills shall be continued to be raised by first party based on the extracted quantity as mentioned hereinabove.

Notwithstanding the bills shall be raised as per provisions contained in preceding cl. 10.(a). The Second Party shall make every Endeavour to get the meter repaired and installed to the satisfaction of the First Party within a period of 1(one) months.

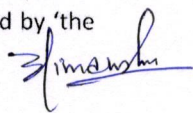
11. BILLS & PAYMENTS:

(a) Bills & Tariff:

The price for supply of water shall be charged to the 'Second Party' in accordance with Schedule-I & the First Party's 'Schedule of Rates' as given in Schedule-II and other conditions in force from time to time, provided that any levy such as any Surcharge, Sales Tax, Octroi or any another amount by whatever other name called known or made by the Corporation, the state Government or any other competent authorities on quantity of water allocated to the 'the second Party' under this agreement, shall be paid by 'the second Party'.



ओ० पी० कुशावाहा / O.P. KUSHWAHA
प्रबन्धक (योजना एवं प्रणाली / Manager (P & S)
हिन्दुस्तान उर्वरक एवं रसायन लिमिटेड
HINDUSTAN URVASAYAN LTD.
(A Joint Venture of NTPC, CIL, IOCL, HFCL)
SINDRI, DHANBAD-828122


Md. O. J.
वरिष्ठ मंडलीय अभियन्ता (असै०)
Sr. Divisional Engineer (C)
कार्यालय, प्रबंधक जलागार प्रचालन
M.R.O. Office
दो.वा.नि. मैथन/D.V.C. Maithon

(b) Security Deposit: Applicable

The First Party may require the Second Party to deposit a Security Amount of Rs. 2,87,31,447/- (Rs. Two crore Eighty seven Lakh Thirty One Thousand Four Hundred Forty Seven Only) equivalent to water charges for three calendar months, considering quantity allocated in 6.60 (Six Point Six Zero) MGD specified in Clause- 1(a) and given in the schedule -I annexed hereto and or as modified as per clause-13 here-in-under and as per the prevailing water rate mentioned in schedule of rates in Schedule-II. The Second Party shall have to pay altered security amount if the quantity of allocation is changed by DVRRC as per the terms of this agreement and as and when the water rates are revised and notified to the second party from time to time during the tenure of this agreement. In the event of termination of this agreement such security deposit shall be refunded after adjustment of dues, if any, to the Second Party without any interest thereon.

(c) Periodicity of Billing:

Bills will be raised to the Second Party monthly/quarterly based on **actual drawal** or as decided by the Corporation as the case may be. It will be the responsibility of second party to make the aforesaid payment within the due date without raising any dispute in this regard.

(d) Mode of payment:

The 'second party' shall pay the bill amount to the first party's office at Kolkata by RTGS/Cheque/Demand Draft drawn on Kolkata Branch of any Nationalized Bank, payable to **Executive Director (Finance), DVC, Kolkata-54** within within 30 days from the date of issue of the bill . The license fee, however, is to be paid by the second party as per terms mentioned in Clause- 1 (b).

(e) Provisional Billing for disputed bills:

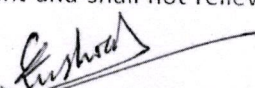
In the case of any disputed bill(s) and or non-receipt/delayed receipt of bill, the second party shall collect the duplicate bill from the office of first party and make the payment immediately. However Delay Payment Surcharge, if applicable, as mentioned here-in-under in clause 11.(f) shall have to be borne by the second party. In case of disputed bills, the second party shall continue to pay full amount as per the bill raised by the first party. The necessary adjustment shall be done by the first party on resolution of dispute and/or differences.

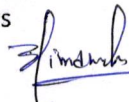
(f) Delay Payment Surcharge:

If 'the second party' fails to make the payment of any bill amount within the due date, the second party shall pay the surcharge of 2.0 % per month on the amount of the bill from the due date of payment to the date of receipt of such amount in first party's office at Kolkata/ in Corporation's Account which shall be treated as date of payment. The rate of Delay Payment Surcharge is however liable to revision from such date as the Corporation may decide with prior notice of one month in writing to the consumer.

(g) Default in payment:

In the event any bill remaining unpaid for 60 days from the date of issue of the bill, the first party shall give the second party **7(Seven) days'** clear notice in writing of its intention to discontinue the supply of water and on the expiry of such period if the payment has not been received, 'the first party' may forthwith discontinue supply of water to the second party till the period the default continues. Such discontinuance of supply shall not be deemed as breach on the part of the Corporation to comply with any of the terms of this Agreement and shall not relieve the consumer of its obligations and liabilities under the Agreement.


ओ.पी. कुशवाहा / O.P. KUSHWAHA
प्रबंधक (योजना एवं प्रणाली / Manager (P & S)
हिंदुस्तान सर्वरक एवं जलागार प्रचालन


MD. O. W.
वरिष्ठ मंडलीय अभियन्ता (असे०)
Sr. Divisional Engineer (C)
कार्यालय, प्रबंधक जलागार प्रचालन

(h) Resolution of Dispute on Bill Amount:

In the event of any dispute on the amount of the bill the consumer shall submit the in details indicating the reason/reasons for such dispute and the aforesaid dispute/disputes normally shall be resolved by mutual discussion and/or mutual exchange of written documents between the consumer and the Corporation through authorized representative within **30 (thirty) days** from the date of receipt of such reference made by the second party to 'the First Party'.

12. MODE OF SUPPLY UNDER NORMAL & ABNORMAL CONDITION:

Save as provided herein 6.60 (Six Point Six Zero) MGD which, however, need not be continuous, throughout 24 hours, shall be available to 'the Second Party' provided that in case of draught or other unforeseen circumstances, force majeure or any other cause over which the First Party has no control, the First Party shall not be responsible for any diminution or discontinuance of supply on such occasions, but it shall restore the normal conditions of supply as soon as it reasonably can be done to the extent possible.

"The First Party" shall not be considered to be in default or in breach in supplying agreed quantity of raw water due to causes beyond the control of the "The First Party" such as acts of God, Natural Calamities, Civil Wars, Fire, Draught, Riot and acts of unsurpassed power, etc.

13. VALIDITY PERIOD OF QUANTUM OF WATER ALLOCATION:

Notwithstanding whatever is stated herein above, the allocated quantum of water for drawal by 'the Second Party' i.e. initial allocation of quantity (in MGD/Cusec) by DVC/DVRRRC shall remain valid for INITIAL AGREEMENT period of **5 (five) years**.

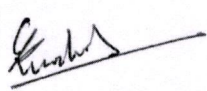
In case the average drawal by the second party during the initial agreement period of five years is **not below 90%** of allocated quantity, then the allocated quantity as specified in Clause- 1(a) shall be treated as the 'allocated quantum' of water for drawal by 'the second party' during the forthcoming period provided that the average drawal during last consecutive **5 (five) years** is **not less by more than 10%** of allocated quantity at the time of review by DVRRRC.

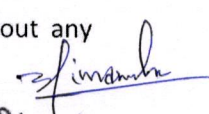
In case the drawal is found **less by more than 10%**, the first party may reduce the quantum of allocation accordingly based on the average drawal. However, the second party shall have the liberty to apply for increasing the **re-allocated quantity** as per provision of Clause- 1(a). Any change in the allocated quantity after review by DVRRRC Shall deem to replace the quantity of drawal specified in Clause- 1(a) and Schedule- I annexed hereto.

Fresh application for re-allotment of the earlier quantity of water for drawal by the second party, shall be required to be submitted by 'the Second Party' **twelve(12) months** prior to expiry of the initial agreement block of 5(five) years.

If the fresh application as above, is not submitted by 'the second party' in due time to the review committee of DVRRRC, 'The first party' shall have the right to reduce ex-parte the re-allocation of water as decided by the committee as deemed fit for equitable distribution taking into consideration the average drawal by the second party during the preceding 5(five) years.

'The second party' hereby accepts and agrees to the aforesaid re-allocation of water without any dispute and the bills shall be raised on the basis of the **drawal quantity** in MGD.


ओ० पी० कुशवाहा / O.P. KUSHWAHA
प्रबन्धक (योजना एवं प्रणाली / Manager (P & S)
हिंदुस्तान उर्वरक एवं रसायन लिमिटेड
HINDUSTAN URVASAYAN LTD.
(A Joint Venture of NTPC, CIL, IOCL, HFCL)
SINDRI, DHANBAD-828122


Md. O. O.
वरिष्ठ बंडलीय अभियन्ता (असै०)
Sr. Divisional Engineer (C)
कार्यालय, प्रबंधक जलागार प्रचालन
M.R.O. Office
ती.घ.नि. मैथन/D.V.C. Madhya Pradesh

14. RULES & REGULATION:

'The Second Party' agrees to conform to and abide by all rules and regulations made by the First Party including guidelines for water allocation set by DVRRRC now in force and/or which may from time to time be made by the First Party consistent with this agreement relating to the extraction of water from the First Party's sources within the statutory limit of the said Act.

'The second party' shall ensure the optimal use of allotted quantum for the specific purpose and surrender the wasteful usage from the allotted quota. 'The second party' shall take all cares to avoid any untoward hydraulic conditions and undesirable changes in the river/supply channel.

'The second party' shall also ensure that the minimum flow in the river channel required for ecological balance is not interfered with. The Second Party shall take care that the intake structure and drawl of water, under no circumstance be detrimental to the safety and operation procedures of adjoining intakes/reservoir bridges both upstream & downstream of the intake point and also that the proposed intake is strong enough to be able to withstand floods in the river.

