



उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड
UTTAR PRADESH POLLUTION CONTROL BOARD

संदर्भ सं०

157243 / NGT Cell - 37/21

दिनांक:

11/1/21

To,

The Registrar General,
Principal Bench,
Hon'ble National Green Tribunal,
Copernicus Marg, New Delhi.

Sub.: Regarding Submission of Report dated 23.12.2020 of Hon'ble Oversight Committee in compliance of the order of Hon'ble NGT passed in OA No. 985/2019, In Re: Water Pollution by Tanneries at Jajmau, Kanpur, Uttar Pradesh with OA No. 986/2019 In Re: Water Pollution at Rania, Kanpur Dehat & Rakhi Mandi, Kanpur Nagar, UP.

Sir,

The Hon'ble Oversight Committee U.P. has directed the Member Secretary, Uttar Pradesh Pollution Control Board, Lucknow to file the Report dated 23.12.2020 of Oversight Committee, in compliance of order passed by Hon'ble National Green Tribunal passed in OA No. 985/2019, In Re: Water Pollution by Tanneries at Jajmau, Kanpur, Uttar Pradesh with OA No. 986/2019 In Re: Water Pollution at Rania, Kanpur Dehat & Rakhi Mandi, Kanpur Nagar, UP.

Therefore, the report dated 23.12.2020 of Oversight Committee is attached herewith for kind perusal.

Yours Sincerely,

(Ajay Kumar Sharma)
Chief Environment Officer
Circle-2

Copy: Staff Officer, Chief Secretary, Government of Uttar Pradesh for kind perusal

Chief Environment Officer
Circle-2

REPORT OF THE OVERSIGHT COMMITTEE, NGT, U.P, LUCKNOW

IN THE MATTER OF:-

**ORIGINAL APPLICATION NO. 985/2019
WITH O.A NO.986/2019**

**IN RE: WATER POLLUTION BY
TANNERIES AT JAJMAU, KANPUR, UTTAR PRADESH
WITH
IN RE: WATER
POLLUTION AT RANIA, KANPUR DEHAT & RAKHI MANDI, KANPUR NAGAR,
UP**

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UPDATED REPORT OF OVERSIGHT COMMITTEE IN COMPLIANCE OF ORDER OF HON'BLE NATIONAL GREEN TRIBUNAL PASSED IN O.A. No. 985/2019 IN RE: WATER POLLUTION BY TANNERIES AT JAJMAU, KANPUR, UTTAR PRADESH WITH O.A. No. 986/2019 IN RE: WATER POLLUTION AT RANIA, KANPUR DEHAT & RAKHI MANDI, KANPUR NAGAR, UP

I. INTRODUCTION

- The Hon'ble NGT dealing with the matter of O.A. No. 985/2019 with O.A. No. 986/2019 vide order dated 15.11.2019 considered two issues. First issue relates to scientific disposal of Chromium dumps at Rania, Kanpur Dehat and Rakhi Mandi, Kanpur Nagar which have been in existence since 1976 and have inter-alia resulted in contamination of groundwater, depriving the inhabitants of access to drinking water. Second issue relates to legality of order dated 08.08.2019 passed by the Principal Secretary, Urban Development, Uttar Pradesh allowing Jal Nigam, Kanpur permitting discharge of untreated sewage containing toxic Chromium directly into the River Ganga. Further issue is water pollution by tanneries discharging untreated industrial effluents containing toxic Chromium into the irrigation canal through inadequately functioning CETP at Jajmau.

Chromium and its associated risks

- Chromium lies in group VI-B of the periodic table and is an active 3d transition element existing in various oxidation states (0, 2+, 3+, 4+, 5+ and 6+). Out of these, Cr (0), Cr (III) and Cr (VI) are the utmost stable and commonly found in the natural ecosystem.
- Cr (0) is the metallic form, having high fusion point and used for the manufacturing of steel and other alloys. Cr (VI) in the forms of chromate (CrO_4^{2-}), dichromate ($\text{Cr}_2\text{O}_7^{2-}$), and CrO_3 are considered the most toxic forms of chromium due to its high oxidizing potential, high solubility, and mobility across the membranes in living organisms and the environment. Cr (III) in the forms of oxides, hydroxides, and sulphates is less toxic as it is relatively insoluble in water, presents lower mobility, and is mainly bound to organic matter in soil and aquatic environments.

- As per the news article published in 'The Hindu' entitled "Nowhere to hide: how Kanpur's tanneries are struggling to afloat¹", Jajmau is the major cluster of tanneries in the north-eastern Kanpur. The article also mentioned Kanpur tanneries are perceived to be the primary source of industrial pollution in the Ganga.

Chromium toxicity and health hazards

- Chromium (VI) is a major ecological and public health concern due to its toxic and hazardous nature. Exposure to high levels of chromium via inhalation, ingestion, or dermal contact may cause adverse health effects in which ingestion has been reported as the main route of exposure to chromium.
- Occupational exposure to chromium is common to tannery workers, and it is the leading cause of health problems which they experience. A study conducted by Rastogi et al. (2008) entitled, "Occupational health risks among the workers employed in leather tanneries at Kanpur", reported significant levels of chromium in urine and blood samples collected from the exposed groups which might be attributed to high concentration of environmental chromium at the workplace
- Non-occupational exposure to chromium occurs through ingestion, inhalation and dermal contact. Ingestion occurs mostly due to eating and drinking chromium-contaminated foods and water, respectively. Foods get contaminated with chromium, mainly due to bioaccumulation when irrigated with contaminated water. Subsequently, eating such contaminated food puts the consumers at a risk of chromium poisoning.

Chromium management technologies and alternatives to chrome-based tanning process

- *Recycling of spent chromium*: This technique involves reutilisation of spent chrome salt. After the first tanning, spent chromium salt present in tanning liquor is not wasted. Instead, it is recycled in the subsequent tanning process either with the addition of a small quantity of fresh chromium salt to compensate the deficit or without. Spent chromium can be effectively reused for

1. ¹ Nowhere to hide: how Kanpur's tanneries are struggling to stay afloat - The Hindu

tanning without compromising the leather quality while bringing economic benefits to tanners.

- One such plant is installed in the premises of tanneries in Tamil Nadu, India. These tanneries segregate the chrome liquor and collect in a tank for precipitation of the chrome by adding magnesium oxide solution. The precipitated chrome slurry is added with sulfuric acid to regenerate chrome and filled in carboys. Thus, the chrome is recovered and mixed with fresh basic chromium sulphate for re-use in the tanning process.
- Attempts have been made to recover chrome as high-purity chromium from tannery effluents:
 - i. A three-step process involving precipitation, extraction, and electro-deposition has been developed for the recovery of chromium (III) from tannery effluent.
 - ii. A solvent extraction technique for recovering chromium from spent chrome liquor has been developed using Cyanex 301–toluene as well as mono (2-ethylhexyl) phosphoric acid–n-hexane systems.
 - iii. Recently, an attempt has been made to remove chromium from tannery effluent using seaweed, *Sargassum* species, and to reuse the chromium bearing seaweed in the manufacture of BCS as a reductant.
- *Total replacement of chromium salts (Chrome free tanning)*: Tanning techniques such as aluminium tanning, vegetable tanning, zirconium tanning, iron tanning, titanium tanning and aldehyde tanning have been known for many years as chrome-free tanning methods designed to replace the high polluting chrome-tanning technique. Nowadays, combination tanning confer high properties comparable to the chrome tanning.
- A study conducted by Musa and Gamelseed et al. (2013) entitled, “Development of Eco-friendly Combination Tanning System for the Manufacture of Upper Leather” proposed the use of Garad powder in combination of oxazolidine for tanning process. They concluded that the leather obtained using garad-oxazolidine combination shown comparable strength and good organoleptic properties which appears to be a promising alternative to chrome.

- Recently, a major step forward for environmentally friendly leather tanning is proposed in Europe. The project TILEATHER ('Ecofriendly Leather Tanned with Titanium') is aimed to develop a new chrome-free leather tanning method that would reduce the potential risk to humans and the environment. In this project, Titanium will be used as an alternative to chrome. Like chrome, titanium produces leather that is light and strong, but unlike chrome, it is biocompatible with human tissues - innocuous, hypoallergenic and biodegradable.
- *High chromium exhaustion tanning technologies:* Conventional chromium tanning suffers less efficiency chrome uptake that contributes significantly to water pollution and loss of tanning agent (chromium sulphate). Enhancing chromium uptake reduces chromium content in the effluent, saves chromium sulphate that would otherwise be wasted and cuts operational costs of treating wastewater. Use of auxiliary chemicals with chromium sulphate or other solvents (except water) in the tanning process might enhance the chromium uptake.
- *Organic tanning:* It has now been possible to avoid completely the use of mineral tanning salts in the manufacture of soft types of leather including suede garments. It is also possible to process richly dyed garment suedes based on vegetable and some organic tanning adjuncts. In these processes, the role and importance of surface charges assume much significance. The underlying process chemistry is becoming well understood. These technological options open up new avenues for eco-friendly tanning methodologies.

Resource recovery from chromium containing wastes:

- The tanning and post tanning process involves permanently stabilizing leather-making proteins against heat, degradation, and thermomechanical stress and improving the intrinsic properties of leather. In commercial practices, chrome tanning is the most commonly employed approach, which uses a large quantity of basic chromium salts that become the source of chromium pollution in this industry. The technique of secondary recycling poses an option for resource recovery from chromium containing waste.
- Regarding economic benefits, secondary recycling is increasingly focused on waste treatment. Because chromium is originally the important material in most

industrial production, the reuse of chromium components recycled from chromium containing waste is promising. Value-added products such as cements, abrasives, glass, tiles, bricks, and pigments can be generated by chemical or/thermal treatment of chromium rich wastes. Besides efficient stabilization of chromium, the presence of chromium may enhance the properties of the final product.

II. ORDERS PASSED BY HON'BLE NGT

1. **Vide order dated 27.09.2019**, the Hon'ble Tribunal considered the matter on receipt of two reports dated 25.09.2019 and 26.09.2019 from Justice Arun Tandon, former Judge of the Allahabad High Court, who has been appointed as a head of a Committee to oversee the compliance of the order of this Tribunal for control of pollution in River Ganga vide order dated 06.08.2018 in *O.A No. 200/2014, M.C Mehta v. Union of India*.
2. As per the Justice Arun Tandon report, during the site visit, the Committee along with representatives from NMCG, CPCB, UPPCB and UP Jal Nigam noticed that the water from hand pumps/borewells was coloured and unfit for drinking. It was also stated that there was no source of potable water and the residents were required to purchase drinking water. Consumption of water was leading to diseases to the inhabitants and the animals. The Committee suggested following measures:
 - a. *"All hand pumps along with tubewells/borewells installed in the area be sealed and there should be complete prohibition on extraction of underground water for drinking purposes both at village Khanchandpur, Kanpur Dehat and Rakhi Mandi, Kanpur Dehat.*
 - b. *State Government through its Chief Secretary must be directed to ensure supply of drinking water through tankers on day to day basis to the residents of the village Khanchandpur and also to surrounding areas till measures as below are not taken.*
 - c. *Drinking water Sintex tanks be installed in appropriate number at appropriate places in village Khanchandpur for providing potable water within a period of 15 days for the use of the residents of the area. These tanks must be*

connected to a supply pipeline from a source of potable water within another 7 days and till then the tanks be filled everyday with drinking water through tankers.

d. The materials which had been purchased for the purpose of Maha Kumbh Mela at Allahabad can be safely used for the above

e. Under the Addendum of DPR has to be made available for the purpose transshipment of the dump of the chromium by the State Government."

