यूरेनियम कॉरपोरेशन ऑफ इंडिया लि० (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/534/296 /2022

19th May 2022

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 31.03.2022 (UCIL, Jaduguda)

Dear Sir,

Please find enclosed herewith the Environmental Statement for the financial year ending 31st March 2022 for Uranium Corporation of India Limited, Jaduguda.

Thanking you,

Yours truly, For Uranium Corporation of India Limited

DGM (Mill)/HOD

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

Ph: 0651-403851 Fax: 0651-403850

Jharkhand State Pollution Control Board, Ranchi



FORM – V (See Rule 14)

Environmental Statement for the financial year ending the 31st March, 2022 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 S.K.Barman DGM (Mill)/HOD

Uranium Corporation of India Limited

(ii) Industry category Primary – (STC Code) Secondary – (STC Code) Not Available

(iii) Production capacity - Units

Classified Information

(iv) Year of establishment

1967

(v) Date of last environmental Statement submitted 29th July 2021

PART - B

Water and Raw Material Consumption.

(i) Water Consumption m³/d

Industrial

Domestic

 $5300 \text{ m}^3/\text{d}$ $5360 \text{ m}^3/\text{d}$

Others

a) Public

 $300 \text{ m}^3/\text{day}$

b) Green belt

 $40 \text{ m}^3/\text{day}$

Recycle water

 $2400 \text{ m}^3/\text{day} *$

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	
Sulphuric Acid, Burnt Lime, Caustic Soda, Common Salt, Pyrolusite, Hydrogen Peroxide, Liquid Ammonia & Furnace Oil etc.	& Magnetite	During the previous financial year Classified information	During the current financial year 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)

		1410	veincht) i	cuies, 2000	27			
Hazardous	Total Quantity							
Wastes			100					
]	During the financial year			During the financial year			
	2020-2021			2021 - 2022				
(a) From	Prev.	Generated	Sold	Balance	Prev.	Generated	Sold Qty	Balance
Process	Balance	Qty	Qty	Qty	Balance	Qty		Qty
1100033	Qty				Qty	13838		
Used / burnt oil	9.385 MT	Nil	5.180MT	4.205MT	4.205MT	3.244 MT	Nil	7.449 MT
(b) From			NA				NA	
Pollution								
Control								
Facilities								

PART - E

Solid Wastes

	Total Quantity			
Solid Wastes	During the previous financial year	During the current financial year		
(a) From process	Classified information	Classified information		
(b) From Pollution Control	Nil	Nil		
facilities (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 statuary 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 harwesting & 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.

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

Signature

Name of the applicant Address of the Applicant S.K.Barman, DCM(Mill)/HOD

Uranium Corporation of India Ltd., Jaduguda,

P.O. Jaduguda Mines, Dist. Singhbhum (E),

Yours Faithfully,

Jharkhand- 832 102

Tel No. (0657) 2730122/222/353 (Ext: 248)

सुमन कुमार बर्मन Surfan Kumar Barman उप महाप्रबंधक (मिल) एचओडी Dy. General Manager (Mill) / MOD