Notwithstanding whatever is stated in Clause-13 above, the review committee for allocation of water shall have prerogative to review periodically to reflect and incorporate the changes which take place in the realm of Water Resource Management.

"The Second Party" will ensure that the effluent water discharging out of the plant/industry will conform to the latest rules/bye laws/ regulations/prescribed water quality parameters by pollution control board of respective State Governments and/or Central Government.

Notwithstanding that the Corporation may not have acted on some previous breach, defaults or event of like nature on the part of the second party, it shall be lawful for the Corporation to enforce the terms and conditions of these presents in the event of a subsequent breach, default or event of like nature in all matters related to withdrawal of raw water by 'the Second Party'.

Any waiver by 'the First Party' of any breach of the terms and conditions of this agreement by the Second Party shall not constitute waiver of any subsequent breach of any other terms or conditions of this agreement.

15. DISPUTE OR DIFFERENCE & ARBITRATION:


Any dispute(s) or difference(s) arising out of or in connection with the agreement at any time between the 'First Party' and the 'Second Party' shall to the extent possible be settled amicably between the parties.

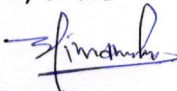
In the event of any dispute(s) or difference(s) whatsoever arising under the agreement or in connection therewith including any question relating to existence, meaning and interpretation of the agreement or any alleged breach thereof, the same shall be referred to the Secretary/CEO of Damodar Valley Corporation, Kolkata-700 054, to nominate Sole Arbitrator for settlement of disputes.

The Arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 or any statutory modification thereof or for the time being in force or the latest. The decision/judgment of the Sole Arbitrator shall be final and binding on both the parties. The cost of Arbitration shall equally be borne by both the parties. The venue of Arbitration shall be at Kolkata.

However, in case the 'Second Party' is a Central Public Sector Enterprise/Govt. Department, the dispute arising between the parties shall be settled through Permanent Arbitration Machinery (PAM) of the Department of Public Enterprise, Govt. of India as per prevailing rules.

All suits arising out of dispute(s) or difference(s) between the 'First Party' and the 'Second Party' are subject to jurisdiction of Court in the City of Kolkata.


O.P. KUSHWAHA / O.P. KUSHWAHA
प्रबंधक (योजना एवं प्रणाली) / Manager (P & S)
हिंदुस्तान उर्वरक एवं रसायन लिमिटेड
HINDUSTAN UREAC


40.02
Sr. Divisional Engineer (C)
कार्यालय, प्रबंधक जलमय प्रसारण
M.R.O. Office
D.V.C. Office

16. TENURE OF AGREEMENT OR VALIDITY :

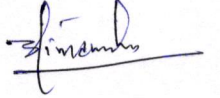
This agreement shall subject as hereinbefore provided be and remain in force for a period of **5 (five) years** initially from the date of commencement of supply **subject to the validity of Bank Guarantee** under this Agreement and thereafter shall continue uninterruptedly under the existing terms and conditions until determined by either party after the expiration of the fifth or any subsequent year on giving **3 (Three) months'** prior notice in writing of such intention and at the expiration of such notice this Agreement shall absolutely cease and determine but without prejudice to the rights and remedies, if any, of either party which may have accrued or arisen hereunder in the meantime and provided that the Second Party shall on giving the First Party **3 (three) months'** prior notice in writing of such intention be at liberty at any time after the expiration of the fifth or any subsequent year to terminate this Agreement by making payment of the charges equal to water charges for one year as per Schedule of Rates (Annexed as Schedule-II) in force at that time.

17. TERMINATION :

If 'the 'Second Party' commits any breach of the terms and conditions of this agreement or if there is any default on the part of 'the second Party', 'the First party' will be at liberty to terminate this agreement upon one months' notice to 'the second party' without prejudice to the rights and remedies, if any, which may have accrued or arisen thereunder.



ओ० पी० कुशवाहा / O.P. KUSHWAHA
प्रबंधक (योजना एवं प्रणाली / Manager (P & S)
हिंदुस्तान उर्वरक एवं रसायन लिमिटेड
HINDUSTAN URVASAYAN LTD.
(A Joint Venture of NTPC, CIL, IOCL, HFCL)
SINDRI, DHANBAD-828122



HD. O.S.
वरिष्ठ मंडलीय अभियन्ता (असै०)
Sr. Divisional Engineer (C)
कार्यालय, प्रबंधक जलागार प्रचालन
M.R.O. Office
दा.घा.नि. मैथन/D.V.C. Maithon

IN WITNESS WHEREOF THE PARTIES TO THESE PRESENTS HAVE HERE UNTO PUT THEIR REPECTIVE HANDS AND SEALS EACH THE DAY AND YEAR FIRST ABOVE WRITTEN.


The Agreement along with Schedule of rates would come into effect on and from the date of commencement of water supply.

21/7/2020

SIGNED, SEALED AND DELIVERED
FOR AND ON BEHALF OF

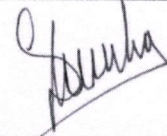
DAMODAR VALLEY CORPORATION
मुख्या अभियंता (नि.नि.)
दा०घा०नि०, मैथन डैम, धनबाद
Chief Engineer (Civil) & HoD
D.V.C. Maithon Dam, Dhanbad

WITNESS

1. S.K. MAJI - 
DCE (WR)
2. Hd. Onr (MD-ONAIR)

(Name & Address)

वरिष्ठ मंडलीय अभियंता (असै०)
Sr. Divisional Engineer (C)
कार्यालय, प्रबंधक जलागार प्रवालन
M.R.O. Office
नी.घा.नि. मैथन / D.V.C. Maithon



SIGNED, SEALED AND DELIVERED
FOR AND ON BEHALF OF

HINDUSTAN URVARAK & RASAYAN LIMITED


Registered Office: Core- 4, 9th Floor, SCOPE Minar, Laxmi
Nagar, District Centre, New Delhi, Pin- 110092

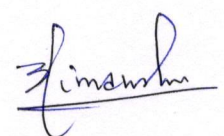
WITNESS

1. 

ओ० पी० कुशवाहा / O.P. KUSHWAHA
प्रबन्धक (योजना एवं प्रणाली) / Manager (P & S)
हिन्दुस्तान उर्वरक एवं रसायन लिमिटेड
HINDUSTAN URVASAYAN LTD.
(A Joint Venture of NTPC, CIL, IOCL, HFCL)
SINDRI, DHANBAD-828122

SINHA KR. SINHA / सुनील कुमार सिन्हा
GENERAL MANAGER PROJECT / प्रबंधक
SINDRI PROJECT / सिंद्री प्रोजेक्ट
HINDUSTAN URVARAK & RASAYAN LIMITED
हिन्दुस्तान उर्वरक एवं रसायन लिमिटेड

2. 
(Name & Address)
प्रबंधक (मानव-संसाधन) / Manager (HR)
हिन्दुस्तान उर्वरक एवं रसायन लिमिटेड
HINDUSTAN URVARAK & RASAYAN LIMITED
(A Joint Venture of NTPC, CIL, IOCL, FCIL & HFCL)
SINDRI, DHANBAD -828122



SCHEDULE- I

[Referred to in Clause-1(a)]

Quantity of Water allocated by DVRRC for drawal by M/s HINDUSTAN URVARAK & RASAYAN LIMITED at SINDRI, Office of the Project Head, Sindri Project, HURL, Old FCIL Office complex, P.O.- Sindri, Dhanbad, Jharkhand, Pin.- 828122, 6.60 (Six Point Six Zero) MGD

From 01-01-2020 day of _____ of two thousand and Twenty the date of commencement of water drawal:

[N.B.: The quantity of raw water allocation as revised by DVRRC from time to time as per the provision of the agreement shall form the integral part of this agreement]

SCHEDULE- II

[Referred to in Clause-11]

SCHEDULE OF RATES**FOR
RAW WATER SUPPLY**

SOURCES OF DRAWAL	INDUSTRIAL	DOMESTIC/MUNICIPALITY/P HED
	Rate	Rate
Reservoir / River (Per KL)	Rs. 11.704	Rs. 1.811
Extra Charges for drawing water from water supply canal (Per KL)	Rs. 0.52	

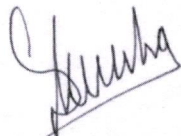
The Tariff will be enhanced annually at the end of every financial year (i.e. w.e.f. 1st April) as follows:

- (i) For Domestic/Municipality/PHED use - 05% shall be increased in raw water tariff annually.
(ii) For Industrial use - 10% shall be increased in raw water tariff annually.

Note: 1) The Water Supply Bills shall be raised on the basis of actual drawal quantity as for all the consumers with the above tariff.

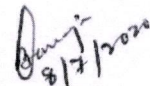
2) An incentive of 10% on the monthly billed amount will be allowed to those Industries who have taken appropriate measures for "Zero Effluent Discharge". The said incentive will be applicable only if the payments are made within due date and on production of requisite certificate from State Pollution Control Authority.

N.B. : Revised rate will be applicable as and when notified by the Corporation.



For and on behalf of

**HINDUSTAN URVARAK & RASAYAN
LIMITED**



CHIEF ENGINEER

For and on behalf of

मुख्य अभियंता (सिंधी) सिंधी परियोजना,
दांघाठानि, मैथन डैम, धनबाद
Chief Engineer,
D.V.C. Maithon Dam, Dhanbad

DAMODAR VALLEY CORPORATION

Registered Office: Core- 4, 9th Floor,

SCOPE Minar, Laxmi Nagar, District

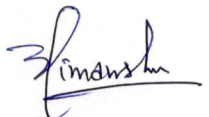
Centre, New Delhi, Pin- 110092

SINDRI PROJECT / सिंदरी-परियोजना

HINDUSTAN URVARAK & RASAYAN LTD.