3. The Hon'ble Tribunal observed that remedial measures suggested by the Committee were required to be undertaken. Accordingly, the Hon'ble NGT directed the Chief Secretary, Uttar Pradesh to forthwith ensure steps for supply of drinking water to the residents in the affected area, apart from taking other remedial measures in the light of report of Justice Tandon in respect of Rania, Kanpur Dehat and Rakhi Mandi, Kanpur Nagar, and around the area of Chromium dumps.
4. Second report related to water pollution by the tanneries by discharging untreated industrial effluents containing toxic Chromium into the irrigation canal through inadequately functioning CETP at Jajmau, Kanpur and the permission granted by the Principal Secretary, Urban Development, UP to Jal Nigam, Kanpur to discharge sewage containing toxic Chromium directly into the river Ganga.
5. Accordingly, the Tribunal directed the Chief Secretary, UP to ensure that untreated sewage is not discharged directly into the river Ganga and atleast temporary arrangements for disinfection/water treatment was done and necessary action was initiated against the officer concerned for illegal action of permitting discharge of untreated sewage and effluents directly into the River Ganga.
6. **Vide order dated 15.11.2019**, the Hon'ble Tribunal noted that Chromium dumps containing toxic hexavalent Chromium has been in existence since 1976 and requisite steps have not been taken so far to dispose of the same as per mandate of law. The industries responsible for generating the said dumps were closed in the year 2005. The SPCB has assessed liability of EC of Rs. 280.01 crore only on 24.10.2019. There is no explanation why no such step was taken against the said industries earlier. The Hon'ble Tribunal also considered the report submitted by

CPCB dated 30.10.2019 which reported that the CPCB in coordination of the UPPCB carried out resampling of ground water in the affected areas.

7. In view of the above, the Hon'ble Tribunal directed as follows:

- i. *The State of UP is held liable for failing to take any action for shifting of Chromium dumps at Rania and Rakhi Mandi which resulted in damage to the environment and the public health for the period from 1976 till date. The amount of compensation in this regard is held to be the amount assessed by the UPPCB to be recovered from the erring industries. Till such recovery, the State itself must pay the amount by way of transfer to an ESCROW account. The amount is to be utilized for restoration of the environment and the public health in the area in the manner mentioned earlier.*
 - ii. *The State of UP must take further steps for disposal of the hazardous Chromium dumps as per directions of the Hon'ble Tribunal dated 22.08.2019, failing which it will be liable to pay compensation.*
 - iii. *State of UP is held liable to pay environmental compensation of Rs. 10 crores for damage to the environment for permitting discharge of untreated sewage containing toxic Chromium into river Ganga directly vide its order dated 08.08.2019.*
 - iv. *The State of UP may take steps for supply of potable water to the inhabitants of the area.*
 - v. *The Expert Committee comprising representatives from S.N. Medical College, Kanpur, PGI Lucknow, RML Lucknow and a nominee of Secretary, Health, Ministry of Health, Govt. of India may conduct the health survey within three months.*
 - vi. *The UPPCB is held liable to pay sum of Rs. 1 crore for ignoring illegal discharge of sewage and other effluent containing toxic Chromium directly into river Ganga and taking action after a long time. UP Jal Nigam is held liable to pay sum of Rs. 1 crore for releasing untreated large quantity sewage containing toxic Chromium in river Ganga.*
8. **Vide order dated 16.07.2020**, the Hon'ble National Green Tribunal reviewed the report filed by Chief Secretary, UP on 04.02.2020 and 11.06.2020, and CPCB on 14.07.2020. The report of Chief Secretary, UP stated that an action plan has been

prepared for restoration of the environment and certain steps have been taken for supply of water to the inhabitants. Further, the report submitted on 11.06.2020 stated that the matter of remediation is at the tender stage. While, the report of the CPCB was of a general nature.

9. Further, the Hon'ble Tribunal noted that the chromium dump containing toxic chemicals has not been shifted to the TSDF as required under the law for which failure of the State of U.P is continuing inspite of repeated directions showing lack of sensitiveness on the part of the concerned officers. Hazard to public health and environment continues. The process of remediation can only start only after shifting of the waste to operational TSDF.
10. In view of the seriousness of the situation, the Hon'ble Tribunal directed the Chief Secretary, UP to ensure prompt action on priority basis in a time bound manner which may be personally monitored by the Chief Secretary, UP.

III. MINUTES OF MEETING BY OVERSIGHT COMMITTEE, NGT

This Oversight committee constituted by Hon'ble NGT held a meeting with concerned administrative officers on 23.10.2020 and 14.12.2020. Various issues as pointed out in the orders of Hon'ble National Green Tribunal were discussed and status of the action taken by the concerned authorities was reviewed.

The highlights of the meetings are as follows:

- General Manager, UPSIDA informed that the work of shifting of Chromium dump has not started yet. Tender process was done thrice but could not be finalised as the last bid was much higher than the expected amount. Now letters have been sent to NEERI, IIT Kanpur, IIT Roorkee, IIT BHU, and IIT Delhi to provide consultancy regarding tender conditions and estimations.
It shows that the work of removal of chromium dump is not going to start in the near future.
- RO, Kanpur informed that 20 MLD CETP is under construction in Jajmau which will be completed by 31st December 2021.

- The Committee expressed the serious displeasure that UPSIDA is not removing the Chromium Dump which is adversely affecting the sub soil water and is a big health hazard despite repeated reminders and specific directions of Hon'ble NGT. The Committee feels that despite repeated reminders, no concrete actions regarding shifting of Chromium dumps has taken place.

The detailed Minutes of Meeting is annexed as **Annexure-I** and **Annexure- II**.

IV. DETAILS OF THE REPORT SUBMITTED BY UPSIDA

- General Manager, UPSIDA informed that the work of shifting of Chromium dump had not started yet. As on 26.08.2020, third tender was considered. Earlier tender has been floated three times. The details of tenders are as follows:

S. No.	Date of invitation	Date of publication	Period of Sale	Date of Opening date
First Tender	14.05.2020	16.05.2020	30.06.2020	01.07.2020
Second tender	10.07.2020	11.07.2020	27.07.2020	28.07.2020
Third tender	29.07.2020	30.07.2020	17.08.2020	26.08.2020

- In the third round of tendering process opened on 26.08.2020. A single tender was received from M/s RAMKY with a bid amount of 55.94 crore against the estimated cost of 34.22 crore. This was the third time when tender had not been finalised.
- Now a letter has been sent to NEERI, IIT Kanpur, IIT Roorkee, IIT BHU, and IIT Delhi to provide consultancy in this regard. Further actions will be taken after the proposals are received.

The detailed report submitted by UPSIDA is attached as **Annexure-III**.

V. COMPLIANCE REPORT SUBMITTED BY UP JAL NIGAM

UP Jal Nigam submitted a compliance report dated 15.12.2020 mentioning the following-

- Safe water is being provided to the households of Chromium affected areas in hamlets viz. Chauhanpurva, Palpurva, Yadavpurva through one tubewell and laid distribution system and old OHT since 15th July 2020.
- In Prasiddhipurva hamlet, safe water is being supplied through tube well and laid distribution system since 12th December 2020. However, underground water in this hamlet is not chromium affected.
- UP Jal Nigam has filed a Civil appeal on 07.08.2020 before the Hon'ble Supreme Court against the order of the Hon'ble Tribunal regarding the EC of Rs. 1 Cr imposed on UP Jal Nigam for releasing large quantity of untreated sewage containing toxic Chromium in river Ganga and Jal Nigam is waiting for the decision of Hon'ble Supreme Court which is listed on 06.01.2021.

The detailed compliance report submitted by UP Jal Nigam is annexed as **Annexure-IV**.

VI. DETAILS OF REPORT SUBMITTED BY HEALTH DEPARTMENT

- In compliance of the orders of Hon'ble Tribunal dated 15.11.2019, Chief Medical Officer, Kanpur Nagar conducted health survey in the areas of Rakhimandi on 25.11.2020, Jajmau on 02.12.2020 and Khanchandrapur village, Sarvankhera, Rania on 06.08.2020, 19.08.2020, 28.08.2020, 07.09.2020, 26.09.2020, 07.10.2020, 22.10.2020, 31.10.2020, 07.11.2020, 15.11.2020 and 24.11.2020.
- A physical verification of the reports of health survey conducted in Jajmau and Rakhi Mandi areas located in Kanpur district was carried out by Dr. Yatendra Kumar Pathak, Joint Director (Health), Directorate of Health Services, UP along with Dr. Anil Kumar Mishra, Chief Medical Officer, Kanpur Nagar and Dr. Mahesh Kumar, Additional Chief Medical officer, Kanpur Nagar on 07.12.2020
- Further, the report mentioned that no comparative disparity has been found in the type of disease and number of unhealthy patients found in the health survey and the type and number of diseases in other areas.
- On 13.05.2020, Health Department submitted a report of health survey conducted in Rania and Rakhi Mandi. Following were the findings of the report:
 - I. There are 100 number of patients of Liver.
 - II. There are 180 persons who were suffering from respiratory problems.

