

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, NEW DELHI

In Re:-ORIGINAL APPLICATION NO. 439 OF 2025

News Item titled "Radioactive contamination affects habitations in Punjab, parliamentary panel urges urgent action" appearing in The Times of India" on 14.08.2025

NGT ON ITS SUO MOTU NOTICE

Versus

POLLUTION CONTROL BOARD AND OTHERS

---Respondents


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Place: SAS NAGAR

Dated: 13-10-2025

Deponent


Er. Jagatjot Goel
Chief Engineer (South)-cum, Advisor,
Water Quality, Department of Water
Supply and Sanitation, Mohali, Punjab

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BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, NEW DELHI

In Re:-ORIGINAL APPLICATION NO. 439 OF 2025

News Item titled "Radioactive contamination affects habitations in Punjab, parliamentary panel urges urgent action" appearing in The Times of India on 14.08.2025

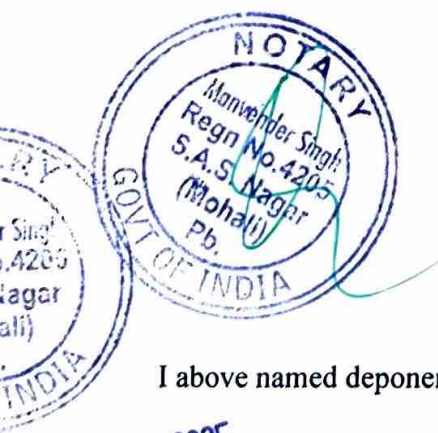
NGT ON ITS SUO MOTU NOTICE

Versus

1. Punjab Pollution Control Board through its Member Secretary, Head office, Vatabaran Bhawan, Punjab Pollution Control Board Nabha Road, Patiala pin code- 147001
2. Department of Water Supply and Sanitation, Punjab through its Principal Secretary, Pb, Civil Sectt-2, Sector 9 Chandigarh
3. Department of Health and Family Welfare, Punjab through its Principal Secretary, Punjab Mini Secretariat, Chandigarh; and
4. Central Pollution Control Board through its Member Secretary, Parivesh Bhawan, East Arjun Nagar, Delhi-110032

---Respondents

Reply by way of Affidavit of Er. Jagatjot Goel Chief Engineer (South)-cum-Advisor (Water Quality) Department of Water Supply and Sanitation, Punjab, on the behalf of Respondent No. 2



I above named deponent do hereby solemnly affirm and declare as under:-

RESPECTFULLY SHOWETH:-

1. That the present Reply is being submitted in compliance of Order dated 01.09.2025, passed by this Hon'ble Tribunal, taking suo-moto notice of News item titled, "Radioactive contamination affects habitations in Punjab, parliamentary panel urges urgent action" appearing in "The Times of India" on 14.08.2025 as under:

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2. That it is respectfully submitted that in reply of Para 2 of order dated 01.09.2025 that total 32 habitations are contaminated with uranium (List of 32 habitation-JJM, GOI attached as **Annexure-A**), out of which Hon'ble Tribunal has itself observed that 23 habitations are covered by CWPP and IHPs. In this regard, it is informed that the tender for the installation of Community Water Purification Plants (CWPP-U) to supply Uranium free water already stand awarded for the remaining 9 habitations.

List of these 9 habitations is attached as **Annexure-B**.

That it is respectfully submitted that as per the Office Memorandum dated 12-10-2023 (**Annexure-C**) issued by Ministry of Jal Shakti, Department of Drinking Water and Sanitation, GoI, for Uranium it has been mentioned that the radiological impact of Uranium was found inconsequential. The finding of memorandum is reproduced in verbatim here below:

"A detailed study was conducted by domain experts of Bhabha Atomic Research Centre (BARC). As per these studies, the radiological impact on worker, public and environment was found to be inconsequential with no radiological significance".

3. That it is respectfully submitted in reply of Para no. 3 of order dated 01.09.2025 that no violations have been done w.r.t. provision of Environment (Protection) Act, 1986 and Water (Prevention and Control of Pollution) Act, 1974 by Department of Water Supply and Sanitation, Punjab.