हिन्दुस्तान उर्वरक एवं रसायन लिमिटेड

Kolkata-700054



Performa of information to be submitted by the company

DETAILS OF THE COMPANY

A. DETAILS OF APPLICANT:

01.Name in Capital Letters	SUNIL KUMAR SINHA
02.Designation	General Manager
03.Relationship with Intending Consumer	Project Head, Sindri
04.Complete Postal Address	Office of the Project Head, Sindri Project, HURL, Old FCIL Office complex, P.O.- Sindri, Dhanbad, Jharkhand, Pin.- 828122
05.Telephone No.	0326-2245454
06.FAX No.	0326-2245454
07.E.Mail Address	sinhask01@hurl.net.in

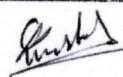
B. DETAILS OF THE WATER CONSUMER:

1 Details of Registered Office:

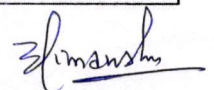
Registered Office	Postal Address:	Core- 4, 9th Floor, SCOPE Minar, Laxmi Nagar, District Centre, New Delhi, Pin- 110092
	Telephone No. :	011-22502267
	FAX No. :	
	E.Mail Address :	

2 Details of Contact Person:

NAME:	SHRI SUNIL KUMAR SINHA	
Contact Person	Postal Address:	Office of the Project Head, Sindri Project, HURL, Old FCIL Office complex, P.O.- Sindri, Dhanbad, Jharkhand, Pin.- 828122
	Telephone No. :	0326-2245454
	FAX No. :	0326-2245454
	E.Mail Address :	sinhask01@hurl.net.in



ओ० पी० कुशवाहा / O.P. KUSHWAHA
प्रबन्धक (योजना एवं प्रणाली) / Manager (P & S)
हिंदुस्तान उर्वरक एवं रसायन लिमिटेड
HINDUSTAN URVASAYAN LTD.
(A Joint Venture of NTPC, OIL INDIA, ICI)



3	Complete Billing Address:	
Billing Address	Postal Address:	Office of the Project Head, Sindri Project, HURL, Old FCIL Office complex, P.O.- Sindri, Dhanbad, Jharkhand, Pin.- 828122
	Telephone No. :	0326-2245454
	FAX No. :	0326-2245454
	E.Mail Address :	opkushwaha@hurl.net.in

C. DETAILS OF PROJECT/UNIT/PUMP LOCATION ETC.:

01. Name of the Village/Place	SINDRI
02. Plot no.	2308
03. Dag No.	-
04. Mouza Name & No.	SINDRI- 190
05. J.L. No.	-
06. Police Station Name & No.	SINDRI POLICE STATION
07. Name of Post Office with PIN	SINDRI POST OFFICE - 828122
08. District	DHANBAD
09. Postal Address of the Plant/ Unit site	Office of the Project Head, Sindri Project, HURL, Old FCIL Office complex, P.O.- Sindri, Dhanbad, Jharkhand, Pin.- 828122
10. Point of Water Withdrawal/	FCIL Land in Sindri Mouza on the River bank of Damodar, Plot no.- 2308
Telephone No.	0326-2245454
FAX No.	0326-2245454
E.Mail Address	opkushwaha@hurl.net.in
11. Location of Water Treatment Plant	In the Sindri Mauza near Settling Tank
12. Location of Pumping Station	P.O.- Mouza- Sindri, Mouza- Sindri-190,Plot No.- 2308, Dist.- Dhanbad, Jharkhand

Opkushwaha श्री० पी० कुरीवाहा / O.P. KUSHWAHA
 प्रबन्धक (योजना एवं प्रणाली) / Manager (P & S)
 हिन्दुस्तान उर्वरक एवं रसायन लिमिटेड
 HINDUSTAN URVASAYAN LTD.
 (A Joint Venture of NTPC, OIL, IOCL, HFC)

Opkushwaha

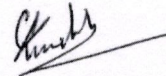
13. Number of pumps installed	2 Nos. of new centrifugal pumps + 1 No old centrifugal pump
14. Capacity of pumps	1750 m3/hr (cubic metre per hour)
15. Location of water meter	Sindri pump house
16. Location of Intake point	FCIL Land in Sindri Mouza on the River bank of Damodar, Plot no.- 2308
17. Quantum of water withdrawal in MGD (approved by DVRRC)	6.60 (Six Point Six Zero) MGD
18. Date of Commencement of water withdrawal from pumping station (to be filled up later)	01/01/2020

D.

DETAILS OF RAW WATER USAGE:

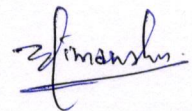
(Attach Separate sheet, if necessary, giving details):

(1) AMMONIA AND UREA FERTILIZER PLANT



Signature with full name of person
signing the Agreement & Stamp/ Seal of Company

ओ० पी० कुशवाहा / O.P. KUSHWAHA
प्रबन्धक (योजना एवं प्रणाली) / Manager (P & S)
हिंदुस्तान उर्वरक एवं रसायन लिमिटेड
HINDUSTAN URVASAYAN LTD.
(A Joint Venture of NTPC, CIL, IOCL, HFCL)
SINDRI, DHANBAD-828122





DAMODAR VALLEY CORPORATION

P.O.-MAITHON DAM,

Tel No. (06540) 279402/279883/279445; Fax No. 06540-274313

ANNEXURES

ENCLOSURES FORMING THE PART OF THE AGREEMENT:-

Annexure (1) to (4) mentioned below and annexed hereto shall form the integral part of this Agreement:-

(1) ANNEXURE-'A' Schedule -I & Schedule -II

(2) ANNEXURE-'B' Detail of the Company

(3) ANNEXURE-'C' MD/DVRRW-6(PART-VIII/2017/1053-60 dated 15.02.2018 of Member Secretary, DVRRRC, CWC, Maithon

(4) ANNEXURE-'D' Letters No.- MRO/Tariff Cell/429 dated 09.05.2018 of SDE©, Tariff Cell, MRO's Office, DVC, Maithon & Letter No.- MRO/ Tariff Cell/604 dated 09.09.2019 of Dy. Chief Engineer ©, Water Resources, DVC, Maithon

For and on behalf of

**HINDUSTAN URVARAK & RASAYAN
LIMITED**

**Registered Office: Core- 4, 9th Floor,
SCOPE Minar, Laxmi Nagar, District
Centre, New Delhi, Pin- 110092**

**SUNIL KR. SINHA / सुनील कु. सिन्हा
GENERAL MANAGER (PROJECT) / महाप्रबंधक (परियोजना)
SINDRI-PROJECT / सिंदरी-परियोजना
HINDUSTAN URVARAK & RASAYAN LTD.
हिंदुस्तान उर्वरक एवं रसायन लिमिटेड**

CHIEF ENGINEER

For and on behalf of

मुख्य अभियंता (सिविल) धनबाद विभाग

दाघानि, मैथन डैम, धनबाद

Chief Engineer (Civil) & HoD

DVC, Maithon Dam

DAMODAR VALLEY CORPORATION

Kolkata-700054



Hindustan Urvarak & Rasayan Limited

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

Ref No. – HURL/Sindri/C&M/2021-22/144

Date : 07/05/2021

Work Order

To,
The Divisional Forest Officer,
Dhanbad Forest Division,
Dhanbad

Subject : Work Order for Development of Greenbelt in 18 Hectare land with plantation of 1666 Trees/ Hectare i.e. 29,998 Trees in 18 Hectares land and maintenance of plantation work for 10 Years at HURL Sindri project

Reference:

1. HURL letter reference no.- HURL/SND/P&S/20-21/891 dated 12-11-2020
2. Letter reference no.- 2398 dated 15-12-2020 from DFO office, Dhanbad

Dear Sir,

With reference to your letter ref. no 2398 dated 15-12-2020, we are pleased to accept your offer for the work of development of Greenbelt in 18 Hectare land with plantation of 1666 Trees/ Hectare i.e. 29,998 Trees in 18 Hectares land and maintenance of plantation work for 10 Years at HURL Sindri project amounting ₹44,18,069.00/- (Rupees Forty Four Lakhs Eighteen Thousand Sixty Nine Rupees only) including GST and contingency charges @ 5% for the contract period of 10 (Ten) years with the following terms and conditions in respect of above mentioned work:-

1. **Scope of Work** – Plantation of trees saplings for Green Belt Development in 18 Hectares of Land inside HURL Sindri project premises with plantation of 1666 plants per hectare and total 29988 plants in 18 Hectares with Barbed fencing including complete maintenance for Ten (10 Years). The Forest department shall take up plantation work as per below tabulated Year wise plan at HURL Sindri site with due expertise and supervision as per the scheme, estimates duly sanctioned as per the estimate submitted by forest department in Co-ordination with Senior Manager, P&S Department, HURL Sindri Project.

S. N.	Year wise plan	Description of work
1	First year	<ol style="list-style-type: none"> 1. Site visit and marking of the Green belt Development area 2. Land development by cutting the bushes. 3. Construction and Erection of RCC pillars (total 82 nos) having dimension 7'x4"x4" with pit of 1'x1'x2'. 4. Concertina wire 4 point 2ply 12swg, 15cm apart 3.75 Metric Ton. 5. Construction of Concertina wire with RCC pillars.