- III. There are 162 patients suffering from gastrointestinal tract problem.
 - IV. 64 persons are diabetic
 - V. 122 persons are having skin related problem.
 - VI. There are 27 TB suspected patients.
 - VII. 88 persons are suffering from Anaemia.
 - VIII. There are 37 Hypertension patients.
 - IX. There are 5 cancer patients
 - X. There are 28 children who were suffering from malnutrition
- As per the report, majority of patients are suffering from problem related to skin, gastrointestinal tract and respiratory system followed by some cases of anaemia and musculoskeletal problem.
 - On the basis of preliminary assessment of the sites near Chromium dump, the Expert committee constituted by Principal Secretary, Department of Medical Health and Family Welfare recommended three level actions for comprehensive baseline assessment of exposure and for mitigation and prevention of ill effects due to chromium dump. Recommendations are as follows:
 - I. Comprehensive assessment of probable source of exposure i.e. chromium dump.
 - II. Ascertainment of health effects on the population due to chromium dump.
 - III. Efforts to mitigate, manage and prevention of health effects on the residing population.
 - CSIR-IITR assessed the level of Chromium and Mercury in water and soil of Rakhi Mandi and Rania Kanpur Nagar. The results of analysis of Chromium and Mercury in water and soil of Rakhi Mandi and Rania, Kanpur Nagar are as follows:

Analysis of Chromium and Mercury in water and soil from Rakhi Mandi, Kanpur Nagar			
S. No.	Location	Chromium* (µg/L)	Mercury# (µg/L)
1	Rakhi Mandi-Railway colony, Submersible 1 (water sample)	BDL	0.352
2	Rakhi Mandi-Railway colony, Submersible 2 (water sample)	BDL	0.187
3	Hand Pump, Rakhi Mandi (water sample)	BDL	0.148

S. No.	Location	Cr (mg/Kg)	Hg (µg/Kg)
1	Rakhi Mandi-Railway colony, (Soil sample)	69.190	98.000
BDL: Below detection limit			
Detection Limit: 0.019 ng/ml for Chromium and 0.100 ng/ml for Mercury			
Instrument used for analysis: * iCAP-PQ, LC-ICP-MS (Thermo Scientific) # DMA-80 (Milestone)			

Analysis of Chromium and Mercury in water and soil from Rania, Kanpur Nagar			
S. No.	Location	Chromium* (µg/L)	Mercury# (µg/L)
1	Rania, Submersible water sample (water sample)	2940.000	0.120
2	Rania, Hand Pump water sample (water sample)	12370.000	0.134
S. No.	Location	Cr (mg/Kg)	Hg (µg/Kg)
1	Rania, (Khan Chandpur), (Soil sample)	1867.000	9.840
BDL: Below detection limit			
Detection Limit: 0.019 ng/ml for Chromium and 0.100 ng/ml for Mercury			
Instrument used for analysis: * iCAP-PQ, LC-ICP-MS (Thermo Scientific) # DMA-80 (Milestone)			

The detailed health survey report conducted by Health Department is annexed as Annexure-V and Annexure-VI.

VII. SUMMARY OF THE COMPLIANCE STATUS

S. No.	Directions issued by Hon'ble NGT	Concerned Department	Compliance status
1.	Status of lifting and remediation of Chromium dump at Rania, Kanpur Dehat by the TSDF operators	UPSIDA	Non-complied The lifting of Chromium dump has not started yet. Letters have been sent to NEERI, IIT Kanpur, IIT Roorkee, IIT BHU, and IIT Delhi to provide consultancy regarding tender conditions and estimations and decision will be taken once the proposals are received by the said institutes.
2.	Status of ETPs/CETPs installation to prevent untreated discharge of industrial effluents in	UP Jai Nigam	Partially complied A 20 MLD CETP is being constructed in Jajmau. The tender processing is done and around 10 percent work is

	river Ganga and its tributary.		completed, and rest is under process. The construction of CETP will be completed by 31 st December 2021.
3.	Status of health survey by the health department.	Health Department	Partially complied Health Department has submitted a detailed survey report undertaken in Rania and Rakhi Mandi areas. While, no details are provided in case of Jajmau area. Health surveys must be conducted at least twice a month.
4.	Steps taken for the supply of potable water to the residents of the affected area.	UP Jal Nigam	Complied Safe water is being provided to all the four hamlets viz. Chauhanpurva, Palpurva, Yadavpurva and Prasiddhipurva of the Village Khanchandpur, Rania.
5.	Status of recovery of EC: UP Jal Nigam is held liable to pay a sum of Rs. 1 crore for releasing untreated large quantity sewage containing toxic Chromium in river Ganga.	UP Jal Nigam	Non-complied UP Jal Nigam has filed a Civil appeal on 07-08-2020 before the Hon'ble Supreme Court against the said order of the Hon'ble Tribunal and is waiting for the decision of Hon'ble Supreme Court which is listed on 06.01.2021. However, till date no order has been passed in favour of UP Jal Nigam.
6.	Status of recovery of EC: The UPPCB is held liable to pay sum of Rs. 1 crore for ignoring illegal discharge of sewage and other effluent containing toxic Chromium directly into river Ganga and taking action after a long time inspite of earlier proceedings before this Tribunal. The State of UP has to be pay compensation to the extent of Rs. 10 Crores for violation of law affecting the environment and public health for illegally	UPPCB	Non-complied Till date no EC has been paid by UPPCB.

	permitting discharge of sewage and other effluent containing toxic Chromium directly into river Ganga.		
7.	Status of recovery of EC on erring industries.	UPPCB	<p>Partially complied</p> <p>A show-cause notice has been issued for the recovery of EC of Rs. 280.01 crore imposed on 6 erring industries. Out of 280.01 crores, 23.44 crore has been deposited in ESCROW account of DM, Kanpur Nagar by the Industrial Development Department. The remaining EC will be deposited by UPPCB after the recovery of EC from 6 erring industries. RC has already been issued against erring industries for the recovery of EC.</p>

VIII. RECOMMENDATIONS

In view of the above, we recommend as follows:

1. With regard to the safe disposal of chromium dump at Rania, Kanpur as ordered by Hon'ble Tribunal in O.A. No. 200/2014 in RE: M.C. Mehta vs Union of India & Ors., neither a single truck load has been shifted to the nearby operational TSDF nor the penalty for non-compliance of this order has been paid. The Chief Secretary, UP may be directed to take concrete actions regarding shifting of chromium dumps and sort out the matter immediately. He may also fix the responsibility for inaction. The committee further recommends serious action in this matter against the concerned officers. Such action may be by giving adverse entries to them and also to initiate disciplinary proceedings against the officers concerned.
2. In regard to the EC imposed on UP Jal Nigam and UPPCB for illegal discharge of untreated sewage into river Ganga, so far, no amount has been deposited. The concerned departments UPPCB and UP Jal Nigam may be directed to deposit the said amount without any further delay. However, the said amount may be

subjected to the final outcome of the Civil Appeal filed by UP Jal Nigam in the Hon'ble Apex Court.

3. EC of Rs. 280.01 Cr has been imposed on 6 erring industries which has not been recovered so far. The SPCB may be directed to invoke Recovery Certificates (RCs) and follow up vigorously for recovery of EC from these units. The State Government has in the meanwhile sanctioned Rs 23.44 Crores from its budgetary resources. The State Government may also be directed to take stringent measures in recovery of this amount and use this amount in remediation of the contaminated areas.
4. As far as the health surveys are concerned in the contaminated areas, the Health Department has submitted a report on 11.12.2020 and 15.05.2020 which are indicative in nature. Principal Secretary, Directorate of Health, UP may be directed to conduct a comprehensive study and prepare an action plan so as to ascertain the exposure and health effects caused due to chromium dump in the nearby areas, and efforts for mitigation and prevention of its ill-effects at the earliest.
5. In order to prevent the violations in pollution norms, a 20 MLD CETP is under construction in Jajmau. UP Jal Nigam may be directed to expedite the construction of CETP so that it gets completed in time bound manner.
6. There needs to be 24x7 monitoring of effluent treatment in such clusters. Already 122 tannery units in Kanpur have been closed down for violation of Pollution norms. The CETPs of such clusters be connected with the Central Control Room at Lucknow through OCEMS for 24x7 monitoring of environment parameters.
7. Reverse boring is another important area that needs to be addressed, especially in environmentally sensitive areas like tannery clusters which are vulnerable to ground water contamination on the sly. The tendency of some units to discharge their effluents by boring a hole in the ground, thereby contaminating ground water needs to be quelled with deterrent punishment. CGWA/SGWA may be directed to take actions in this regard. The CGWA/SGWA field machinery needs to be strengthened where the complaints of groundwater contamination are plenty. A shallow borewells may be installed around such areas and regular monitoring of groundwater quality from those borewells may be undertaken so as to have a

check on contamination levels. Alternately, hydrogeological contamination studies may also be carried on in such areas.

8. The Urban Development Department may be directed to identify and mark Buffer Zone around the Chromium dump areas.
9. To ensure the proper chromium management practices in tannery clusters/units, the industries may be directed to install chromium recovery plants based on Tamil Nadu model and implement the recovery and reuse techniques. Also, norms should be very stringent for discharge of untreated sewage into the drains/rivers.
10. While several alternatives to chrome-based tanning is available, the industries may be directed to exploit the techniques of chrome-free or blending of chrome with other minerals for tanning purposes. Moreover, the industries must partner with research institutes to develop such alternatives.
11. The use of titanium instead of chromium in tanning process may result into light and strong leather which is also biocompatible with human tissues as proposed by project "TILEATHER" in EU. Such researches may also be promoted in India to develop chrome free leather production.
12. The strategies of bioremediation using chromium tolerant bacteria and/or phytoremediation using hyperaccumulating plants may be promoted as post chromium dump cleaning process to prevent the leaching of contaminant in soil and water.
13. The approaches such as "Microbial-based Phytoremediation" which is based on the association of metal tolerant bacteria in rhizosphere of hyperaccumulating plant may also be undertaken as post chromium treatment in highly contaminated environment.
14. Researches may be promoted for alternative use of solid wastes from tannery industries. Among the main applications of solid tannery wastes, the following stand out production of adsorbent materials, biodiesel, biogas, biopolymers, applications in agriculture and other applications involving extraction/recovery of compounds of industrial/commercial interest, isolation of microorganisms and production of enzymes and applications in the animal diet.

15. The approach of secondary recycling may be explored for recovery of resources and value-added products synthesis from chromium rich wastes such as cements, abrasives, glass, tiles, bricks, and pigments.
16. In order to prevent the bioaccumulation and biomagnification of chromium or other metals in the area, Health Department may be directed to carryout soil metal analysis in the agricultural lands near to the tannery industrial areas.

23-12-2020

23-12-2020

X Anup Chandra Pandey

Dr Anup Chandra Pandey
Member, Oversight Committee
Signed by: ANUP CHANDRA PANDEY

X SVS. Rathore

Justice SVS Rathore
Signed by: SURENDRA VIKRAM SINGH RATHORE

Dec 23, 2020

Annexures: As above

Please visit our website: oscngt.upsdc.gov.in for more information.

**MINUTES OF MEETING OF NGT OVERSIGHT COMMITTEE, U.P. LUCKNOW HELD ON
23.10.2020 IN OA NO. 985/2019 IN RE: WATER POLLUTION BY TANNERIES AT JAJMAU,
KANPUR, UP WITH OA NO. 986/2019 IN RE: WATER POLLUTION AT RANIA, KANPUR
DEHAT & RAKHI MANDI, KANPUR NAGAR, UP (ORGANISED WITH THE HELP OF NIC)
THROUGH VIDEO-CONFERENCING**

Present: Hon'ble Mr Justice SVS Rathore, Chairman, and
Dr Anup Chandra Pandey, Member.