4. That it is respectfully submitted in reply of Para no. 4 of order dated 01.09.2025 that as per Minutes of Meeting (MoM) issued by Drinking Water and Sanitation, National Jal Jeevan Mission, GoI dated 22.05.2023 (**Annexure D**), it was advised to the State to setup Community based Uranium remediation plants where more than 60 ppb Uranium has been detected. The finding of meeting is reproduced in verbatim here below:

"The BARC team also informed that the current limit of 30 ppb for Uranium in water is rather ambitious and they advised the State team to set up Community based Uranium remediation plants where more than 60 ppb Uranium has been detected in the groundwater samples"

5. That it is respectfully submitted that para no. 5 of order dated 01.09.2025 that w.r.t gaps in SLWM facilities all the villages of Punjab State have been covered with 100% Functional Household Tap Connections (FHTCs) through 70 lpcd piped drinking water supply. The wastewater generated is collected into the natural village ponds. Out of 11977 villages 8747 village ponds have been provided with screening cum desilting Chambers for primary filtration of grey water and 3620 villages have been provided solid waste management arrangements.

As targets and achievement of solid and liquid waste management during 2024-25 are concerned, it is submitted that targets were set in accordance with the approved Annual Implementation Plan 2024-25 by the Department of Drinking Water and Sanitation,



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Ministry of Jal Shakti, Government of India, according to which 7021 solid waste management and 2818 liquid waste management plants were to be constructed during 2024-25 along with sustaining ODF Status.

As per Swachh Survekshan Grameen (SSG) 2023 conducted at National level by an independent verification agency, 99.99% of households reported having access to toilet facility i.e. the State has 99.99% Open Defecation Free Status. Similarly, in SSG 2022 this percentage was 99.30%. The State is amongst top 5 States which are maintaining the Open Defecation Free Status since declaration.

The targets of SLWM FY 2024-25 could not be achieved due to following reasons:

a. Convergence of Funds

Implementation of SLWM projects requires convergence of funds under MGNREGA and 15th Finance Commission. Joint efforts by Department of Water Supply and Sanitation and Department of Rural Development and Panchayats are being made to ensure convergence of funds for SLWM implementation in the villages.

b. Administrative Challenges

- i. Model Code of Conduct: Enforced due to parliamentary elections in April 2024, suspending development works during the election period.
- ii. Dissolution of Gram Panchayats: Gram Panchayats were dissolved on 27th February 2024. Fresh elections were held on 15th October 2024, and Sarpanches assumed office on 8th November 2024. Thus, for nearly eight months, Panchayats were non-functional, delaying implementation.

That it is respectfully submitted that para no.5 of order dated 01.09.2025 that w.r.t low number of ODF Plus villages the Department of Drinking Water and Sanitation, Ministry of Jal Shakti, Govt. of India has identified 70 SAGY Villages under Swachh Bharat Mission (Grameen). Out of 70 villages, 18 villages have achieved ODF Plus (Model) status. Regular coordination meetings between Department of Water Supply and Sanitation and Department of Rural Development & Panchayats are being held to improve the progress.

6. That it is respectfully submitted Para no. 6 & 7 of order dated 01.09.2025 do not need any reply.

7. That it is respectfully submitted by that the Department of Water Supply & Sanitation, Punjab is committed to provide clean drinking water to rural areas for human consumption and undertakes chemical testing once a year and bacteriological testing twice a year for all sources. Based upon regular testing, wherever the contamination is beyond the permissible limit in DWSS sources, the process is initiated for taking



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remedial measures in short - term basis for immediate relief and long- term basis for sustainable solutions.

In view of above submissions, no lapse is attributable to Respondent No 2, which is ensuring the supply of safe and potable drinking water to the rural population of the State, therefore, it is most respectfully prayed that the petition be dismissed qua the Respondent no. 2, in the interest of justice and fairplay.

Place: SAS NAGAR

Dated: 13-10-2025

Deponent

Er. Jagatjot Goel
Chief Engineer (South)-cum, Advisor,
Water Quality, Department of Water
Supply and Sanitation, Mohali, Punjab



VERIFICATION:

Verified that the contents of Para No.1 to7 of the Reply are true and correct to my knowledge and as per information derived from the official records. No part of it is false and nothing has been concealed therein.