HURL, Sindri Project, Old FCIL Office Complex, PO- Sindri, Dhanbad Jharkhand-828122, Tel: -0326-2245454

CIN: U24100DL2016PLC358399, GST Reg. No.: - 20AADCH9368N1Z6, Website: www.hurl.net.in

Corp. Office/Regd. Office: Core-4, 9th Floor, SCOPE Minar, Laxmi Nagar, District Centre, New Delhi, Delhi, East Delhi, India - 110092

Dhanbad Kamesh
07/05/21



Hindustan Urvarak & Rasayan Limited

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

		<ol style="list-style-type: none">6. Marking pit for plantation of tree sapling 1666 per hectare with 0.3m x 0.3m x 0.3m.7. Temporary shed for storing of plants.8. Materials for plantation (polythene bags, seed, fertilizers, vermi compost, etc)9. Earth and water conservation work:- Digging Contour trench size 5mx0.3mx0.3m, with 2 meter apart from each other. Making slop of the pit of 0.3m breadth and 0.15 meter deep.
2	Second Year	<ol style="list-style-type: none">1. Plantation of Trees2. Spraying and pouring of water on regular basis.3. Plugging near plants for unwanted grasses.4. Fertilizer to be given at regular intervals.5. Replacement of dead plants by new plants.6. Water pouring in planted trees.7. Protection for planted trees
3	Third Year	<ol style="list-style-type: none">1. Spraying and pouring of water on regular basis.2. Plugging near plants for unwanted grasses.3. Fertilizer to be given at regular intervals4. Replacement of dead plants by new plants.5. Protection of Planted trees.6. Repairing of barricade.
4	Fourth Year	<ol style="list-style-type: none">1. Spraying and pouring of water on regular basis.2. Plugging near plants for unwanted grasses.3. Replacement of dead plants by new plants4. Protection of planted trees.5. Fertilizer to be given at regular intervals
5	Fifth Year	<ol style="list-style-type: none">1. Spraying and pouring of water on regular basis.2. Plugging near plants for unwanted grasses.3. Protection of planted trees.4. Fertilizer to be given at regular intervals5. Repairing of barricade.
6	Sixth Year	<ol style="list-style-type: none">1. Protection of planted trees.
7	Seventh Year	<ol style="list-style-type: none">1. Protection of Planted trees.
8.	Eighth Year	<ol style="list-style-type: none">1. Protection of Planted trees.
9	Ninth Year	<ol style="list-style-type: none">1. Protection of Planted trees.
10.	Tenth Year	<ol style="list-style-type: none">1. Protection of Planted trees.

2. **Contract Period** : The contract shall be operative for a period of Ten year with effect from the start date of work as certified by Senior Manager (P&S), HURL Sindri Project.

Debabrata Kumar
07/05/21
[Signature]

HURL, Sindri Project, Old FCIL Office Complex, PO- Sindri, Dhanbad Jharkhand-828122, Tel: -0326-2245454

CIN: U24100DL2016PLC358399, GST Reg. No.: - 20AADCH9368N1Z6, Website: www.hurl.net.in

Corp. Office/Regd. Office: Core-4, 9th Floor, SCOPE Minar, Laxmi Nagar, District Centre, New Delhi, Delhi, East Delhi, India - 110092



Hindustan Urvarak & Rasayan Limited

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

3. The Forest department shall conduct all its plantation activities subject to all laws, rules, statutory orders and regulations applicable to the site and the nature of the work.
4. The Forest department shall exercise precautions on the aid and advice of the company for safety of all lives and properties involved in the plantation activities.
5. Annual Joint Inspection report of the inspection carried out by joint team of Forest department and officials of HURL Sindri Project after the completion of each year work should indicate name of the site, year of plantation, number of plants, name of the species present, date of inspection and survival rate.
6. The display board shall be installed at all the plantation sites indicating the name of company, the number of plantation, species planted, name of site of plantation and plantation year.
7. All the material, tools & tackles and manpower required with regard to execution of aforesaid work shall be arranged by DFO office at their own cost. All boarding/ lodging/ Transportation/ Local conveyance of workman/ labourers engaged shall be in the scope of the Forest department.
8. The Forest department shall pay wages not less than the minimum wages fixed by the Govt. of Jharkhand to the workmen / labourers engaged in execution of the aforesaid work and it will be responsibility of the Forest department to ensure the compliance of the payment of wages to its workmen / labourers as per law and HURL shall not be held responsible for the same.
9. In case of revision of minimum wages by Govt. of Jharkhand during the contract period, the increase amount shall be payable/reimbursable by HURL including its implication on statutory benefits and GST as applicable.
10. **Payment Terms** : Total project cost is Rs. ₹44,18,069.00/- (Rupees Forty Four Lakhs Eighteen Thousand Sixty Nine Rupees only) including GST and contingency charges @ 5% for the contract period of 10 (Ten) years. This contract amount calculated for plantation and maintenance work is based on the estimate submitted by the Forest department. The Payment schedule will be as follows,

S.N.	Item Description	Amount (In Rs.)	Additional Contingencies charge @5%	Total Amount (in Rs.)
1.	1 st Year Work	21,95,763.58	1,09,788.18	23,05,551.76
2.	2 nd Year Work	6,56,392.80	32,819.64	6,89,212.44
3.	3 rd Year Work	2,93,464.61	14,673.23	3,08,137.84
4.	4 th Year Work	2,75,021.40	13,751.07	2,88,772.47
5.	5 th Year Work	2,47,208.21	12,360.41	2,59,568.62
6.	6 th Year Work	1,07,967.00	5,398.35	1,13,365.35
7.	7 th Year Work	1,07,967.00	5,398.35	1,13,365.35
8.	8 th Year Work	1,07,967.00	5,398.35	1,13,365.35
9.	9 th Year Work	1,07,967.00	5,398.35	1,13,365.35
10.	10 th Year Work	1,07,967.00	5,398.35	1,13,365.35
Total		42,07,685.59	2,10,384.28	44,18,069.88

HURL, Sindri Project, Old FCIL Office Complex, PO- Sindri, Dhanbad Jharkhand-828122, Tel: -0326-2245454

CIN: U24100DL2016PLC358399, GST Reg. No.: - 20AADCH9368N126, Website: www.hurl.net.in

Corp. Office/Regd. Office: Core-4, 9th Floor, SCOPE Minar, Laxmi Nagar, District Centre, New Delhi, Delhi, East Delhi, India - 110092

Deepak Kumar
07/10/24



[Handwritten signature]



Hindustan Urvarak & Rasayan Limited

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

11. For the release of payment, you have to submit
- The letter of acceptance of the work order along with the Demand Letter/Bill for the 1st Year Work

And for further payments regarding this work order

- Utilization certificate of the preceding payment made to you in respect of this work order
- Joint Inspection report of preceding year's work
- Demand letter/Bill based on the actual rates of labour wages to that Corresponding year for payment

The Utilization certificates along with joint inspection report shall be accepted by the accepting authority i.e G.M. (Project Head), HURL Sindri Project or his authorized representative.

12. HURL shall not have any liability in case of any accident etc. towards Forest Department's personnel/staffs/workers during the execution of the aforesaid work.
13. All safety requirements for manpower, tools and equipment's involved in execution of the aforesaid work shall be fulfilled by the forest department. Safety in totality for execution of the aforesaid work is complete responsibility of the forest department.
14. Child labour is prohibited under Mines act, therefore, child labour shall not be deployed in the aforesaid work.

Debasit Kumar
12/50/10
Manager (C&M),
HURL Sindri Project

Copy to :-

- GM, HURL Sindri Project
- Senior Manager (P&S), HURL Sindri Project
- Office Copy.



Finambh

GREEN BELT DEVELOPMENT & PLANTATION OF TREES

The project proponent shall develop greenbelt in an area of 33% i.e., nearly 132 acres out of 393 acres plant area of the project. The greenbelt of 30m width around periphery shall be provided (Plate A)

5000 trees per year in 5 year shall be planted in nearby village with the consultation of the villagers. Survival rate of plants shall be reported to RO, MoEF&CC in 6 monthly compliance reports.

Purpose

Trees and plants are an essential component of healthy environment. In addition to maintaining the oxygen-carbon dioxide balance in the atmosphere through photosynthesis, trees and plants control air and noise pollution, control soil erosion, provide food and shelter to domestic and wild animals including birds and insects, and improve the aesthetic value of the environment. The utility of the green belt predominantly lies in its capacity to attenuate the fugitive emission and spillage. Thus, the objectives of the proposed green belt program are as follows:

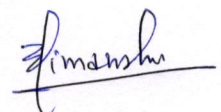
- a) To control air pollution due to fugitive emissions and spillage.
- b) To attenuate noise generated by various machines.
- c) To attenuate the effect of accidental release of toxic gases.
- d) To reduce the effect to fire and explosion.
- e) To improve the general appearance and aesthetics of the area.
- f) To provide food and habitat for wildlife.
- g) To control soil erosion.
- h) To obscure the proposed facilities from general view.
- i) To create additional source of income for the rural people.

Areas to be afforested

Sindri Fertilizer plant is being established in vacant land in the battery limit of FCI of 393 acres of land. Green-belt development program shall be undertaken in 33% of the plant area including 30 m wide green belt around the battery limit of the plant. There exists a thick green belt around the existing abandoned fertilizer plant. The existing township is well planned with a proper forestation. While preparing the layout plan for locating the different facilities, extreme care has been exercised to preserve the existing plantation to the extent possible. Trees, lawns and gardens shall be developed within the premises to cover all the vacant areas. Extreme care shall be taken to utilize all available areas for forestation.

Scheme and Species for Green Belt

The general approach for selection of species for green belt development is their potential for attenuation of fugitive emissions and noise, diversity of vegetation, introduction of species attracting birds and animals, and to create a natural habitat. It is proposed to develop trees of different heights so as to provide cover from ground level up to the canopy of tall tree species. Further, trees with big foliage



and those known to prosper well in the area will be developed. Preference will be given to fruit bearing trees so as to provide food and shelter to birds and insects.