Other dignitaries present:

1. Shri Mayur Maheshwari, CEO, UPSIDA
2. Shri Sandeep Chandra, UPSIDA
3. Shri Ashish Tiwari, Member Secretary, UPPCB
4. Shri Ramesh, JMD, River Pollution Control & Conservation
5. Shri Pankaj Verma, Additional District Magistrate (Admn), Kanpur Dehat
6. Shri Sonu Singh, Representative of MoEF&CC

Meeting was held as scheduled.

These cases involve two major issues. First issue relates to scientific disposal of Chromium dumps at Rania, Kanpur Dehat and Rakhi Mandi, Kanpur Nagar which have been in existence since 1976 and have inter-alia resulted in contamination of ground water, depriving the inhabitants of access to drinking water. Second issue relates to legality of order dated 08.08.2019 passed by the Principal Secretary, Urban Development, Uttar Pradesh allowing Jal Nigam, Kanpur permitting discharge of untreated sewage containing toxic Chromium directly into the River Ganga. Further issue is water pollution by tanneries discharging untreated industrial effluents containing toxic Chromium into the irrigation canal through inadequately functioning CETP at Jajmau.

Vide order dated 15.11.2019 the status was reviewed and report of CPCB dated 30.10.2019 was considered. It was observed as under:

"It is undisputed that Chromium dumps containing toxic hexavalent Chromium (as mentioned in the report of the CPCB quoted above) has been in existence since 1976 and requisite steps have not been taken so far to

dispose of the same as per mandate of law. Chromium is considered to be an environmentally hazardous element and classified as class-A human carcinogen. 1 Hexavalent Chromium Cr (VI) is toxic and the World Health Organization (WHO) has classified it as carcinogenic and can cause stomach ulcers and cancers and severe damage to kidneys and liver.2 The industries responsible for generating the said dumps were closed in the year 2005. The SPCB has assessed liability of environmental compensation of Rs. 280.01 crore only on 24.10.2019. There is no explanation why no such step was taken against the said industries earlier. We may note that this Tribunal has been issuing directions for shifting of the Chromium dumps but the State of UP has failed to do so. The direction of this Tribunal has already been quoted above from the order dated 22.08.2019 (para 24). Such directions were also issued earlier vide order dated 13.07.2017”.

Taking into account the above mentioned situation, the Tribunal stated that it was clear that there is failure on the part of State of UP and its authorities in disposal of the Chromium dumps which is hazardous to the public health and the environment. The proposal mentioned in the report of the Chief Secretary, UP was for in-situ remediation though earlier stand of the State of UP was to shift the Chromium waste to the Treatment Storage and Disposal Facility (TSDF) for hazardous waste. Several directions have been passed in this case on subsequent dates of hearing.

Vide order dated 16.07.2020, the Tribunal gave the following directions after considering the report filed on 04.02.2020 on behalf of the Chief Secretary, U.P followed by a further report dated 11.06.2020 and CPCB's report dated 14.07.2020:

- “i. The State of UP is held liable for failing to take any action for shifting of Chromium dumps at Rania and Rakhi Mandi which resulted in damage to the environment and the public health for the period from 1976 till date. The amount of compensation in this regard is held to be the amount assessed by the UPPCB to be recovered from the erring industries. Till such recovery, the State itself must pay the amount by way of transfer to an ESCROW account. The amount is to be utilized for restoration of the environment and the public health in the area in the manner mentioned earlier. The State of UP is at liberty to recover the amount from the erring industries or erring officers as already mentioned in para 13 above.*
- ii. The State of UP must take further steps for disposal of the hazardous Chromium dumps as per directions of this Tribunal dated 22.08.2019*

quoted above, failing which it will be liable to pay compensation as mentioned in the said order.

- iii. State of UP is held liable to pay environmental compensation of Rs. 10 crores for damage to the environment for permitting discharge of untreated sewage containing toxic Chromium into river Ganga directly vide its order dated 08.08.2019. The State of UP is at liberty to recover the amount from the erring officers apart from taking action against the persons responsible in the manner. The UPPCB is held liable to pay sum of Rs. 1 crore for ignoring illegal discharge of sewage and other effluent containing toxic Chromium directly into river Ganga and taking action after a long time in spite of earlier proceedings before this Tribunal. UP Jal Nigam is held liable to pay sum of Rs. 1 crore for releasing untreated large quantity sewage containing toxic Chromium in river Ganga. These amounts may be deposited with the CPCB within one month which may be overseen by the Chief Secretary, UP. UPPCB is at liberty to recover the amount from the erring industries.
- iv. The State of UP may take steps for supply of potable water to the inhabitants of the area and other steps as already mentioned in paras 13 to 15 above.
- v. The Expert Committee in terms of para 13 above may conduct the health survey within three months.
- vi. CPCB may issue appropriate directions to ensure that no authority allows discharge of polluted sewage or polluted effluents directly into a water channel or stream in violation of law even in monsoon and also the standards for faecal coliform are duly maintained."

The Oversight Committee reviewed the compliance of directions passed by Hon'ble NGT in the aforesaid cases i.e. OA No. 985/2019 with OA No. 986/2019. The minutes of meeting are presented below:

S.No.	Issue/Directions by Hon'ble NGT	Current Status and Decision taken by Committee
1.	Removal of Chromium dump at Rania	Official from UPSIDA informed that last tender was received on 26 August, 2020. Single bid was received one more time so this information was passed to State Level Committee

		<p>and Secretary, Environment for necessary guidance. However, no reply has been received from them till date. The Oversight Committee felt that it was for the State Govt to sort out these modalities. The Committee expressed its displeasure that the State Govt is not removing the Chromium Dump which is affecting the sub soil water and is a big health hazard despite repeated reminders. The Committee directed that any further delay may result in stern action by Hon'ble NGT.</p>
2.	EC from 6 identified industrial units	<p>Rs.23.44 crore deposited by Industrial Development Dept in DM, Kanpur ESCROW A/C. Industries went to NGT and represented themselves stating that this EC should not be imposed. NGT directed them to put up their problem in front of UPPCB. UPPCB reconfirmed that the 6 industries need to pay the amount vide letter dated 28.05.2020. 15 days' time was given to them for depositing the amount failing which Recovery certificate has been issued to them. Assets of three (3) companies have been attached and would be up for auction while similar action has to be taken regarding other industrial units. ADM Kanpur Dehat assured that the District Administration would</p>

		initiate recovery proceedings on priority.
3.	Problem of drinking water	Water provided by Overhead tank from July, 2020 in three out of 4 hamlets viz Chauhanpurwa, Balpurwa, Yadavpurwa and Prasadhipurwa. The problem of chromium does not exist in Prasadhipurwa but since it is part of project, water supply would be ensured by Dec,2020.

23-10-2020

23-10-2020

X Anup Chandra Pandey

Dr Anup Chandra Pandey
Member, Oversight Committee
Signed by: ANUP CHANDRA PANDEY

X SVS Rathore

Justice SVS Rathore
Chairman, Oversight Committee
Signed by: SURENDRA VIKRAM SINGH RATHORE

Oct 23, 2020

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**MINUTES OF MEETING OF THE OVERSIGHT COMMITTEE, NGT UP LUCKNOW,
HELD ON 14.12.2020 AT 11:00 A.M IN OA NO. 985/2019 IN RE: WATER POLLUTION BY
TANNERIES AT JAJMAU, KANPUR WITH OA NO. 986/2019 IN RE: WATER POLLUTION IN
RANIA, KANPUR DEHAT & RAKHI MANDI, KANPUR NAGAR ORGANIZED
THROUGH VIDEO-CONFERENCING**

Present: Hon'ble Mr. Justice S.V.S Rathore, Chairman
Hon'ble Dr Anup Chandra Pandey, Member

Other dignitaries present:

1. Shri Ashish Tiwari, Member Secretary, UPPCB
2. Shri Sandeep Chandra, UPSIDA
3. Shri S. R. Sachan, UPSIDA
4. Dr. D. K. Soni, Additional Director, CPCB, Lucknow
5. Shri Ajay Sharma, CEO, UPPCB, Lucknow
6. Shri Vivek Roy, CEO, UPPCB, Lucknow
7. Shri Anil Mathur, Regional Officer, UPPCB, Kanpur Nagar

Meeting was held as scheduled.

These cases involve two major issues. First issue relates to scientific disposal of Chromium dumps at Rania, Kanpur Dehat and Rakhi Mandi, Kanpur Nagar which have been in existence since 1976 and have inter-alia resulted in contamination of ground water, depriving the inhabitants of access to drinking water. Second issue relates to legality of order dated 08.08.2019 passed by the Principal Secretary, Urban Development, Uttar Pradesh allowing Jal Nigam, Kanpur permitting discharge of untreated sewage containing toxic Chromium directly into the River Ganga. Further issue is water pollution by tanneries discharging untreated industrial effluents containing toxic Chromium into the irrigation canal through inadequately functioning CETP at Jajmau.

Vide order dated 16.07.2020, the Hon'ble Tribunal considered the report filed on 04.02.2020 on behalf of the Chief Secretary, U.P followed by a further report dated 11.06.2020 and CPCB's report dated 14.07.2020 and gave the following directions:

"i. The State of UP is held liable for failing to take any action for shifting of Chromium dumps at Rania and Rakhi Mandi which resulted in damage to the environment and the public health for the period from 1976 till date. The amount of compensation in this regard is held to be the amount assessed by the UPPCB to be recovered from the erring industries. Till such recovery, the State itself must pay the amount by way of transfer to an ESCROW account. The amount is to be utilized for restoration of the environment and the public health in the area in the manner mentioned earlier. The State of UP is at liberty to recover the amount from the erring industries or erring officers as already mentioned in para 13 above.

ii. The State of UP must take further steps for disposal of the hazardous Chromium dumps as per the directions of this Tribunal dated 22.08.2019 quoted above, failing which it will be liable to pay compensation as mentioned in the said order

iii. State of UP is held liable to pay environmental compensation of Rs. 10 crores for damage to the environment for permitting discharge of untreated sewage containing toxic Chromium into river Ganga directly vide its order dated 08.08.2019. The State of UP is at liberty to recover the amount from the erring officers apart from taking action against the persons responsible in the manner. The UPPCB is held liable to pay sum of Rs. 1 crore for ignoring illegal discharge of sewage and other effluent containing toxic Chromium directly into river Ganga and taking action after a long time in spite of earlier proceedings before this Tribunal. UP Jal Nigam is held liable to pay sum of Rs. 1 crore for releasing untreated large quantity sewage containing toxic Chromium in river Ganga. These amounts may be deposited with the CPCB within one month which may be overseen by the Chief Secretary, UP. UPPCB is at liberty to recover the amount from the erring industries.

iv. The State of UP may take steps for supply of potable water to the inhabitants of the area and other steps as already mentioned in paras 13 to 15 above.

v. The Expert Committee in terms of para 13 above may conduct the health survey within three months.

vi. CPCB may issue appropriate directions to ensure that no authority allows discharge of polluted sewage or polluted effluents directly into a water channel or stream in

violation of law even in monsoon and also the standards for faecal coliform are duly maintained."

