यूरेनियम कॉरपोरेशन ऑफ इंडिया लि0 (भारत सरकार का संस्थान) परमाणु उर्जा विभाग



URANIUM CORPORATION OF INDIA LTD.

(A Government of India Enterprise) Department of Atomic Energy

An ISO : 9001: 2008, ISO:14001: 2004 IS:18001: 2007 Company CIN : U12000 JH 1967 GOI 000806

REGISTERED POST

Ref: UCIL/Mill/534/381 /2023

17th June 2023

To The Member Secretary Jharkhand State Pollution Control Board T.A. Building, HEC Compound Dhurwa, Ranchi - 834004

Sub: Environmental Statement for the financial year ending on 31.03.2023 (UCIL, Jaduguda)

Dear Sir,

Please find enclosed herewith the Environmental Statement for the financial year ending 31st March 2023 for Uranium Corporation of India Limited, Jaduguda.

Thanking you,

Yours truly, For Uranium Corporation of India Limited

(Karthikéyan P.) Chief Supdt. (Mill)

CC: Regional Officer
Regional Office – cum – Laboratory
Jharkhand State Pollution Control Board
MB – 15, New Housing Colony
Adityapur, Jamshedpur

Jharkhand State Pollution Control Board, Ranchi

FORM – V (See Rule 14)

<u>Environmental Statement for the financial year ending the 31st March, 2023</u> <u>FOR URANIUM CORPORATION OF INDIA LIMITED JADUGUDA</u>

<u> PART – A</u>

(i) Name and address of the owner / Occupier/ Factory Manager of the industry operation or process Shri Karthikeyan P. Chief Supdt. (Mill) Uranium Corporation of India Limited

- (ii) Industry category Primary (STC Code) Secondary – (STC Code)
- (iii) Production capacity Units
- (iv) Year of establishment
- (v) Date of last environmental Statement submitted

Not Available

Classified Information

1967

19th May 2022

<u> PART – B</u>

Water and Raw Material Consumption.

(i)	Water Consumption m ³ /d					
	Industrial	5300 m ³ /d				
	Domestic	5360 m ³ /d				
	Others					
	a) Public	300 m ³ /day				
	b) Green belt	$40 \text{ m}^3/\text{day}$				

Recycle water

2400 m³/day *

Name of Products	Process water consumption per unit of product output				
	During the previous financial year	During the current financial year			
(1) Uranium Peroxide	Classified information	Classified information			
(2) Magnetite	Classified information	Classified information			

* Recycle water is used for industrial purpose.



(ii) Raw Material Consumption

Name of raw materials	Name of Products	Consumption of raw material per un of output			
•		During the previous financial year	During the current financial year		
Sulphuric Acid, Burnt Lime, Caustic Soda, Common Salt, Pyrolusite, Hydrogen	Uranium Peroxide & Magnetite	Classified information	Classified information		
Peroxide, Liquid Ammonia & Furnace Oil etc.					

* Industry may use if disclosing details of raw material would violate contractual obligations otherwise all industries have to name the raw materials used.

<u>PART – C</u>

Pollution discharged to Environment / Unit of output Parameter as specified in the consent issued

Pollutants	Quantity of pollutants discharged (mass/day)	Concentrations of pollutants in discharge (mass/volume)	Percentage of variation from prescribed standards with reasons.	
Water Domestic Industrial	2000 kl/day 4755 kl /day	As per the parameters specified in the consent		

<u> PART – D</u>

<u>Hazardous Wastes</u> (as specified under The Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008)

Hazardous Wastes	Total Quantity							
	D	•	ng the financial year During the finan 2021-2022 2022 - 202				•	
(a) From Process	Prev. Balance Qty	Generated Qty	Sold Qty	Balance Qty	Prev. Balance Qty	Generated Qty	Sold Qty	Balance Qty
Used / burnt oil	4.205MT	3.244 MT	Nil	7.449 MT	7.449 MT	0.470 MT	Nil	7.919 MT
(b) From Pollution Control Facilities]	NA			N	JA	

<u> PART – E</u>

Solid Wastes

Solid Wastes	Total Qu	uantity		
	During the previous financial year	During the current financial year		
(a) From process	Classified information	Classified information		
(b) From Pollution Control facilities	Nil	Nil		
(c) (i) Quantity recycled or reutilized within the unit	Nil	Nil		
(ii) Sold	Classified information	Classified information		
(iii) Disposed	Classified information	Classified information		

NB: Solid waste as tailing slurry / sludge is contained in well-engineered tailing pond.

<u> PART – F</u>

Please specify the characterizations (in terms of composite and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Solid wastes i.e. waste ore slurry is disposed off in the well engineered tailings pond. Decanted liquor is sent to ETP and a part of it recycled to process plant and remaining are treated before disposal in the environment after maintaining statuary norms.

<u> PART – G</u>

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

Steps are being taken to conserve natural resources like water by recycling ETP water to process plant, plantation of trees, and conservation of electrical power, rain harwesting & recharge well.

<u> PART – H</u>

Additional measures / investment proposal for environmental protection including abatement of pollution, prevention of pollution.

Uranium ore slurry after recovery of uranium is neutralized at pH 10 and pumped to tailings pond, where solids settles and clear liquor is coming to Effluent Treatment Plant for further treatment.

UCIL has implemented a composite scheme for reclamation of water and effluent treatment to make the final discharged effluent environmentally benign.

Mine water from nearby UCIL mines is collected, clarified and reused in processing plant.

A part of Tailings pond effluent is recycled to ore processing plant for reuse. Rest is treated with barium chloride and lime. Settled precipitates are sent back to tailings pond and clear effluent is monitored before discharging it to the environment.

<u> PART – I</u>

Any other particulars for improving the quality of the environment

UCIL has taken all the measures required for improving the quality of the environment.

- 1. In Crushing Plant dust extraction system and in Ground Hopper Yard water spray system has been installed to control release of dust into environment.
- 2. In Lime plant wet scrubber type dust extraction system has been installed to control release of lime dust into environment.
- 3. Ventilation system of Chemical house has been installed to improve the air quality in Chemical House.
- 4. Ventilation system at Horizontal Belt Filter (HBF) Building has been installed to improve the air quality in HBF area.
- 5. Ambient air and stack monitoring in mill area are being done to monitor the quality of environment.
- 6. A water recycle system has been installed in storm water drain of mill area to recycle back accidental outflow of process water from grinding circuit & tailings plant.
- 7. Two nos. of rain water harvesting pits have been made to maintain the ground water level.
- 8. Boiler stack air is discharged through a tall chimney of 47 m height to keep the surroundings environment friendly.
- 9. Tree plantations near CISF ground, inside WTP & around tailings pond area have been done for development of green belt.
- 10. Water sprinkling through water tanker at the service roads inside plant premises is being done to contain the fugitive dust.
- 11. Five nos. of new monitoring wells have been made around Tailings pond area to monitor the quality of Ground Water.

Yours Faithfully,

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Signature

Name of the applicant Address of the Applicant

Karthikeyan P., Chief Supdt (Mill) Uranium Corporation of India Ltd., Jaduguda, P.O. Jaduguda Mines, Dist. Singhbhum (E), Jharkhand- 832 102 Tel No. (0657) 2730122/222/353 (Ext: 248)