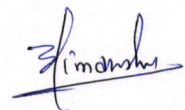
The plan for development of green belt is as given below:

- a) The distance between two plants should not be less than 3.0 m so that a 30 m width green belt will have ten rows of plantations. Thus a 30 m width green belt will have a plant boundary of 1.0 km will have 3330 plants.
- b) A pit of 45 cm x 45 cm x 45 cm must be dug for plantation of saplings which are at least 6 months old.
- c) Samplings must be planted at the onset of monsoon.

Different species in the green belt suggested to have dense stratified 3 to 5 layer canopy so as to form a visible barrier and wind breaker

- a) On the outer ring of the green belt facing fugitive emissions from the open surface and roads close plantation of 2 to 3 rows of evergreen *Alstoniascholaris* intermixed with *FicusCunea* and Babul.
- b) Behind the outer layer, fast growing evergreen plants having good fugitive emission removing capacity like evergreen *MahuaIndica* and *Derris Indica*, Sagwan, Gambhar and Putranjiya.
- c) Middle layer may be planted with Silver Oak which is tall, hardy and evergreen.
- d) In the next layer some typical hard and fast growing plants like *Leucaena*, *Acacia auriculiformis*, *Cassia fistula*, *C. Siamea*, *Inga ducis* may also be considered.
- e) In the inner periphery Bouganvella may be planted as it has high capacity for absorbing toxic gases.
- f) Some plants having good timber value like *Dalbergia sissoo*, *Albizialebbek*, *Azadiracta indica*, *Tectona grandis* along with fruit trees like Ber, Guava, Jamun, Jack fruit and Bel may also be planted to attract birds.
- g) For fencing purpose plants from *Asclepiadaceae* and *Apocynaceae* families like *Alstonia Calotropis* which are resistant to grazing may be considered.
- h) The entire green belt may be interspersed with climbers.

Efforts would be made by M/s HURL in collaboration with State Forest Department to explore mutual areas of interest in the area of identifying trees/plants to maintain/enhance the current biodiversity.



Expenditure incurred under
Public Hearing commitment
Sindri Project, HURL

S No.	Item description	Quantity	Amount (including GST) (in Rs.)	Purchase done by	Instructions received from Dist. Admin./ HURL internal decision/ if other case- (please specify)	Action taken with date
1	Covid-19 Testing Kits	10000 nos.	7,84,000.00	HURL	Dist. Admin	Handed over to Civil Surgeon, Dhanbad on 15 May 2021
2	3-Ply Nose Masks	15,000 Nos.	21,300.00	HURL	HURL internal decision	Distribution to nearby Locality of Sindri by P&S/ Safety department HURL started from 31 May2021
3	N-95 Nose Masks	1,000 Nos.	19,990.00	HURL	HURL internal decision	Distributed to nearby Locality of Sindri by P&S/ Safety department HURL started from 31 May2021
4	Infrared Thermometer (IR)	20 Nos.	13,900.00	HURL	HURL internal decision	Distribution will be done to nearby Society/ Locality of HURL
5	Hand Sanitizer	400 Nos. (500ml each)	22,000.00	HURL	HURL internal decision	Distribution will be done to nearby Society/ Locality of HURL
6	Pulse Oximeter	30 Nos.	48,000.00	HURL	HURL internal decision	Distribution will be done to nearby Society/ Locality of HURL
7	Sanitization works for Community	06 Nos.	1,48,762.20	HURL	HURL internal decision	sanitization of nearby Locality of Sindri by P&S / Safety department HURL started from 20 May2021
8	Face Shield	50 Nos.	3,150.00	HURL	HURL internal decision	sanitization of nearby Locality of Sindri by P&S / Safety department HURL started from 20 May2021

3/imanishu

S No.	Item description	Quantity	Amount (including GST) (in Rs.)	Purchase done by	Instructions received from Dist. Admin./ HURL internal decision/ if other case- (please specify)	Action taken with date
9	Hiring of Ambulance for 02 Months	01 No.	1,50,000.00	HURL	HURL internal decision	Proposal initiated by HR department for catering the need medical emergency during Covid pandemic of nearby locality of Sindri
10	3-Ply Nose Masks & Hand Sanitizer	20,000 Nos. & 1000 Nos. (250 ml each)	95,900.00	HURL	HURL internal decision	Distribution will be done to nearby Society/ Locality of HURL
11	5 Litres Oxygen Concentrator	5 nos	3,03,500.00	HURL	Addi. Seceretary Home, Prision and Dis. Mgmt. Deptt.	Handed over to District Administration after procurement of the same
12	Pulse Oxymeter	25 nos	23,625.00	HURL	Addi. Seceretary Home, Prision and Dis. Mgmt. Deptt.	Handed over to District Administration after procurement of the same
13	Oxygen Plant	02 nos.	71,68,000.00	HURL	Dist. Admin	Handed over to District Administration after procurement of the same
14	Street light	94 sets	9,66,320.00	HURL	HURL internal decision	-
GRAND TOTAL (in Rs.)			97,68,447.20			

Simanshu

Expenditure incurred under
Corporate Environment Responsibility (CER)
Sindri Project, HURL

S No.	Item description	Quantity	Amount (including GST) (in Rs.)	Purchase done by	Instructions received from Dist. Admin./ HURL internal decision/ if other case- (please specify)	Action taken with date
1	Covid-19 Testing Kits	10000 nos.	7,84,000.00	HURL	Dist. Admin	Handed over to Civil Surgeon, Dhanbad on 15 May 2021
2	3-Ply Nose Masks	15,000 Nos.	21,300.00	HURL	HURL internal decision	Distribution to nearby Locality of Sindri by P&S/ Safety department HURL started from 31 May2021
3	N-95 Nose Masks	1,000 Nos.	19,990.00	HURL	HURL internal decision	Distributed to nearby Locality of Sindri by P&S/ Safety department HURL started from 31 May2021
4	Infrared Thermometer (IR)	20 Nos.	13,900.00	HURL	HURL internal decision	Distribution will be done to nearby Society/ Locality of HURL
5	Hand Sanitizer	400 Nos. (500ml each)	22,000.00	HURL	HURL internal decision	Distribution will be done to nearby Society/ Locality of HURL
6	Pulse Oximeter	30 Nos.	48,000.00	HURL	HURL internal decision	Distribution will be done to nearby Society/ Locality of HURL
7	Sanitization works for Community	06 Nos.	1,48,762.20	HURL	HURL internal decision	sanitization of nearby Locality of Sindri by P&S / Safety department HURL started from 20 May2021
8	Face Shield	50 Nos.	3,150.00	HURL	HURL internal decision	sanitization of nearby Locality of Sindri by P&S / Safety department HURL started from 20 May2021

[Handwritten Signature]

S No.	Item description	Quantity	Amount (including GST) (in Rs.)	Purchase done by	Instructions received from Dist. Admin./ HURL internal decision/ if other case- (please specify)	Action taken with date
9	Hiring of Ambulance for 02 Months	01 No.	1,50,000.00	HURL	HURL internal decision	Proposal initiated by HR department for catering the need medical emergency during Covid pandemic of nearby locality of Sindri
10	3-Ply Nose Masks & Hand Sanitizer	20,000 Nos. & 1000 Nos. (250 ml each)	95,900.00	HURL	HURL internal decision	Distribution will be done to nearby Society/ Locality of HURL
11	Anganwadi	150 Centres	1,50,00,000.00		Dist. Admin	Submitted to District Administration
12	5 Litres Oxygen Concentrator	5 nos	3,03,500.00	HURL	Addi. Seceretary Home, Prision and Dis. Mgmt. Deptt.	Handed over to District Administration after procurement of the same
13	Pulse Oxymeter	25 nos	23,625.00	HURL	Addi. Seceretary Home, Prision and Dis. Mgmt. Deptt.	Handed over to District Administration after procurement of the same
13	Oxygen Plant	02 nos.	71,68,000.00	HURL	Dist. Admin	Handed over to District Administration after procurement of the same
14	Street light	94 sets	9,66,320.00	HURL	HURL internal decision	-
GRAND TOTAL (in Rs.)			2,47,68,447.20			

[Handwritten signature]

This Compliance Report is the fulfillments of the condition of the Environmental Clearance (EC) vide File No. EC [IA/JH/IND2/54024/2016, J-11011/154/2016-IA II(I)] for the period of April 2021 to September 2021. This report has been prepared by Projects and Development India Limited (PDIL) by collecting respective samples in consultation with the State Pollution Control Board (SPCB) officials and Hindustan Urvarak and Rasayan Limited (HURL) officials. During the above mentioned period the analysis of the environmental parameters has been conducted by the CPCB accredited Laboratory at PDIL Noida under the strict supervision of the Government Analysts.

The proposed project is located at Sindri with the capacity of 2200MTPD Ammonia and 3850MTPD Urea in the District Dhanbad in the state of Jharkhand. The area falls in the agricultural belt of the Jharkhand.

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. 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, GoI (2000)

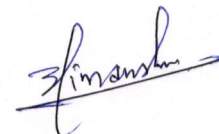
Manual on Artificial Recharge of Ground Water, Central Water Ground Board, Ministry of Water Resources, GoI (2007)

Rain Water Harvesting and Conservation: Manual, Consultancy Services Organization, CPWD, GoI (2002)

The green belt proposed by MoEF&CC is under review for selection of suitable plant species in consultation with local experts of the area.