The Oversight Committee reviewed the compliance of directions passed by Hon'ble NGT in the aforesaid cases i.e. **OA No. 985/2019** with **OA No. 986/2019**. The minutes of meeting are presented below:

S. No.	Directions issued by Hon'ble NGT	Decision taken by the Committee
1.	Hon'ble NGT directed lifting and remediation of Chromium dump at Rania, Kanpur Dehat by the TSDF operators	<p>General Manager, UPSIDA informed that the work of shifting of Chromium dump has not started yet. The tender has been floated three times. As on 26.08.2020, the tender was opened for the third time for which a single bid was received from M/s RAMKY with a bid amount of 55.94 crore against the estimated cost of 34.22 crore. This was the third time when tender had not been finalised.</p> <p>Mr. Sandeep Chandra, GM further informed that letters have been sent to NEERI, IIT Kanpur, IIT Roorkee, IIT BHU, and IIT Delhi to provide consultancy regarding tender conditions and estimations. He expects that the proposals shall be received by 16-12-2020 and after approval by the State Level Committee further action shall be taken. However, he avoided to say as to when the work of removal of dump shall start.</p> <p>The Committee expressed its displeasure that UPSIDA is not removing the Chromium Dump which is affecting the sub soil water and is a big health hazard despite repeated reminders and specific directions of Hon'ble NGT.</p> <p>The Committee feels that despite repeated reminders, no concrete actions regarding shifting of Chromium dumps has taken place. Chief Secretary should sort out the matter</p>

		immediately and also may fix the responsibility for inaction.
2.	Hon'ble NGT had directed the State to install ETPs/CETPs and ensure their proper function to prevent untreated discharge of industrial effluents in river Ganga and its tributary.	RO, Kanpur informed that 20 MLD CETP is being constructed in Jajmau. The tender processing is done and around 10 percent work is completed, and rest is under process. The construction of CETP will be completed by 31 st December 2021.

Note: Keeping in view that the officers of medical department are extremely busy in fighting with COVID-19, hence the Committee avoided to call them in the meeting to enquire about the status of medical camps in the affected areas. We have asked the authorities to furnish report containing relevant information in writing. Said report has been received and shall be included in the report to be submitted to Hon'ble NGT by the Oversight Committee.

14-12-2020

14-12-2020

X Anup Chandra Pandey

Dr Anup Chandra Pandey
Member, Oversight Committee
Signed by: ANUP CHANDRA PANDEY

X SVS Rathore

Justice SVS Rathore
Chairman, Oversight Committee
Signed by: SURENDRA VIKRAM SINGH RATHORE

Dec 14, 2020

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For kind attention of Mrs. Pratibha Gupta

Annexure-III 27

ग्राम खानचन्द्रपुर, तहसील रनियाँ, कानपुर देहात में डम्प क्रोमियम युक्त
हैजार्डस वेस्ट के निस्तारण के सम्बन्ध में अद्यतन स्थिति।

1. भारत वर्ष में चिन्हित कुल 12 Hazardous waste Dump Sites में से 08 स्थल परियोजना में चयनित किये गये थे। इनमें से एक स्थल ग्राम खानचन्द्रपुर के निकट तहसील रनियाँ-जनपद कानपुर देहात है। केन्द्रीय प्रदूषण नियंत्रण बोर्ड (CPCB) द्वारा स्थल के अध्ययन एवं डी0पी0आर0 तैयार करने हेतु M/s E.R.M India Pvt Ltd. को जुलाई 2014 में अनुबन्धित किया गया था।
2. मै0 ERM द्वारा डी0पी0आर0 की फाइनल रिपोर्ट तथा अन्तरिम रिमेडियल मेजर रिपोर्ट (रु0 23.44 करोड़) दिसम्बर 2018 CPCB को प्रस्तुत की गई। CPCB द्वारा रिपोर्ट की प्रति प्रमुख सचिव, पर्यावरण, उ0प्र0 शासन को प्रेषित की गई। यह रिपोर्ट उप सचिव, औद्योगिक विकास अनुभाग-4 के पत्र दिनांक 02.08.2019 के माध्यम से आवश्यक कार्यवाई हेतु मुख्य कार्यपालक अधिकारी, यूपीसीडा को प्राप्त कराई गई।
3. डी0पी0आर0 के अनुसार डम्प क्रोमियम वेस्ट, प्रदूषित भूमि के निस्तारण तथा भूमिगत जल के रिमेडियेशन कार्य के लिए Environmental Engineer न होने जैसी व्यवहारिक कठिनाइयों से मुख्य कार्यपालक अधिकारी, यूपीसीडा के पत्र दिनांक 20.08.2019 द्वारा प्रमुख सचिव, अवस्थापना एवं औद्योगिक विकास, उ0प्र0 शासन को अवगत कराया गया।
4. महाप्रबन्धक(अभियंत्रण), यूपीसीडा ने पत्र दिनांक 23.09.2019 द्वारा विशेष सचिव, अवस्थापना एवं औद्योगिक विकास, उ0प्र0 शासन से अनुरोध किया गया कि उक्त कार्य यूपीसीडा के स्थान पर पर्यावरण निदेशालय/उ0प्र0 प्रदूषण नियंत्रण बोर्ड के माध्यम से कराया जाय। मुख्य कार्यपालक अधिकारी, यूपीसीडा द्वारा पत्र दिनांक 30.09.2019 द्वारा सचिव, अवस्थापना एवं औद्योगिक विकास, उ0प्र0 शासन से अनुरोध किया गया कि मा0 एन0जी0टी0 के आदेश के अनुसार शासन से धनराशि केन्द्रीय प्रदूषण नियंत्रण बोर्ड को उपलब्ध करा दी जाय, यूपीसीडा द्वारा केन्द्रीय प्रदूषण नियंत्रण बोर्ड को आवश्यक सहयोग प्रदान किया जा सकता है।
5. प्रमुख सचिव, पर्यावरण, वन एवं जलवायु परिवर्तन, उ0प्र0 शासन की अध्यक्षता में दिनांक 07.01.2020 को बैठक की गई। बैठक में मै0 रैम्की इन्वायरो (कुम्भी, कानपुर देहात स्थित टी0एस0डी0एफ0) एवं मै0 भारत ऑयल कम्पनी (कुम्भी, कानपुर देहात स्थित टी0एस0डी0एफ0) को भी आमंत्रित किया गया।
6. विस्तृत चर्चा के उपरान्त मेसर्स रैम्की इन्वायरो द्वारा रु0 7.00 प्रति किग्रा0 तथा मै0 भारत ऑयल कम्पनी (कुम्भी, कानपुर देहात स्थित टी0एस0डी0एफ0) द्वारा रु0 4.00 प्रति किग्रा0 हैजार्डस क्रोमियम वेस्ट के निस्तारण की दरें बताई गईं।

7. मुख्य सचिव महोदय उ०प्र० शासन की अध्यक्षता में दिनांक 29.11.2019 को हुई बैठक में निर्णय हुआ कि अवस्थापना एवं औद्योगिक विकास विभाग द्वारा कार्य योजना का क्रियान्वयन पर्यावरण, वन एवं जलवायु परिवर्तन विभाग के तकनीकी पर्यवेक्षण में किया जायेगा। राज्य स्तर पर तकनीकी सलाह हेतु अध्यक्ष, केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा नामित अधिकारी की अध्यक्षता में समिति गठित हुई।
8. प्रमुख सचिव, पर्यावरण, वन एवं जलवायु परिवर्तन, उ०प्र० शासन के कार्यालय ज्ञाप दिनांक 02 मार्च 2020 द्वारा सचिव, पर्यावरण, वन एवं जलवायु परिवर्तन, उ०प्र० शासन की अध्यक्षता में डम्प क्रोमियम हैजार्ड्स वेस्ट के निस्तारण एवं कन्टामिनेटेड स्वार्यल को एस०एल०एफ० में डालने एवं उसकी कैपिंग तथा दूषित भूगर्भीय जल के रिमेडियेशन की कार्ययोजना का क्रियान्वयन अवस्थापना एवं औद्योगिक विकास विभाग द्वारा किये जाने हेतु राज्य स्तर पर तकनीकी सलाहकार समिति गठित की गई।
9. राज्य स्तरीय तकनीकी सलाहकार समिति द्वारा "प्रोजेक्ट मानीटरिंग कन्सल्टेन्ट (पी०एम०सी०) का चयन तथा पी०एम०सी० के माध्यम से टेक्निकल बिड डाक्यूमेन्ट तैयार कराने तथा क्रियान्वयन के दौरान अनुश्रवण आदि सम्बन्धी कार्य सम्पादित किये जायेंगे।" जिला स्तर पर कार्ययोजना के अनुश्रवण कार्यों की प्रगति के अनुश्रवण हेतु जिलाधिकारी, कानपुर देहात की अध्यक्षता में जिला स्तरीय समिति का गठन किया गया। जिला स्तरीय समिति द्वारा "प्रत्येक माह प्रगति आख्या पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, उ०प्र० शासन को उपलब्ध कराई जायेगी"
10. केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा मै० ERM से बिड डाक्यूमेन्ट तैयार कराये गये उ०प्र० प्रदूषण नियंत्रण बोर्ड के द्वारा बिड डाक्यूमेन्ट यूपीसीडा को दिनांक 14.05.2020 को उपलब्ध कराया गया। बिड डाक्यूमेन्ट (रु० 34.23 करोड़) प्रथम का परिमार्जन एवं अनुमोदन राज्य स्तरीय समिति द्वारा दिनांक 14.05.2020 को किया गया, जिसके तुरन्त पश्चात उक्त कार्य हेतु दिनांक 14.05.2020 को प्रथम बार निविदा आमंत्रित की गई,।
11. निविदा की प्री-बिड मीटिंग दिनांक 20.05.2020 को हुई तथा प्री-बिड मीटिंग में प्राप्त सुझाव/वॉछित स्पष्टीकरण हेतु दिनांक 27.05.2020 को राज्य स्तरीय तकनीकी समिति की बैठक हुई। बैठक में चर्चा के उपरान्त संशोधित बिड डाक्यूमेन्ट का अनुमोदन प्रदान किया गया। जिसके Prebid के बाद निविदा दिनांक 01.07.2020 को खोली गई
12. Single Bid आने के कारण पुनः 10.07.2020 को द्वितीय बार उच्चाधिकारियों के निर्देश पर, महाप्रबन्धक के स्तर से निविदा आमंत्रित की गई जो कि दिनांक 28.07.2020 को खोली गई