Place: SAS NAGAR

Dated: 13-10-2025

Deponent

Er. Jagatjot Goel
Chief Engineer (South)-cum, Advisor,
Water Quality, Department of Water
Supply and Sanitation, Mohali, Punjab

I Know Myself and Her Personality
And Her Signatures Signed by
My Presence
KJ
HRMS-492213
8728972752

Attested as Identified

MANVENDER SINGH
NOTARY
S.A.S. Nagar (MOHALI)
PUNJAB, (INDIA)

Order No. 736
Inq. No. 932

MANVENDER SINGH
NOTARY
JUDICIAL COURTS COMPLEX
S.A.S. NAGAR (MOHALI)-PB
(INDIA) REGD. NO.4205

Certified that the Affidavit/SPA/GPA/
Agreement/Declaration/Undertaking/PDI/
RNIB etc. document has been read over &
explained to the deponent/Executant, who
seemed perfectly to understand the same at
the time of making the same.

13 OCT 2025

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**Information available on GoI website <https://ejalshakti.gov.in/> under "Water Quality Progress":
Format C17 A- List of 32 Quality affected Uranium Habitations (as on 24/09/2025) as per GoI Website**

S. No	StateName	District Name	Village Name	Habitation Name	Short Term Measures
1	Punjab	Fazilka	Ganjuana	Shamshabad	IHP
2	Punjab	Hoshiarpur	Dholia	Dholia	IHP
3	Punjab	Hoshiarpur	Badla	Saunspur Patti	IHP
4	Punjab	Barnala	Patti Sohlan	Patti Sohlan	CWPP
5	Punjab	Barnala	Dhilwan Patiala	Dhilwan Patiala	CWPP
6	Punjab	Fatehgarh Sahib	Chehlan	Chehlan	CWPP
7	Punjab	Fatehgarh Sahib	Dharamgarh	Dharamgarh	CWPP
8	Punjab	Fatehgarh Sahib	Lakha Singh Wala	Lakha Singh Wala	CWPP
9	Punjab	Fazilka	Mumbe Ke	Nawan Mumbke	CWPP
10	Punjab	Fazilka	Lallo Wali	Turkan Wali	CWPP
11	Punjab	Fazilka	Chak Lakhowali	Chak Lakho Wali	CWPP
12	Punjab	Fazilka	Bahmani Wala	Simre Wala	CWPP
13	Punjab	Ferozepur	Rukna Munгла	Rukna Munгла	CWPP
14	Punjab	Ferozepur	Haraj	Haraj	CWPP
15	Punjab	Ferozepur	Jhanjian	Jhanjian	CWPP
16	Punjab	Ferozepur	Kahansinghwala	Kahan Singh Wala	CWPP
17	Punjab	Ferozepur	Bahawalpur	Bahawal Pur	CWPP
18	Punjab	Ferozepur	Beri Qadarabad	Beri Kadra Bad	CWPP
19	Punjab	Ferozepur	Maloke	Mallo Ke	CWPP
20	Punjab	Malerkotla	DULWAN	DULWAN	CWPP
21	Punjab	Moga	Sosan	Sosan	CWPP
22	Punjab	Sangrur	Ravidaspura Tibbi	Singhpura	CWPP
23	Punjab	Sangrur	Ugrahan	Ugrahan	CWPP
24	Punjab	Fazilka	Mohammad Amira	Mohamad Amira	-
25	Punjab	Fazilka	Noor Mohammad	Noor Mohamad	-
26	Punjab	Fazilka	Salem Shah	New Salem Shah	-
27	Punjab	Fazilka	Chak Sotrian	Basti Bawrian	-
28	Punjab	Fazilka	Chak Sotrian	Dhani Chowdhri Chhanga Ram	-
29	Punjab	Ferozepur	Nau Baramad Sher Singhwala	Jhugge Mansa Singh	-
30	Punjab	Ferozepur	Boorwala	Jhugge Talian Wale	-
31	Punjab	Moga	Pathangarh	Pathan Garh	-
32	Punjab	Patiala	Birdhano	Birdhano	-

Information available on GoI website <https://ejalshakti.gov.in/> under "Water Quality Progress": Format C17 A