The Environmental Monitoring report of 6 months w.r.t Air, Water and Noise have been presented separately with the average values. The environmental conditions and the compliance have been found normal as per the Standards. The Air Quality results have been presented through a self explanatory table with the NAAQ Standards w.r.t the parameter PM_{10} , $PM_{2.5}$, NO_x , SO_2 . No abnormal value has been recorded during the study period. 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 five No. of physical parameters, thirteen No. of chemical parameters, nine No. of Heavy metals and three No. of miscellaneous parameters. No abnormal value has been recorded except for value of TDS & Hardness recorded beyond desirable limits at one location near old ammonia cooling tower of FCIL. 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 April 2021 to September 2021.



Compliance of EC conditions for the period April 2021 - September 2021 for Proposed Ammonia-Urea (2200MTPD & 3850 MTPD) plants of HURL at Sindri

HURL, SINDRI, AIR QUALITY DATA: APRIL 2021- SEPTEMBER 2021

ANNEXURE-VI

MONTH	Parameters	Admn. Building HURL Gate (SA1)	Railway Phatak (inside the Plant) (SA2)	Domgarh Gate (inside the Plant) (SA3)	Settling Tank (SA4)	PDIL Guest House(SA5)	Sindri Basti Village(SA6)	NAAQ Standard
APRIL 2021	PM10	92.7	87.4	91.2	91.2	89.4	83.9	100
	PM 2.5	53.3	49.1	51.8	50.3	50.1	46.5	60
	SO2	13.9	13.8	14.3	14.5	14.1	12.5	80
	NOx	23.4	21.1	21.5	23.8	23.8	21.3	80
	CO	1.32	1.33	1.42	1.70	1.57	1.13	02
	NH3	BDL	BDL	BDL	BDL	BDL	BDL	400
	NMHC	5.01	5.19	5.55	5.73	5.12	4.62	-
	MHC	4.74	5.52	5.71	5.14	5.4	4.61	-
	VOC	4.87	4.70	5.92	4.66	5.74	4.57	-
MAY 2021	PM10	92.6	87.8	90.4	89.9	87.6	80.9	100
	PM 2.5	51.8	48.9	50.8	48.3	48.0	43.5	60
	SO2	14.4	13.9	14.4	14.3	13.9	12.1	80
	NOx	22.2	21.2	21.9	21.7	23.2	20.4	80
	CO	1.2	1.3	1.3	1.3	1.5	1.1	02
	NH3	BDL	BDL	BDL	BDL	BDL	BDL	400
	NMHC	5.0	5.0	5.5	5.2	5.1	4.5	-
	MHC	4.7	5.4	5.5	5.3	5.5	4.6	-
	VOC	4.9	4.7	5.8	5.0	5.2	4.3	-
JUNE 2021	PM10	88	85.78	81.56	78.44	81.89	74.89	100
	PM 2.5	48.78	47.11	46.00	42.56	44.44	39.78	60
	SO2	13.50	13.00	12.84	11.91	13.01	12.19	80
	NOx	20.46	19.01	19.02	17.52	18.28	17.67	80
	CO	1.00	1.06	0.97	0.93	1.43	1.11	02
	NH3	BDL	BDL	BDL	BDL	BDL	BDL	400
	NMHC	2.60	2.35	2.39	1.41	1.96	1.62	-
	MHC	2.58	2.57	2.64	1.72	2.23	2.02	-
	VOC	3.11	3.09	3.38	2.47	2.88	2.6	-
JULY 2021	PM10	32.4	30.6	34.6	32.7	32.6	28.2	100
	PM 2.5	16.7	16.1	17.6	16.3	15.7	14.8	60
	SO2	16.5	15.9	14.4	10.9	11.4	10.5	80
	NOx	18.5	17.7	18.2	15	16.2	15	80
	CO	2.03	1.79	1.9	1.26	1.26	1.00	02
	NH3	BDL	BDL	BDL	BDL	BDL	BDL	400
	NMHC	1.62	1.38	1.44	0.86	1.01	0.64	-
	MHC	1.85	1.55	1.58	0.94	1.14	0.71	-
	VOC	2.38	2.06	1.94	1.22	1.32	0.80	-
AUGUST 2021	PM10	27.11	24.56	26.67	20.56	23.11	20.44	100
	PM 2.5	13.11	12.67	12.89	10.56	11.78	10.22	60
	SO2	13.71	13.79	14.51	12.27	12.12	12.37	80
	NOx	16.26	16.69	16.94	14.06	15.42	15.21	80
	NH3	BDL	BDL	BDL	BDL	BDL	BDL	400
	C6H6	<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	0.26	0.33	0.48	0.27	0.41	0.30	02
	Ozone	16.21	15.58	16.41	14.59	15.7	13.48	180

(Handwritten Signature)

Compliance of EC conditions for the period April 2021 - September 2021 for Proposed Ammonia-Urea (2200MTPD & 3850 MTPD) plants of HURL at Sindri

	Ni	BDL	BDL	BDL	BDL	BDL	BDL	20
	As	BDL	BDL	BDL	BDL	BDL	BDL	06
	Lead	BDL	BDL	BDL	BDL	BDL	BDL	1.0
SEPTEMBER 2021	PM10	41.88	36.75	52.88	35.5	42	38.25	100
	PM 2.5	26.00	20.38	33.13	22.13	26.38	25.13	60
	SO2	19.64	16.86	21.01	13.74	18.05	16.08	80
	NOx	16.2	14.26	17.58	16.00	16.30	16.40	80
	NH3	BDL	BDL	BDL	BDL	BDL	BDL	400
	C6H6	<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	0.35	0.31	0.53	0.27	0.36	0.39	02
	Ozone	28.95	20.25	29.78	20.05	27.5	21.56	180
	Ni	BDL	BDL	BDL	BDL	BDL	BDL	20
	As	BDL	BDL	BDL	BDL	BDL	BDL	06
	Lead	BDL	BDL	BDL	BDL	BDL	BDL	1.0
	AVG. APRIL 2021 TO SEPTEMBER 2021	PM10	62.45	58.82	62.89	58.05	59.43	54.43
PM 2.5		34.95	32.38	35.37	31.69	32.73	29.99	60
SO2		15.28	14.54	15.24	12.94	13.76	12.62	80
NOx		19.50	18.33	19.19	18.01	18.87	17.66	80
CO		1.03	1.02	1.10	0.96	1.09	0.84	02
NH3		BDL	BDL	BDL	BDL	BDL	BDL	400
NMHC		2.85	2.78	2.98	2.64	2.64	2.28	-
MHC		2.77	3.01	3.09	2.62	2.85	2.39	-
VOC		3.05	2.91	3.41	2.67	3.03	2.45	-
C6H6		<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
Ozone		22.58	17.92	23.10	17.32	21.60	17.52	180
Ni		BDL	BDL	BDL	BDL	BDL	BDL	20
As		BDL	BDL	BDL	BDL	BDL	BDL	06
Lead		BDL	BDL	BDL	BDL	BDL	BDL	1.0

NOTE: BDL = Below Detection Limit, ($\mu\text{g}/\text{m}^3$) = PM₁₀, PM_{2.5}, SO₂, NO_x, NH₃, C₆H₆, Lead, Ozone
 ng/m³ = Arsenic (As), Benzo(α)Pyrene

(ppm) = NMHC, MHC, (mg/m³) = CO, VOC

Simanshu

ज्ञानसिता
 पर्यावरण प्रयोगशाला
 प्रोजेक्ट्स एंड डेवलपमेंट इंडिया लिमिटेड
 (भारत सरकार का उपक्रम)
 मिनी रत्ना-1 कंपनी
 पी.डी.आई.एल. भवन, ए-14, सेक्टर-1
 नोएडा-201301, (उ.प्र.), इत

**HURL, SINDRI, GROUND WATER QUALITY DATA:
AVG. (APRIL 2021 TO SEPTEMBER 2021)**

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

Sl. No	Parameters	Analysis Results			Requirement (Acceptable) / Permissible Limits (IS:10500:2012)
		Near Instrumentation Coke Oven & Amm. Storage (Hand Pump) (GW1)	Near Domgarh Mandir (Hand Pump) (GW2)	Rohraband (Hand Pump) (GW3)	
PHYSICAL					
1	pH	7.4	7.5	7.3	6.5-8.5
2	Temperature (°C)	28.4	28.3	28.2	-
3	Colour, HU	<9.6	<9.6	<9.6	5/15
4	Odour	Unobj.	Unobj.	Unobj.	Unobj.
5	Taste	Agreeable	Agreeable	Agreeable	Agreeable
6	Turbidity (NTU)	<5	<5	<5	1/5
7	Total Suspended Solid	NT	NT	NT	-
8	Total Dissolved Solids	451.8	513.0	401.2	500/2000
CHEMICAL					
1	P- Alkalinity as CaCO ₃	NIL	NIL	NIL	-
2	Total Alkalinity as CaCO ₃	188	241	233	200/600
3	Chloride as Cl	102	104	52	250/1000
4	Sulphate as SO ₄	60	64	47	200/400
5	Nitrate as NO ₃	4.3	4.2	4.4	45/NR
6	Fluoride as F	0.86	0.92	0.92	1.0/1.5
7	Total Hardness as CaCO ₃	356	424	279	200/600
8	Ca. Hardness as CaCO ₃	222	277	157	75/200
9	Mg. Hardness as CaCO ₃	136	147	122	30/100**
10	Sodium as Na	17	13	33	-
11	Potassium as K	4	3	6	-
12	Silica as SiO ₂	14	14	12	-
13	Iron as Fe	0.23	0.25	0.24	0.3/NR
HEAVY METALS					
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	0.77	0.77	0.80	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
OTHERS					
1	Mineral oil,	BDL	BDL	BDL	0.5/NR
2	Ph.Compound as C ₆ H ₅ OH	BDL	BDL	BDL	0.001/0.002
3	Coliform (MPN/100ml)	<55	<55	<55	-