- किन्तु पुनः Single Bid आने के कारण शीघ्रता के क्रम में पुनः तीसरी बार अल्पकालीन निविदा दिनांक 29.07.2020 को आमंत्रित की गई।
13. तृतीय बार की तकनीकी निविदा दिनांक 18.08.2020 को खोली गई निविदा में दो निविदाकारों ने भाग लिया जिसमें से मै0 रेम्की इन्चायरो प्रा0लि0 की निविदा तकनीकी रूप से अर्ह पायी गयी।
14. राज्य स्तरीय तकनीकी समिति द्वारा अनुमोदित बिड डाक्यूमेन्ट में उक्त कार्य की लागत रू0 34.23 करोड़ आंकी गई है। मेसर्स रैम्की इन्चायरों द्वारा आंकलित धनराशि रू0 34.23 करोड़ के विरुद्ध रू0 55.95 करोड़ धनराशि की निविदा डाली गई थी जो लगभग 63.45 प्रतिशत अधिक थी, जबकि दिनांक 07.01.2020 को प्रमुख सचिव, पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, उ0प्र0 शासन की अध्यक्षता में हुई बैठक में मेसर्स रैम्की द्वारा उपरोक्त कार्य के लिए रू0 7000/- प्रति टन की दर से अवगत कराया गया था। स्पष्टतः मै0 रैम्की द्वारा शासन को अवगत कराई गई दर रू0 7000/- प्रति मी0 टन के विपरीत रू0 8991- प्रति मी टन की दर डाली गई है।
15. चूँकि उपरोक्त कार्य भारत वर्ष में प्रथम बार किया जा रहा है अतः इस कार्य हेतु NEERI (National Environmental Engineering Research Institute) एवं देश के प्रतिष्ठित भारतीय प्रौद्योगिकी प्रतिष्ठान (IIT) से उपरोक्त आगणन, निविदा, भौतिक कार्य आदि कराने हेतु कन्सल्टेन्सी ले ली जाय जिससे कि इस विशिष्ट कार्य की आगणन, निविदा भौतिक कार्य आदि सुचारू रूप से सम्पन्न हो सके।
16. NEERI (National Environmental Engineering Research Institute), IIT, Kanpur, IIT Roorkee, IIT BHU एवं IIT Delhi को उपरोक्त कार्य की कन्सल्टेन्सी प्रदान करने हेतु पत्र निर्गत किया जा चुका है एवं व्यक्तिगत रूप से भी सम्पर्क किया जा रहा है। दिनांक 05.12.2020 तक आने वाले प्रस्तावों के अनुसार अग्रेतर कार्यवाही की जायेगी।


31/12/20
N.O. (N.C.T.)


03/12/2020
D.G.M.(C)



उत्तर प्रदेश जल निगम

Annexure-IV

प्रधान कार्यालय - 6-राणा प्रताप मार्ग, लखनऊ

पत्र संख्या - 911 / 022- 985-2019 / 2020

दिनांक-15.12.2020

सेवा में,

ई मेल द्वारा

श्री ए0एन0 बाजपेई,
(पी0पी0एस0)
मा0 सदस्य, ओवर साइट कमेटी,
एन0जी0टी0, उ0प्र0
लखनऊ।

विषय:-माननीय एन0जी0टी0 में योजित ओ0ए0 संख्या 985/2019 विद 986/2019 in Re: "Water pollution by Tanneries at Jajmau, Kanpur U. P. with Re: Water Pollution at Rania, Kanpur Dehat & Rakhi Mandi, Kanpur Nagar, U. P." में माह नवम्बर-2020 तक की मासिक प्रगति रिपोर्ट के सम्बन्ध में।

महोदय,

उपरोक्त विषयक कृपया अपने ई-मेल दिनांक 30.09.2020 का सन्दर्भ ग्रहण करने का कष्ट करें, जिसके द्वारा ओ0ए0 संख्या 985/2019 विद 986/2019 में मासिक प्रगति रिपोर्ट उपलब्ध कराये जाने की अपेक्षा की गयी है।

उक्त के क्रम में मुख्य अभियन्ता (कानपुर क्षेत्र), उ0प्र0 जल निगम, कानपुर के कार्यालय पत्रांक 3833/एम-13/154 दिनांक 14.12.2020 के माध्यम से प्राप्त माह नवम्बर-2020 एवं दिनांक 14.12.2020 तक की मासिक प्रगति रिपोर्ट संलग्न कर अग्रेतर कार्यवाही हेतु प्रेषित है।

संलग्नक :- उपरोक्तानुसार।

भवदीय

(रमेश रंजन)

संयुक्त प्रबन्ध निदेशक

पू.सं. एवम् दिनांक उपरोक्तानुसार।

प्रतिलिपि निम्नलिखित को अनुपालन आख्या की प्रति संलग्न कर आवश्यक कार्यवाही हेतु प्रेषित:-

1. प्रमुख सचिव, नगर विकास विभाग, उ0प्र0 शासन।
2. प्रमुख सचिव, वन पर्यावरण एवं जलवायु परिवर्तन विभाग, उ0प्र0 शासन।
3. सदस्य सचिव, उ0प्र0 प्रदूषण नियन्त्रण बोर्ड, गोमतीनगर, लखनऊ।

संयुक्त प्रबन्ध निदेशक

THE MONTHLY PROGRESS REPORT OF OA NO. 985/2019 WITH OA NO. 986/2019 IN RE: WATER POLLUTION BY TANNERIES IN
 JAJMAU, KANPUR U.P. WITH WATER POLLUTION AT RANIA, KANPUR DEHAT AND RAKHIMANDI, KANPUR NAGAR

Concerned Departments:

4. U.P. Jal Nigam

S.No.	Direction by Hon'ble NGT	Concerned Department	Compliance Status	Compliance Status Nov-2020	Compliance Status on dated 14, Dec -2020
4-	Steps taken for the supply of potable water to the residents of the affected area. In an earlier meeting dated 11.05.2020, it was informed that the water is being supplied through pipeline in Rakhimandi. It was also informed that piped water supply scheme costing rupees 2.90 crores has been sanctioned for Rania and the work	Jal Nigam, U.P.	Partially completed	1- For affected area of Rakhi Mandi, Kanpur Nagar, project amounting to Rs. 459 Lacs was sanctioned by UP Govt. on dated 22.10.2019. Works of this project got completed and commissioned on 15.01.2020 and safe water supply is being provided since then continuously to inhabitants of the affected area through providing 2510 m. pipe line and 225 household connections. 2- To provide safe water supply to village Khanchandpur of Rania area of district Kanpur Dehat, a project amounting to Rs. 298.46 Lacs was sanctioned by UP Govt. on dated 30.12.2019. In this project two tube wells, distribution system in 14.83 km., one overhead tank of 50 kl/12 m. staging capacity and 500 household connections are proposed. Out of the proposed works, both two tubewells constructed and commissioned, distribution system has been completed and	1- For affected area of Rakhi Mandi, Kanpur Nagar, project amounting to Rs. 459 Lacs was sanctioned by UP Govt. on dated 22.10.2019. Works of this project got completed and commissioned on 15.01.2020 and safe water supply is being provided since then continuously to inhabitants of the affected area through providing 2510 m. pipe line and 225 household connections. 2- To provide safe water supply to village Khanchandpur of Rania area of district Kanpur Dehat, a project amounting to Rs. 298.46 Lacs was sanctioned by UP Govt. on dated 30.12.2019. In this project two tube wells, distribution system in 14.83 km., one overhead tank of 50 kl/12 m. staging capacity and 500 household connections are proposed. Out of the proposed works, both two tubewells constructed and commissioned, distribution system has been completed and

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S.No.	Direction by Hon'ble NGT was to complete by August-2020.	Concerned Department	Compliance Status July	Compliance Status Nov-2020	Compliance Status on dated 14, Dec - 2020
5-	Status of recovery of EC: U.P. Jal Nigam is held liable to pay a sum of Rs 1 crore for releasing untreated large	Jal Nigam Up	Non Complied.	<p>Out of the proposed works, one no. tubewell constructed and commissioned, other one under progress, distribution system has been completed and 370 No. house connection has been provided.</p> <p>Safe water is being provided to the house holds of chromium affected areas in hamlets viz Chauhanpurva, Palpurva and Yadavpurva through one no. tube well and laid distribution system and old OHT since 15th July 2020.</p> <p>Work progress was not adversely affected by national lockdown due to Covid-19 pandemic, however works have been restarted since 5th May 2020 and balance works are in remaining one hamlet viz. Prasiddhipurva. However Prasiddhipurva is not chromium effected. Safe water is being provided to the house holds of Prasiddhipurva through tube well and laid distribution system since 12 Dec. 2020 and chromium effected 3 hamlet named as above are being supplied with safe water since 15-07-2020.</p>	<p>480 No. house connection has been provided. Safe water is being provided to the households of chromium affected areas in hamlets viz Chauhanpurva, Palpurva and Yadavpurva through one no. tube well and laid distribution system and old OHT since 15th July 2020.</p> <p>Work progress was not adversely affected by national lockdown due to Covid-19 pandemic, however works have been restarted since 5th May 2020 and balance works are in remaining one hamlet viz. Prasiddhipurva. However Prasiddhipurva is not chromium effected. Safe water is being provided to the house holds of Prasiddhipurva through tube well and laid distribution system since 12 Dec. 2020 and chromium effected 3 hamlet named as above are being supplied with safe water since 15-07-2020.</p>
5-	Status of recovery of EC: U.P. Jal Nigam is held liable to pay a sum of Rs 1 crore for releasing untreated large	Jal Nigam Up	Non Complied.	<p>A Civil Appeal vide diary no. 4835/2020 has been filed which is registered as C.A. No. 002924-002925 2020 on 07-08-2020 before the Hon. Supreme Court against the aforesaid order of Hon. Tribunal, stating the facts that all the sewer cleaning works had been</p>	<p>A Civil Appeal vide diary no. 4835/2020 has been filed which is registered as C.A. No. 002924-002925 2020 on 07-08-2020 before the Hon. Supreme Court against the aforesaid order of Hon. Tribunal, stating the facts that all the sewer cleaning works had been</p>

