

यूरेनियम कॉरपोरेशन ऑफ इंडिया लि०  
(भारत सरकार का संस्थान)



URANIUM CORPORATION OF INDIA LTD.  
(A Government of India Enterprise)

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

**REGISTERED POST**

Ref: UCIL/Mill/534/347/2024

July 06, 2024

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 31.03.2024  
(UCIL, Jaduguda)**

Dear Sir,

Please find enclosed herewith the Environmental Statement for the financial year ending 31<sup>st</sup> March 2024 for Uranium Corporation of India Limited, Jaduguda.

Thanking you,

Yours truly,  
For Uranium Corporation of India Limited

  
(Karthikeyan 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)**

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

**PART - A**

- (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)      Not Available  
Secondary – (STC Code)
- (iii) Production capacity – Units      Classified Information
- (iv) Year of establishment      1967
- (v) Date of last environmental Statement submitted      17<sup>th</sup> June 2023

**PART - B**

**Water and Raw Material Consumption.**

- (i) **Water Consumption m<sup>3</sup>/d**
- |               |                            |
|---------------|----------------------------|
| Industrial    | 5300 m <sup>3</sup> /d     |
| Domestic      | 5360 m <sup>3</sup> /d     |
| <u>Others</u> |                            |
| a) Public     | 300 m <sup>3</sup> /day    |
| b) Green belt | 40 m <sup>3</sup> /day     |
| Recycle water | 2400 m <sup>3</sup> /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 unit of output	
		During the previous financial year	During the current financial year
Sulphuric Acid, Burnt Lime, Caustic Soda, Common Salt, Pyrolusite, Hydrogen Peroxide, Liquid Ammonia & Furnace Oil etc.	Uranium Peroxide & Magnetite	Classified information	Classified information

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

**PART - C**

**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	

**PART - D**

**Hazardous Wastes  
(as specified under The Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008)**

Hazardous Wastes	Total Quantity							
	During the financial year 2022-2023				During the financial year 2023 - 2024			
	Prev. Balance Qty	Generated Qty	Sold Qty	Balance Qty	Prev. Balance Qty	Generated Qty	Sold Qty	Balance Qty
(a) From Process	7.449 MT	0.470 MT	Nil	7.919 MT	7.919 MT	6.834 MT	NIL	14.753 MT
Used / burnt oil								
(b) From Pollution Control Facilities	NA				NA			

## PART - E

### Solid Wastes

Solid Wastes	Total Quantity	
	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.

## PART - F

**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 statutory norms.

## PART - G

**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 harvesting & recharge well.

## PART - H

**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.

## PART - I

### **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.
12. A Trolley mounted fog canon equipment having 100 meter coverage area have been installed in Ground Hopper area of Crushing plant to suppress dust.
13. A 4" Ø water line with portable revolving arm has been installed along the service road from rear gate to the ground hopper for dust suppression.

Yours Faithfully,

Signature



Name of the applicant

Karthikeyan P., Chief Supd. (Mill)

Address of the Applicant

Uranium Corporation of India Ltd., Jaduguda,  
P.O. Jaduguda Mines, Dist. Singhbhum (E),  
Jharkhand- 832 102

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