जातिपति

पर्यावरण प्रयोगशाला

प्रोजेक्ट्स एंड डेवलपमेंट इंडिया लिमिटेड
(भारत सरकार का उपक्रम)

मिनी रत्ना-1कंपनी

पी.डी.आई.एल. भवन, ए-14,सेक्टर-1

नोएडा-201301,(उ.प्र.), इत

Simran

HURL, SINDRI, SURFACE WATER QUALITY DATA-2021
AVG. (APRIL 2021 TO SEPTEMBER 2021)

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

Sl. No.	Parameters	Nimtand Village (Pond) SW1	Seven Lake (Pond) SW2	Damodar River SW3	Requirement (Acceptable) / Permissible Limits (IS:10500:2012)
PHYSICAL					
1	Temperature (°C)	28.9	29.3	29.9	-
2	Colour, HU	9	11	12	5/15
3	Turbidity (NTU)	12	14	17	1/5
4	pH	7.4	7.3	7.2	6.5-8.5
5	Total Dissolved Solids	261	261	280	500/2000
6	Suspended Solids	51	54	59	-
CHEMICAL					
1	Total Alkalinity as CaCO ₃	132	127	150	200/600
2	Chloride as Cl	40	41	43	250/1000
3	Sulphate as SO ₄	42	43	39	200/400
4	Nitrate as NO ₃	4.3	5.0	4.3	45/NR
5	Fluoride as F	0.37	0.35	0.32	1.0/1.5
6	Total Hardness as CaCO ₃	199	186	209	200/600
7	Calcium Hardness as CaCO ₃	123	116	122	75/200
8	Magnesium Hardness as CaCO ₃	78	70	87	30/100
9	Dissolve Oxygen	6.5	6.7	6.7	-
10	COD	36	41	36	-
11	BOD ₅ (3 days at 27° C)	7	8	8	-
12	Sodium as Na	16	19	20	-
13	Potassium as K	3	4	3	-
HEAVY METALS					
1	Iron as Fe	0.24	0.25	0.25	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	0.33	0.34	0.37	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
OTHERS					
1	Oil & grease	BDL	BDL	BDL	0.5/NR
2	Phenolic Compound	BDL	BDL	BDL	0.001/0.002
3	Coliform Organisms (MPN/100ml)	990	1064	1296	-

शान्त (मन)
पर्यावरण प्रयोगशाला
प्रोजेक्ट्स एंड डेवलपमेंट इंडिया लिमिटेड
(भारत सरकार का उपक्रम)
मिनी रत्ना-1कंपनी
पी.डी.आई.एल. भवन, ए-14, सेक्टर-1
नोएडा-201301, (उ.प्र.), इत

Shindri

Compliance of EC conditions for the period April 2021 - September 2021 for
Proposed Ammonia-Urea (2200MTPD & 3850 MTPD) plants of HURL at Sindri

ANNEXURE-VI

HURL, SINDRI, NOISE QUALITY DATA FROM APRIL 2021- SEPTEMBER 2021

MONTH	Parameters	Admn. Building HURL Gate (SA1) (Industrial Area)	Railway Phatak (inside the Plant) (SA2) (Industrial Area)	Domgarh Gate (inside the Plant) (SA3) (Industrial Area)	Settling Tank (SA4) (Industrial Area)	PDIL Guest House (SA5) (Residential Area)	Sindri Basti Village (SA6) (Residential Area)	Prescribed Limits in dB(A) as per NAAQS (Ind. / Res. Area)
APRIL 2021	24-hrs Avg L _{oq} Value dB(A)	54.9	52.9	54.8	50.8	52.3	49.9	-
	Day time L _{oq} Value dB(A)	56.5	54.5	56.5	52.5	53.9	51.4	75/55
	Night time L _{oq} Value dB(A)	45.4	44.6	44.4	41.1	42.5	41.4	70/45
MAY 2021	24-hrs Avg L _{oq} Value dB(A)	50.5	49.1	49.9	46.4	47.9	46.1	-
	Day time L _{oq} Value dB(A)	56.1	54.2	55.9	52.1	53.5	50.9	75/55
	Night time L _{oq} Value dB(A)	44.8	44.0	43.8	40.6	42.3	41.3	70/45
JUNE 2021	24-hrs Avg L _{oq} Value dB(A)	50.8	49.3	50.5	47.6	48.6	45.8	-
	Day time L _{oq} Value dB(A)	56.2	54.1	56.2	53.0	53.8	50.7	75/55
	Night time L _{oq} Value dB(A)	45.4	44.4	44.8	42.1	43.3	40.9	70/45
JULY 2021	24-hrs Avg L _{oq} Value dB(A)	54.4	52.6	53.4	52.4	51.8	51.5	-
	Day time L _{oq} Value dB(A)	55.8	54.1	54.9	53.8	53.3	53.0	75/55
	Night time L _{oq} Value dB(A)	47.0	45.3	45.7	46.1	44.7	44.4	70/45
AUGUST 2021	24-hrs Avg L _{oq} Value dB(A)	51.7	50.2	51.2	49.7	48.7	48.4	-
	Day time L _{oq} Value dB(A)	56.4	54.7	55.7	53.5	53.4	53.0	75/55
	Night time L _{oq} Value dB(A)	46.9	45.6	46.6	45.8	43.9	43.8	70/45
SEPTEMBER 2021	24-hrs Avg L _{oq} Value dB(A)	53.5	51.8	53.3	50.7	48.9	48.5	-
	Day time L _{oq} Value dB(A)	57.9	56.0	56.8	53.8	53.7	53.1	75/55
	Night time L _{oq} Value dB(A)	49.0	47.6	49.7	47.5	44.0	43.9	70/45
AVG. (APRIL 2021 TO SEPTEMBER 2021)	24-hrs L _{eq} Value dB(A)	52.6	51.0	52.2	49.6	49.7	48.4	-
	Day time L _{eq} Value dB(A)	56.5	54.6	56.0	53.1	53.6	52.0	75/55
	Night time L _{eq} Value dB(A)	46.4	45.3	45.8	43.9	43.5	42.6	70/45

श्रीलक्ष्मी
पर्यावरण प्रयोगशाला
प्रोजेक्ट्स एंड डेवलपमेंट इंडिया लिमिटेड
(भारत सरकार का उपक्रम)
मिनी रत्ना-1कंपनी
पी.डी.आई.एल. भवन, ए-14,सेक्टर-1
नोएडा-201301,(उ.प्र.), इत्त

Environment Monitoring Data

Information Related to Air, Water and Hazardous Waste Generation

- (i) Name of the Industry / Facility With Contact details: **HINDUSTAN URVARAK & RASAYAN LIMITED (HURL)**
(As Per the Consent to Establish / Operate):
- (ii) Date of Update of display: **26/11/2021**
- (iii) Details of Updated of Consent to Operate and Authorization with Validity:
- (iv) Details of Operational Status: **NON-OPERATIONAL**
AUTO-RENEWED CTE
APP NO.- 11340176 DATED
23/10/2021 VALID UPTO 29/05/2022
- (v) Production Details:

S.No	Products Manufactured (including - Recycling / Utilization)	Details of Hazardous Chemical used With Quantity and Purpose	Type of HW Generated With Category as Per HONM Rules, 2016	Quantity of HW Generated, Stored and disposed	Made of treatment and disposal (Pre-Processing, Co-Processing, recycling/Utilizing/Reuse/SLF Incinerator etc.)

(vi) Air Emission :

S.No.	Source of Air Pollution (EX. Boiler / DG Sets / Furnaces With Capacity in Htr/kg, type of Fuel etc)	Air Pollution Control Devices (APCD devices With Stack height)	Parameters Monitored w.r.t. Air Pollution (PM, CO, SO ₂ , NO _x , etc.)	
			Monitored Data	Limits / Standard Prescribed by SPCBs/CPCB
			PM ₁₀ =46.44, PM _{2.5} =26.67, SO ₂ =15.78, NO _x =23.26, CO=0.35, OZONE=28.95	PM ₁₀ =100, PM _{2.5} =60, SO ₂ =80, NO _x =80, CO=02, OZONE=180

(vii) Effluent discharge :

S.No.	Source of Effluent Discharge With Quantity (EX: Process Waste Water, domestic Effluent etc.)	Treatment Method (ETP with Capacity or any other Method)	Mode of disposal of treatment effluent (Drain/Sewer/land etc)	Effluent Discharge Monitoring (PH, COD, BOD, TSS etc)	
				Inlet	Outlet

[Handwritten Signature]

RAINWATER HARVESTING

The rain water collected from the roof of the permanent buildings shall be harvested for ground water recharge as a compensation to meet the requirement due to loss of permeable area promoting ground water recharge, maintenance of existing hydro-dynamic pattern of the area and to conserve the salinity of ground water in the area. The excess rainwater shall be sent to the trap through storm water drain and attempts shall be made not to mix any process waste with the storm water. The trap shall have two compartments, one consisting of sized boulders and the other, sized hard coke. The excess water from sized hard coke shall be collected in another tank before discharge in to natural drainage system. The drainage system of project area shall be aligned as per the existing natural drainage pattern of the area.

Rain water harvesting and recharging system shall be installed as per the relevant the central ground water board guidelines applicable for the area. The rain water harvesting/aquifer recharging system have been proposed as water conservation measure. The systems shall be installed at such location of the project area close to the Administrative building so as to facilitate collection of most of the rain water from the roofs of the building in the project area. Similarly, same system of rain water harvesting shall be implemented in the township.