Status of 9 remaining Uranium Affected Habitations as freezed on Goi Website

S. No	StateName	District Name	Village Name	Habitation Name	Short Term Measures	Status of Mitigation Measure
1	Punjab	Fazilka	Mohammad Amira	Mohamad Amira	CWPP - Uranium (Tender already Allotted)	Work Under Progress
2	Punjab	Fazilka	Noor Mohammad	Noor Mohamad	CWPP - Uranium (Tender already Allotted)	Work Under Progress
3	Punjab	Fazilka	Salem Shah	New Salem Shah	CWPP - Uranium (Tender already Allotted)	Work Under Progress
4	Punjab	Fazilka	Chak Sotrian	Basti Bawrian	CWPP - Uranium (Tender already Allotted)	Work Under Progress
5	Punjab	Fazilka	Chak Sotrian	Dhani Chowdhri Chhanga Ram	CWPP - Uranium (Tender already Allotted)	Work Under Progress
6	Punjab	Ferozepur	Nau Baramad Sher Singhwala	Jhugge Mansa Singh	CWPP - Uranium (Tender already Allotted)	Work Under Progress
7	Punjab	Ferozepur	Boorwala	Jhugge Talian Wale	CWPP - Uranium (Tender already Allotted)	Work Under Progress
8	Punjab	Moga	Pathangarh	Pathan Garh	CWPP - Uranium (Tender already Allotted)	Work Under Progress
9	Punjab	Patiala	Birdhano	Birdhano	CWPP - Uranium (Tender already Allotted)	Work Under Progress

Annexure C

File No. WQ-11021/1/2023-WQ-DDWS - 193
Government of India
Ministry of Jal Shakti
Department of Drinking Water and Sanitation
National Jal Jeevan Mission (NJJM)

Pt. Deendayal Antyodaya Bhawan
CGO Complex, Lodhi Road
New Delhi - 110 003
Dated: 12th October, 2023


Office Memorandum

Subject: Standard operating procedure (SOP) for the safe disposal of Uranium-loaded media in the water filtration plant

Safe disposal of Uranium-loaded media generated during the treatment of groundwater containing Uranium is essential. Based on the experimental and theoretical studies conducted at Bhabha Atomic Research Centre (BARC), a Standard Operating Procedure (SOP) has been developed for the safe disposal of Uranium-loaded media, generated during the treatment of groundwater containing Uranium. A copy of SOP is enclosed for necessary action wherever such uranium treatment systems are deployed in the piped water schemes.

2. In case, any clarification is required for implementation of the SOP, Dr. A.K. Nayak, Head, Nuclear Controls and Planning Wing (NCPW), Department of Atomic Energy (headncpw@dae.gov.in), may be contacted.

Yours sincerely,


12/10/2023
(Pradeep Singh)
Director (JIM-IV)

Encl: As above.

To

Addl. Chief Secretary/ Principal Secretary/ Secretary,
In-charge Rural Water Supply Department/ PHED,
All States/ Union Territories.

Copy to:

Engineer-in-Chief/ Chief Engineer, Rural Water Supply/ PHED of all States/ UTs.

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File No. WQ-11021/1/2023-WQ-DDWS (Computer No. 26541)
Secretary (DWS)

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Government of India
Department of Atomic Energy
Nuclear Controls and Planning Wing

OYC Building,
2nd Floor,
C.S.M Marg,
Mumbai – 400001

No. DAE/NCPW/ICSD2023/03

October 06, 2023

**Sub: SOP developed by BARC on safe disposal of Uranium loaded
media in water filtration plant-reg.**

Kind references is invited to the D.O. No. W-I 1012/9/2022-J JM-III-DD WS dated: July 28, 2022 from Ministry of Jal Shakti, Department of Drinking Water and Sanitation and IA-Z-11013/75/2023-1A-I dated 01.08.2023 from Ministry of Environment Forest and Climate Change, IA-I Division on the above mentioned subject.