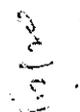
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Direction by Hon'ble NGT	Concerned Department	Compliance Status July	Compliance Status Nov-2020	Compliance Status on dated 14, Dec - 2020
quantity of sewage containing toxic chromium in river Ganga.			cleaning works had been executed with the permission of State Government and it is permissible under sec. 24 of water prevention and control act 1974. It was listed on 24-08-2020 in which Hon'ble Supreme Court registered the case with CA No. 988 to 989 of 2020. At present works of trunk sewer rehabilitation has been completed and sewage is being treated at Jajmau cluster of STPs without any interruption since October 2019.	executed with the permission of State Government and it is permissible under sec. 24 of water prevention and control act 1974. It was listed on 24-08-2020 in which Hon'ble Supreme Court registered the case with CA No. 988 to 989 of 2020. At present works of trunk sewer rehabilitation has been completed and sewage is being treated at Jajmau cluster of STPs without any interruption since October 2019.
			As far as deposit of E.C. is concerned, Jal Nigam is waiting for the decision of Hon'ble Supreme Court which is listed on 06.01.2021	As far as deposit of E.C. is concerned, Jal Nigam is waiting for the decision of Hon'ble Supreme Court which is listed on 06.01.2021
			For environmental compensation notice received from UPPCB. A detailed reply has been sent to UPPCB vide letter No. 3726/W-18/104 Dt. 06-12-2019	For environmental compensation notice received from UPPCB, A detailed reply has been sent to UPPCB vide letter No. 3726/W-18, 104 Dt. 06-12-2019


 Project Manager
 Pollution Control Unit,
 U.P. Jal Nigam,
 Kanpur


 General Manager
 Ganga Pollution Control Unit,
 U.P. Jal Nigam,
 Kanpur


 Superintending Engineer
 XIV Circle,
 U.P. Jal Nigam,
 Kanpur


 Chief Engineer (K.Z.)
 U.P. Jal Nigam,
 Kanpur



पत्रांक : 3833/ M-3 / 134

दिनांक : - 14/12/2020

सेवा में,

मुख्य अभियंता (गंगा),
उ० प्र० जल निगम,
लखनऊ।

विषय: माननीय राष्ट्रीय हरित अधिकरण, नई दिल्ली द्वारा OA No. 985/2019 with 986/2019 in Re: Water Pollution by Tanneries at Jajmau, Kanpur U.P. with Re: Water Pollution at Rania Kanpur Dehat and Rakhimandi, Kanpur Nagar, U.P. में पारित आदेश दिनांक 15.11.2019 के अनुपालन की अद्यतन स्थिति के सम्बन्ध में।

महोदय,

कृपया उपरोक्त विषयक आपके पत्रांक 671/022 04/985-2019/2020 दिनांक 06.10.2020 के क्रम में माननीय एन.जी.टी. में विचाराधीन याचिका संख्या ओ०ए० 985/2019 एवं ओ०ए० 986/2019 में पारित आदेश में उल्लिखित मा० ओवर साईट कमेटी की संस्तुतियों पर दिनांक 14.12.2020 तक की अद्यतन अनुपालन आख्या संलग्न कर प्रेषित की जा रही है।

संलग्नक : उपरोक्तानुसार।

भवदीय

(राम शरण)

मुख्य अभियंता (कानपुर क्षेत्र)

पृ.सं. एवं दिनांक उपरोक्तानुसार।

प्रतिलिपि निम्नलिखित को संलग्नक सहित सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित :-

1. मुख्य अभियंता (गंगा), उ० प्र० जल निगम, लखनऊ।
2. अधीक्षण अभियंता, चतुर्दश मण्डल, उ० प्र० जल निगम, कानपुर।
3. महाप्रबंधक, गंगा प्रदूषण नियंत्रण इकाई, उ० प्र० जल निगम, कानपुर।
4. उपसचिव (सामन्वय), मुख्य अभियंता (गंगा क्षेत्र), उ० प्र० जल निगम, गाजियाबाद।
5. गार्ड फाइल।

संलग्नक : उपरोक्तानुसार।

मुख्य अभियंता (कानपुर क्षेत्र)

प्रेषक,

निदेशक (स्वास्थ्य)
चिकित्सा एवं स्वास्थ्य सेवाएं,
उत्तर प्रदेश, लखनऊ।

सेवा में,

माननीय अध्यक्ष,
ओवरसाइट कमेटी,
मा0 राष्ट्रीय हरित अधिकरण, उ0प्र0, लखनऊ।

पत्रांक--निदे0स्वा0 / कैम्प / 2020-21 / 1069

दिनांक 11 दिसम्बर, 2020

विषय--मा0 एन0जी0टी0 के केस संख्या--OA No- 985/2019 with 986/2019 in Re:Water Pollution by
Tanneries at JAJMAU, Kanpur with IN Re: Water Pollution at Rania, Kanpur Dehat & Rakhi
Mandi, Kanpur Nagar में पारित आदेश दिनांक 15.11.2019 के सम्बन्ध में।

महोदय,

उपर्युक्त विषय के सम्बन्ध में मुख्य चिकित्साधिकारी, कानपुर नगर के द्वारा दिनांक 25.11.2020 को राखीमंडी क्षेत्र में एवं दिनांक 02.12.2020 को जाजमऊ क्षेत्र में तथा मु0चि0अ0, कानपुर देहात के द्वारा ग्राम खानचंद्रपुर, सरवनखेडा, रनिया में दिनांक 06.08.2020, 19.08.2020, 28.08.2020, 07.09.2020, 26.09.2020, 07.10.2020, 22.10.2020, 31.10.2020, 07.11.2020, 15.11.2020 एवं 24.11.2020 को स्वास्थ्य सर्वेक्षण कराया गया। (रिपोर्ट की छायाप्रति संलग्न)

डॉ0 पतन्त कुमार पाठक समुक्त निदेशक (स्वास्थ्य), स्वास्थ्य सेवा महानिदेशालय, उ0प्र0, लखनऊ के द्वारा जनपद कानपुर नगर में जाजमऊ और राखी मंडी स्थलों से सम्बंधित रिपोर्टों का भौतिक सत्यापन डॉ0 अनिल कुमार मिश्रा, मुख्य चिकित्साधिकारी, कानपुर नगर एवं डॉ0 महेश कुमार, अपर मुख्य चिकित्साधिकारी, कानपुर नगर के साथ सम्मिलित रूप से दिनांक 07.12.2020 को किया गया। इस के अलावा प्रभावित क्षेत्रों में हुये स्वास्थ्य कैम्प के सम्बन्ध में अवगत कराना है कि स्वास्थ्य सर्वेक्षण में पाये गये अस्वस्थ मरीजों के रोग के प्रकार एवं उनकी संख्या तथा अन्य क्षेत्रों में रोग के प्रकार व उनकी संख्या में तुलनात्मक रूप से कोई विषमता नहीं पाई गयी है। इस प्रकरण में दोनों जनपदों के मुख्य चिकित्साधिकारियों को निर्देशित कर दिया गया है कि उपरोक्त स्थलों में प्रत्येक माह में दो बार आवश्यक से रूप स्वास्थ्य परीक्षण कराया जाय तथा संबंधित सर्वेक्षण आख्या महानिदेशालय को सम्मय ई-मेल directorhealth2012@gmail.com पर उपलब्ध कराना सुनिश्चित किया जाये।

संलग्नक--संपर्कानुसार।

भवदीय,

निदेशक, स्वास्थ्य

पत्रांक--निदे0स्वा0 / कैम्प / 2020-21 /

तददिनांक।

प्रतिलिपि--निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. पर्यावरण वन एवं जलवायु परिवर्तन विभाग / उ0प्र0 प्रदूषण नियन्त्रण बोर्ड।
2. स्टाफ ऑफिसर, महानिदेशक, चिकित्सा एवं स्वास्थ्य, उ0प्र0।
3. श्री शिव गोपाल सिंह, उप सचिव, अनु0-7 उ0प्र0 शासन।
4. मुख्य चिकित्सा अधिकारी, कानपुर नगर एवं कानपुर देहात।

संयुक्त निदेशक (स्वास्थ्य)

प्रेमक-

निदेशक (स्वास्थ्य)
चिकित्सा एवं स्वास्थ्य सेवायें,
उत्तर प्रदेश, लखनऊ।

सेवा में

माननीय अध्यक्ष
ओवरसाइट कमेटी,
मा0 राष्ट्रीय हरित अधिकरण, उ0प्र0, लखनऊ

दिनांक 11 दिसम्बर, 2020

पत्रांक-निदे0स्वा0/कैम्प/2020-21/

विषय-मा0 एन0जी0टी0 के केस संख्या--OA No- 985/2019 with 986/2019 in Re:Water Pollution by
Tanneries at JAJMAU, Kanpur with IN Re: Water Pollution at Rania, Kanpur Dehat & Rakhi
Mandi, Kanpur Nagar में पारित आदेश दिनांक 15.11.2019 के सम्बन्ध में।

महोदय,

उपर्युक्त विषय के सम्बन्ध में मुख्य चिकित्साधिकारी, कानपुर नगर के द्वारा दिनांक 25.11.2020 को राखीमन्डी क्षेत्र में एवं दिनांक 02.12.2020 को जाजमऊ क्षेत्र में तथा मु0चि0अ0, कानपुर देहात के द्वारा ग्राम खानचंद्रपुर, सरवनखेडा, रनिया में दिनांक 06.08.2020, 19.08.2020, 28.08.2020, 07.09.2020, 26.09.2020, 07.10.2020, 22.10.2020, 31.10.2020, 07.11.2020, 15.11.2020 एवं 24.11.2020 को स्वास्थ्य सर्वेक्षण कराया गया। (रिपोर्ट की छायाप्रति सलग्न)

डा0 यतेंद्र कुमार पाठक, संयुक्त निदेशक (स्वास्थ्य) स्वास्थ्य सेवा महानिदेशालय, उ0प्र0, लखनऊ के द्वारा जनपद कानपुर नगर में जाजमऊ और राखी नन्डी स्थलों से सम्बंधित रिपोर्टों का भौतिक सत्यापन डा0 अनिल कुमार मिश्रा, मुख्य चिकित्साधिकारी, कानपुर नगर एवं डा0 महेश कुमार अपर मुख्य चिकित्साधिकारी, कानपुर नगर के साथ सम्मिलित रूप से दिनांक 07.12.2020 को किया गया। इस के अलावा प्रभावित क्षेत्रों में हुये स्वास्थ्य कैम्प के सम्बन्ध में अद्यतन कराना है कि स्वास्थ्य सर्वेक्षण में पाये गये अस्वास्थ्य मरीजों के रोग के प्रकार एवं उनकी संख्या तथा अन्य क्षेत्रों में रोग के प्रकार व उनकी संख्या में तुलनात्मक रूप से कोई विषमता नहीं पाई गयी है। इस प्रकरण में दोनों जनपदों के मुख्य चिकित्साधिकारियों को निर्देशित कर दिया गया है कि उपरोक्त स्थलों में प्रत्येक माह में दो बार अवश्य रूप से स्वास्थ्य परीक्षण कराया जाय तथा संबंधित सर्वेक्षण आख्या महानिदेशालय को रासमट ई-मेल directorhealth2012@gmail.com पर उपलब्ध कराना सुनिश्चित किया जाये।