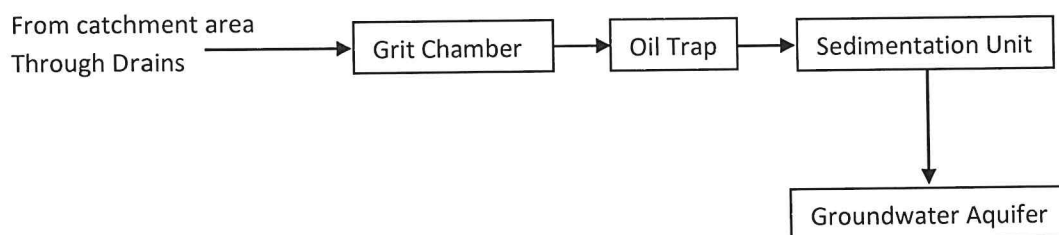
The bores shall be provided within 3 m deep enclosures, which will comprise layers of boulders, gravel and coarse sand so as to separate suspended matter from the rainwater. Three nos. of ground water recharging systems have been proposed to be developed in the township area and three nos. in the factory area. Rainwater harvesting system will consist of the following units:

1. Rainwater Collection System
2. Rainwater Filtration System
3. Rainwater Recharging Pond including an active well of depth 20m and dia 100-150mm.

The system will be cleaned during dry season and will be made ready to collect water for harvesting from its command area during monsoon. Provision shall also be made in the rainwater harvesting system for Chlorination/disinfection especially during the first phase of monsoon. The system shall be designed as per the guidelines for rainwater harvesting prepared by Central Ground Water Board (Ministry of Water Resources).

The scheme of rain water harvesting and aquifer recharging is presented below:

Block Diagram for Proposed Rain Water Harvesting / Aquifer Recharging System



Signature

The rainwater harvesting system for the fertilizer plant will follow the guidelines laid out by different Departments/Ministries as far as possible.

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

The sizing of the rain water collection drain and sub-units including the harvesting pond shall be calculated depending upon the maximum rain intensity within 50 years and roof area of the building after finalization of the building design.

A handwritten signature in black ink, appearing to read 'S. Manohar', is located in the lower right quadrant of the page. The signature is written in a cursive style with a horizontal line underneath.

Government of India
Ministry of Environment, Forests and Climate Change (MoEF&CC)
Regional Office – Ranchi

MONITORING REPORT

PART I

DATA SHEET

File No

1		Project Type	Fertilizer Plant Revival
2		Name of the project	Ammonia-Urea Fertilizer Project Hindustan Urvarak & Rasayan Limited, Sindri
3		Clearance letters/Om No. and dated	J11011/154/30166-IAII (I)
4		Locations	Sindri
	a	Taluk(S) District	Jharia Dhanbad
	b	State(S)	Jharkhand
	c	Latitudes/Longitudes	Location Longitude Latitude Elevation (m) NE Boundary 86°29'37.8"E 23°40'17.44"N 164.90 Northern Boundary 86°29'17.30"E 23°39'48.73"N 165.20 m NW Boundary 86°29'2.84"E 23°39'45.45"N 165.20 m Centre of FCIL Plant 86°29'25.52"E 23°39'22.45"N 155.45 m Eastern Boundary 86°29'0.78"E 23°39'22.08"N 160.02 m Western Boundary 86°29'0.78"E 23°39'47.34"N 161.54 m Southern Boundary 86°29'38.05"E 23°38'59.17"N 153.01 m <i>Source: GPS</i>
5		Address for correspondence	
	a	Address of concerned Project Chief Engineer (with Pin Code & Telephone/Telex/fax nos)	Group General Manager Hindustan Urvarak & Rasayan Limited (HURL) Old FCIL Office Complex, Sindri PO-Sindri, Dist.-Dhanbad – 828122 Telephone – 0326-2245454
	b	Address of Executive Project Engineer (with Pin Code/fax numbers)	Sr. Manager (P&S) & Officer (Safety) Hindustan Urvarak & Rasayan Limited (HURL) Old FCIL Office Complex, Sindri PO-Sindri, Dist.-Dhanbad – 828122 Telephone – 0326-2245454



6		Salient Features
	a	<p>Salient features of the project</p> <p>The Ammonia and Urea plants shall be one of the latest energy efficient Natural Gas Based plant (2200 MTPD for Ammonia and 3850 MTPD for Urea). The technology suppliers shall consider the latest technological features with an objective to have lowest energy consumption & high reliability of plant having state of the art technology with latest technological features. Ammonia and Urea plants operation considered for 330 days in a year with planned shutdown of once in two years.</p> <p>One blast proof Central Control Room (CCR) for control & monitoring of operation of all Ammonia/Urea/Offsite & utility facilities shall be provided by LSTK Contractor.</p> <p>The ETP facility shall treat all effluents, continuous, intermittent or emergency discharges from ammonia/urea plants. All liquid treated effluent from various sections of the plants shall be collected in final effluent pond made of RCC. The treated effluent shall be pre-treated with chemicals to make it Suitable for feeding to RO plant. The RO plant shall be two stage RO systems. The treated water from RO shall be recycled back to filtered water tank in WTP. The final reject waste water from RO units shall be further treated in thermal evaporation unit using low pressure steam to achieve zero liquid discharge from ETP plant.</p> <p>All Liquid & gaseous effluents generated from various plans & facilities shall be treated before final discharge to meet the requirements of Central/State pollution control board.</p>
	b	<p>Of the environmental management plans.</p> <p>An Environmental Management Plan (EMP) has been prepared keeping in view all possible strategies oriented towards the impact minimization. The EMP for the proposed project is divided into three phases i.e., Planning, Construction and Operational phase.</p> <p>During the planning stage, Energy efficient machines with 5-star rating shall be utilised</p>

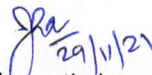


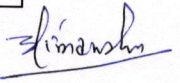
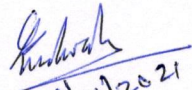
			<p>along with LED street lights and use of solar energy. Ultra-low NOx burners shall be integrated into the system to reduce NOx emissions. All piping and instrumentation diagrams and plant layout shall be reviewed as a part of HAZOP/HAZAN studies to assess the risks involved. Noise suppression measures such as enclosures and buffers will be used to limit noise levels in areas frequented by personnel to below 85 dB(A).</p> <p>The overall impact of the pollution on the environment during construction phase is localised in nature and is for a short period at all sites. In order to develop effective mitigation plan, all the construction activities shall be undertaken, controlled and managed by LST/Non-LSTK contractor under the guidance of PMC. It is mandatory for these contractors to develop site/project specific HSE Policy, HSE Plan, HSE management system.</p> <p>The environmental management plan during the operational phase of the plant shall be directed towards the following:</p> <ul style="list-style-type: none"> • Ensuring the operation of various process units as per specified operating guidelines/operating manuals. • Strict adherence to maintenance schedule for various machinery/equipment. • Good Housekeeping practices. • Post project environmental monitoring.
7		Breakup of the project area	
	a	Project area	393 acres
8		Breakup of project affected population with enumeration of those losing house/dwelling units only, agriculture land only, both dwelling units and agriculture land and landless labours/artisans	No Project Affected Persons are involved as there is no displacement of population. The project is coming up in old plant complex of FCIL, Sindri.
	a	SC, ST/Adivasis	NA
	b	Others	NA

firdoush

9		Financial Details		
	a	Project cost as originally planned and subsequent revised estimates and the years of price reference	Rs. 6977.01 crore	
	b	Allocation made for environmental management plans with item wise and year wise breakup	It is included in the project cost. Actual cost will be furnished after completion of project.	
	c	Benefit cost ratio/internal rate of return and the years of assessment	Debt Service Coverage Ratio*	1.58
			Internal rate of Return*	10.98
			*As per Project Feasibility Report	
	d	Whether (c) includes the cost of environmental management as shown in (b) above	Yes	
	e	Total expenditure on the Project so far	Rs. 4631.54 crore	
	f	Actual expenditure incurred on the environmental management plans so far	Rs. 4.19 crore	
10		Forest land requirement	No Forest Land is involved	
	a	The status of approval for a diversion of forest land for non-forestry use	NA	
	b	The status of compensatory afforestation, if any	NA	
	c	The status of clear felling	NA	
	d	Comments on the viability and sustainability of compensatory afforestation in the light of actual field experience so far	NA	
11		The status of clear felling in no-forest area (such as submergence area of reservoir, approach road) if any with quantitative information	NA	
12		Status of Construction	Construction work is in progress by LSTK agency M/s Technip FMC consortium and other offsite work is being carried out by M/s NICE, M/s Driplex, M/s Sanjay Kumar, M/s MISPL, M/s WAPCOS, M/s EDAC, M/s TSPL	
	a	Date of commencement	18 th May,2018	

	b	Date of completion (actual and / or planned)	March 2022
13		Reasons for the delay if the project is yet to start	COVID19
14		Date of site visit	
	a	The dates on which the project was monitored by the Regional Office on previous occasions, if any	27/07/2021
	b	Date of site visit for this monitoring report	PDIL's environmental monitoring team visits the monitoring locations as per schedule of monitoring and construction site is regularly visited by designated Nodal Officer.


 (Kameshwar Jha)
 Group General Manager
 Hindustan Urvarak & Rasayan Ltd. (HURL)
 Old FCIL Office Complex, Sindri
 PO-Sindri, Dist.- Dhanbad-828122
 Telephone – 0326-2245454



 29/11/2021