- 2) National Jal Jeevan Mission (NJJM) has sought the guidance of Department of Atomic Energy (DAE) for handling and safe disposal of uranium loaded media generated during treatment of ground water containing uranium.
- 3) Based on experimental and theoretical studies conducted at Bhabha Atomic Research Centre (BARC), Standard Operating Procedure (SOP) was developed on safe disposal of Uranium loaded media in water filtration plant.
- 4) The draft SOP was discussed in a meeting held on 25.05.2023, with NJJM, MoEF&CC, DAE, BARC, AERB, CPCB, BIS and State Government of Punjab.
- 5) Based on the deliberations in the meeting, the SOP was again reviewed in the Department and revised. The revised guideline is enclosed.
- 6) It may kindly be noted that, in case of any clarification in implementing the SoP Dr. A. K. Nayak, Head, NCPW (headncpw@dae.gov.in) may be contacted.

File No. WQ-11021/1/2023-WQ DDWS (Computer No. 26541)
Secretary (DWS)

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7) This has approval of Competent authority in the Department.

C.M.S. Jansi
(C M S Jansi)

Under Secretary to Govt. of India

Encl : as above

- (i) Ms. Vini Mahajan
Secretary, Department of Drinking Water and Sanitation
Ministry of Jal Shakti
New Delhi- 110 003
- (ii) Ms. Leena Nandan
Secretary, Ministry of Environment, Forest & Climate Change
New Delhi- 110 003

Guideline for Safe Management of Uranium Loaded Media

National Jal Jeevan Mission (NJJM) has sought the guidance of Department of Atomic Energy (DAE) for safe management of uranium loaded media generated during treatment of ground water.

DAE has examined the matter with respect to safety and security aspects associated with management of uranium loaded media. A detailed study was conducted by domain experts of Bhabha Atomic Research Centre (BARC). As per these studies, the radiological impact on worker, public and environment was found to be inconsequential with no radiological significance. Hence, handling and disposal of such resin does not warrant any further regulatory control from radiological safety considerations.

Further, it was also noted that there is no immediate concern of uranium getting leached from the media. However, from long term security consideration, as an abundant caution, it is desirable to immobilize the uranium loaded media in a cement matrix so as to make it completely non-recoverable and non-dispersible.

With this background the following guidelines are to be ensured for water treatment plants set up for community water supplies:

1. The uranium loaded media should be immobilised in cement matrix (herein after referred as immobilized media) in accordance with the procedure provided in Annexure.
2. The State Government shall identify a site for final disposal of immobilised media with proper surveillance and security arrangement so as to prevent any unauthorised access and its removal. Preoperational baseline data of groundwater with respect to uranium content of the identified site to be carried out along with arrangement in place for periodic monitoring of ground water.
3. The respective State Government shall obtain a one-time written permission under Section 6 of the Atomic Energy Act, 1962 for disposal of the immobilised media at designated disposal site in accordance with S.No.1 and S.No.2.
4. State Government shall also ensure adequate security during transit storage and transport of immobilised media to designated disposal site.
5. With the written permission issued under Section 6 of the Atomic Energy Act and arrangements specified in S.No.4 in place and prior to operation of water treatment plant, the State Government shall obtain a licence from DAE under Rule 3 of Atomic Energy (Mining, Milling and Handling of Prescribed Substance) Rules, 1984 for handling the uranium, which is notified as prescribed substance under the Atomic Energy Act, 1962. The State Government may obtain a combined licence for more than one plant at a time.
6. The State Government shall ensure that the conditions specified in the licence or any other directives issued by DAE from time to time are complied by the water treatment plants including submission of periodic report.

Annexure

Procedure for Immobilization of uranium loaded media in cement matrix

Basis:

- Batch Size: 60 L loaded resin (~30 kg) or 60 nos. of pre-filters & cartridges (total).

[a] For cementation of resin

Option-I (In-drum mixing)

- A typical vertical drum/container for in-drum mixing of loaded resin: Drum total capacity: ~ 220 L (Dia: ~575 mm, H: Clear height of ~855 mm).
- The drum can have disposal type stirrer and cement mixing position can have a detachable motor. An adequate mixing system is to be provided with detachable motor arrangement for mixing of the media with cement and water.

OR

Drum can be put on standard vibro-rotation table for mixing of materials inside the drum. The vibro-rotation table of adequate capacity is to be used for mixing of the drum content with protection against drum toppling.

Option-II (Outside drum mixing)

A standard cement mixer tumbler can be used for mixing of cement, water and resin media. The mixture can then be poured inside the drum. The tumbler mixer should have adequate capacity to mix powder media, water and cement content with protection against content spillage outside the mixer.

[b] For cementation of pre-filters & cartridges

- A typical vertical drum/container: Drum total capacity: ~ 220 L (Dia: ~575 mm, H: Clear height of ~855 mm).
- A standard cement mixer tumbler of adequate capacity can be used to prepare cement-water slurry and pour inside the drum having cartridges.

A1: Sequential steps for cementation of resin

Option-I (for in-drum mixing)

- ✓ Check the empty drum/container for water leak tightness and check free rotation of inbuilt agitator.
- ✓ Standard drum/container to be filled with 100 kg cement.
- ✓ Put the drum/container at the mixing position on firm platform.
- ✓ Align the motor with stirrer so that it is in same axis Or align the drum with vibration platform.
- ✓ Pour the loaded media (60 L) into the drum/container.
- ✓ Pour 70-75 L water into the drum/container gradually and then close the lid.
- ✓ Start mixing (either by agitator-motor Or by vibrating platform arrangement).

- ✓ Note current and rpm Or vibrating platform parameters.
- ✓ Stop mixing operation after 20 min.
- ✓ Allow the cemented product to set for 4 h.
- ✓ Pour cement slurry (5 L water + 5 kg Cement) on top of the cemented product after opening the lid.
- ✓ Close the lid of the drum/container.
- ✓ Keep the product to cure for 7 days.

Option-II (Preparation of cement and media mixer outside drum)

- ✓ Check the empty drum/container for water leak tightness and check free rotation of inbuilt agitator.
- ✓ Standard drum/container to be filled with 100 kg cement and 60 L loaded media.
- ✓ Start mixing operation.
- ✓ Pour 70-75 L water into it gradually.
- ✓ Care should be taken so that mixture do not spill outside the tumbler.
- ✓ Put the drum/container below the tumbler mixer.
- ✓ After adequate mixing for 10-20 min, pour the content in the standard drum.
- ✓ Allow the cemented product to set for 4 h.
- ✓ Pour 5 L water and add 5 kg cement in the tumbler mixer and mix well.
- ✓ Pour the cement slurry on top of the cemented product.
- ✓ Close the lid of the drum/container.
- ✓ Keep the product to cure for 7 days.

A2: Sequential steps for cementation of pre-filters & cartridges

- Check the empty drum/container for water leak tightness.
- Stack 60 nos. of filters/cartridges into the empty drum so that the mid portion and surrounding of each filter/cartridge is accessible to cement slurry.
- Fill with 100 kg cement and pour 70-75 L water into the mixer into commercial tumbler cement mixer.
- Mix well for 10-20 min to make consistent cement slurry.
- Put the drum/container below the tumbler mixer.
- Pour the cement slurry into the drum filled with filters/cartridges.
- Allow the cemented product to set for 4 h.
- Pour 5 L water and add 5 kg cement in the tumbler mixer and mix well.
- Pour the cement slurry on top of the cemented product.
- Close the lid.
- Keep the product to cure for 7 days.

A3: Protection during U media handling and cementation

- PPEs like boiler suits, chemical goggles, full-face shield or a full-face respirator, impervious gloves of chemically resistant material (rubber or neoprene), safety shoes etc. need to be used.
- Work to be carried out by trained personnel.

- No rotating equipment shall be energized until ensuring worker is away from the equipment and hand or any body part of the worker is not aligned or entered in the mixing system
- After completion of the work all PPEs shall be washed thoroughly and dried before next usage. Dust filter of the respirator shall be disposed off after each use.

Annexure D

W-11012/9/2022-JJM-III-DDWS
Government of India
Ministry of Jal Shakti
Department of Drinking Water and Sanitation
National Jal Jeevan Mission

4th Floor, 'Antyodaya' Bhawan
 CGO Complex, Lodhi Road,
 New Delhi-110 003
 Date: 22.05.2023

To

i) Principal Secretary,
 Department of Water Supply and Sanitation
 Government of Punjab

ii) Shri S.K.Jha
 Head, Radiation Protection Section (Nuclear Fuels)
 Health Physics Division, BARC

iii) Shri Soumen Sinha
 Scientific Officer/G, Atomic Energy Regulatory Board,
 Department of Atomic Energy

Subject: Record of Discussion of meeting held on 16.05.2023-reg

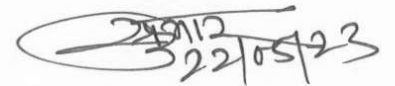
Sir,

A meeting to discuss the SOP for safe disposal of Uranium loaded exhausted media was held on 16th May 2023 at 11.00 AM in Minister's Conference Room, 4th floor, Deendayal Upadhyaya Antyodaya Bhavan, New Delhi.

2. In this regard, I am to convey the record of discussion of the meeting for information and necessary action.

Encl: As above

Yours faithfully,



(Sunil Kumar)

Under Secretary to the Govt. of India

Email: sunil.kumar70@nic.in

Copy to:

- i.) PPS to Secretary, DDWS
- ii.) PPS to AS & MD, NJJM
- iii.) All DS/Director, NJJM
- iv.) Deputy Advisor (AM) & (SP), NJJM

Record of discussions of Meeting held on 16.05.2023 on guidelines for Standard Operating Procedures (SOP) for safe disposal of Uranium loaded exhausted media

A meeting to discuss the SOP for safe disposal of Uranium loaded exhausted media was held on 16th May 2023 at 11.00 AM in Minister's Conference Room, 4th floor, Deendayal Upadhyaya Antyodaya Bhavan, New Delhi. The meeting was chaired by Additional Secretary and Mission Director, NJJM, DDWS, Government of India. List of participants is enclosed at **Annex – I**.

2. The AS &MD, NJJM, DDWS, Government of India welcomed the representatives from BARC, DAE, and Government of Punjab. The AS&MD, NJJM, DDWS, Govt. of India informed that:

- A meeting was held on the 17th February 2023 in which BARC representatives were requested to finalise the Standard Operating Procedures (SOP) for appropriate treatment and disposal of Uranium laden media.
 - The BARC and DAE representatives elaborated upon the SOPs prepared by them and briefed those present regarding various requirements including the licencing, training, safety protocols and other requirements that have to be mandatorily fulfilled for ensuring the objective.
 - The BARC and DAE representatives informed that the State needs to procure single licence valid for a term of three years from DAE. All the projects/facilities where Uranium remediation may take place must be listed in the application. Based upon the quantity of Uranium estimated in the waste media, "Cementation" or "Plasma based Incineration" of spent resin shall be decided.
 - The BARC team also informed that the current limit of 30 ppb for Uranium in water is rather ambitious and they advised the State team to set up Community based Uranium remediation plants where more than 60 ppb Uranium has been detected in the ground water samples.
 - It was also decided that other stakeholders such as Central Pollution Control Board as well as the MoEFCC will also be consulted in the matter to firm up the plan before implementation.
3. The AS &MD, NJJM, DDWS assured the State team that all support under JJM will be made available for addressing Uranium contamination issues in ground water sources. It was also decided to convene another meeting with officials of CPCB and MoEFCC for finalization of the same. The details of meeting will be communicated separately.



Annex-I

List of Participants**Government of India**

1. Shri Vikas Sheel, Additional Secretary & Mission Director, NJJM, DDWS, Ministry of Jal Shakti
2. Shri Pradeep Singh, Director, NJJM, DDWS
3. Shri Y. K. Singh, Director, NJJM, DDWS
4. Shri Ajay Kumar, Director Water Quality, NJJM, DDWS
5. Shri Arunkumar Kembhavi, DS, NJJM, DDWS
6. Shri A. Muralidharan, Dy. Advisor, NJJM, DDWS
7. Shri Sumit Priyadarshi, Dy. Advisor, NJJM, DDWS
8. Shri Neeraj Sharma, Sr. Infrastructure Specialist, NJJM, DDWS

Bhabha Atomic Research Centre

1. Dr. S.K.Jha, Head Radiation protection section, Health, Safety & Environment group
2. Shri K.C.Pancholi, Scientific Officer/ G, Nuclear recycle group
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