सलग्नक-उपरोक्तानुरार।

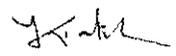
भवदीय,

निदेशक, स्वास्थ्य

पत्रांक-निदे0स्वा0/कैम्प/2020-21/1070-73 तददिनांक।

प्रतिलिपि-निम्नलिखित को सूचनाार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. पर्यावरण वन एवं जलवायु परिवर्तन विभाग/उ0प्र0 प्रदूषण नियन्त्रण बोर्ड।
2. स्टाफ ऑफिसर, महानिदेशक चिकित्सा एवं स्वास्थ्य उ0प्र0।
3. श्री शिव गोपाल सिंह, उप सचिव, अनु0-7, उ0प्र0 शासन।
4. मुख्य चिकित्सा अधिकारी, कानपुर नगर एवं कानपुर देहात।


संयुक्त निदेशक (स्वास्थ्य)

प्रेषक,

संयुक्त निदेशक (स्वास्थ्य)
चिकित्सा एवं स्वास्थ्य सेवाएँ,
उत्तर प्रदेश, लखनऊ।

सेवा में,

निदेशक (स्वास्थ्य)
चिकित्सा एवं स्वास्थ्य सेवाएँ,
उत्तर प्रदेश, लखनऊ।

पत्रांक-निदेशक/कैम्प/2020-21/1067

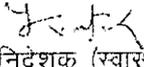
दिनांक 9 दिसम्बर, 2020

विषय- मा0 एन0जी0टी0 के केस संख्या-OA No- 985/2019 with 986/2019 in Re:Water Pollution by Tanneries at Rakhi Mandi & JAJMAU, Kanpur Nagar के सम्बन्ध में निरीक्षण आख्या।

महोदय,

उपर्युक्त विषय के सम्बन्ध में मुख्य चिकित्साधिकारी, कानपुर नगर के द्वारा राखीमंडी में स्वास्थ्य परीक्षण कराया गया था। जाजमऊ में नगरीय प्राथमिक स्वास्थ्य केन्द्र स्थित है वहाँ नियमित रूप से मरीजों को चिकित्सा से संबंधित सुविधाएं उपलब्ध करायी जा रही हैं। इस संबंध में दिनांक 07.12.2020 को कानपुर नगर जाकर जाजमऊ और राखी मंडी स्थलों से सम्बंधित रिपोर्टों के संबंध में वार्ता की तथा डा0 अनिल कुमार मिश्रा, मुख्य चिकित्साधिकारी, कानपुर नगर एवं डा0 महेश कुमार, अपर मुख्य मुख्यचिकित्साधिकारी, कानपुर नगर के साथ सम्मिलित रूप से दिनांक 07.12.2020 को स्थलीय निरीक्षण किया गया। वहाँ भेजे गये सामान्य से मुलाकात भी की थी। मुझे प्रभावित क्षेत्रों में हुए स्वास्थ्य कैम्प के सम्बन्ध में आपसे अवगत कराना है कि मुझे मिली जानकारी के अनुसार स्वास्थ्य सर्वेक्षण में पाये गये अस्वस्थ मरीजों के रोग के प्रकार एवं उनकी संख्या तथा अन्य क्षेत्रों में रोग के प्रकार एवं उनकी संख्या में तुलनात्मक रूप से कोई विशेषता नहीं पाई गयी है। इस प्रकार से मुझे यह कहना है कि राखीमंडी में प्रत्येक माह में दो बार आवश्यक रूप से स्वास्थ्य परीक्षण कराया जाय तथा संबंधित सर्वेक्षण आख्या महानिदेशालय को ससमय ई-मेल directorhealth2012@gmail.com पर उपलब्ध कराना भी सुनिश्चित किया जाय। इसके अलावा जाजमऊ नगरीय प्राथमिक स्वास्थ्य केन्द्र के ओपी0डी0 रजिस्टर का संबंधित अपर मुख्य चिकित्साधिकारी, के द्वारा अपडेटेड किया जाय तथा इसकी सूचना मुख्य चिकित्साधिकारी, कानपुर नगर एवं निदेशक(स्वास्थ्य) को समय-समय पर उपलब्ध कराना सुनिश्चित किया जाय।

भवदीय


संयुक्त निदेशक (स्वास्थ्य)

पत्रांक- निदेशक/कैम्प/2020-21/

तददिनांक।

प्रतिनिधि-निम्नलिखित को सूचनाार्थ एक आवश्यक कार्यवाही हेतु प्रेषित।

- 1 मुख्य चिकित्सा अधिकारी कानपुर नगर।

संयुक्त निदेशक (स्वास्थ्य)

प्रेषक,

सयुक्त निदेशक (स्वास्थ्य)
चिकित्सा एवं स्वास्थ्य सेवाएँ,
उत्तर प्रदेश, लखनऊ।

सेवा में,

मुख्य चिकित्साधिकारी,
कानपुर नगर, उत्तर प्रदेश।

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पत्रांक--निदे०स्वा०/कैम्प/2020-21/1052

दिनांक--8 दिसम्बर, 2020

विषय--मा० एन०जी०टी० के केस संख्या--OA No- 985/2019 in Re:Water Pollution by Tanneries at JAJMAU, Kanpur & Rakhi Mandi, Kanpur Nagar से सम्बन्धित रिपोर्ट के भौतिक सत्यापन के सम्बन्ध में।

महोदय,

उपर्युक्त विषय के सम्बन्ध में मेरे द्वारा कल दिनांक 07.12.2020 को आपके जनपद के जाजमऊ और राखी मण्डी से सम्बन्धित रिपोर्टों का भौतिक सत्यापन किया गया तथा आप (मु०चि०अ०, कानपुर नगर) एवं डा० महेश कुमार, अपर मुख्य चिकित्साधिकारी, कानपुर नगर के साथ उपरोक्त स्थल का भौतिक निरीक्षण भी किया। जाजमऊ में नगरीय प्राथमिक स्वास्थ्य केन्द्र स्थित है एवं यह सुचारु रूप से कार्य कर रहा है लेकिन राखी मण्डी में नगरीय प्राथमिक स्वास्थ्य केन्द्र नहीं है इसलिये वहाँ वर्तमान की तरह हर माह में कम से कम दो दिन स्वास्थ्य कैम्प आयोजित किये जाये जिससे स्थानीय नागरिकों को सामान्य रोगों के अतिरिक्त प्रदूषण से होने वाली संभावित बीमारी का भी निदान एवं उपचार हो सके। यद्यपि अभी तक कानपुर नगर के अन्य क्षेत्रों की तुलना में यहाँ पर अधिक व्यक्तियों के बीमार होने के साक्ष्य नहीं मिले हैं लेकिन इन दोनों ही जगहों पर विशेष साफ-सफाई की आवश्यकता है। इस हेतु विशेष स्वच्छता अभियान चलाया जाना अति-आवश्यक होगा।

अतः उक्त के दृष्टिगत आप अपने स्तर से सम्बन्धित विभागों के अधिकारी के माध्यम से उक्त स्थानों यथा जाजमऊ एवं राखी मण्डी पर स्वच्छता अभियान चलाया जाना सुनिश्चित करें।

भवदीय,

DL (D. J. K. PATHAK)
स० निदेशक, स्वास्थ्य

पत्रांक--निदे०स्वा०/कैम्प/2020-21/1053-55 तददिनांक।

प्रतिलिपि--निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. जिलाधिकारी, कानपुर नगर का इस आशय के साथ प्रेषित कि उपरोक्त स्थल की साफ-सफाई के लिये सम्बन्धित विभाग के अधिकारियों को निर्देशित करने का कष्ट करें।
2. स्टाफ ऑफिसर, महानिदेशक, चिकित्सा एवं स्वास्थ्य, उ०प्र०, लखनऊ, उत्तर प्रदेश।
3. निदेशक, राष्ट्रीय कार्यक्रम, चिकित्सा एवं स्वास्थ्य, उ०प्र०।

DL (D. J. K. PATHAK)
स० निदेशक (स्वास्थ्य)

प्रेषक,

संयुक्त निदेशक (स्वास्थ्य)
चिकित्सा एवं स्वास्थ्य सेवाएँ,
उत्तर प्रदेश, लखनऊ।

सेवा में

निदेशक (स्वास्थ्य)
चिकित्सा एवं स्वास्थ्य सेवाएँ
उत्तर प्रदेश, लखनऊ।

पत्रांक-निदे0स्वा0/कैम्प/2020-21/

दिनांक 9 दिसम्बर, 2020

विषय- मा0 एन0जी0टी0 के केस संख्या-OA No- 985/2019 with 986/2019 in Re:Water Pollution by Tanneries at Rakhi Mandi & JAJMAU, Kanpur Nagar के सम्बन्ध में निरीक्षण आख्या।

महोदय

उपर्युक्त विषय के सम्बन्ध में मुख्य चिकित्साधिकारी, कानपुर नगर के द्वारा राखीमंडी में स्वास्थ्य परीक्षण कराया गया था। जाजमऊ में नगरीय प्राथमिक स्वास्थ्य केन्द्र, स्थित है वहां नियमित रूप से मरीजों को चिकित्सा से संबंधित सुविधाएं उपलब्ध करायी जा रही है, इस संबंध में दिनांक 07.12.2020 को कानपुर नगर जाकर जाजमऊ और राखी मंडी स्थलों से सम्बंधित रिपोर्टों के संबंध में वार्ता की तथा डा0 अनिल कुमार मिश्रा, मुख्य चिकित्साधिकारी, कानपुर नगर एवं डा0 गहेश कुमार अपर मुख्य मुख्यचिकित्साधिकारी कानपुर नगर के साथ सम्मिलित रूप से दिनांक 07.12.2020 को स्थलीय निरीक्षण किया गया। तथा मेरे एवं सामान्य से मुलाकात भी की थी। मुझे प्रभावित क्षेत्रों में हुए स्वास्थ्य कैम्प के सम्बन्ध में आपको अवगत कराना है कि मुझे मिली जानकारी के अनुसार स्वास्थ्य सर्वेक्षण में पाए गए अस्वास्थ्य मरीजों के रोग के प्रकार एवं उनकी संख्या तथा अन्य क्षेत्रों में रोग के प्रकार एवं उनकी संख्या में गुलनात्मक रूप से कोई विषमता नहीं पाई गयी है। इस प्रकरण में मुझे यह कहना है कि राखीमंडी में प्रत्येक माह में दो बार आवश्यक रूप से स्वास्थ्य परीक्षण कराया जाय तथा संबंधित सर्वेक्षण आख्या महानिदेशालय को ससमय ई-मेल directorhealth2012@gmail.com पर उपलब्ध कराना भी सुनिश्चित किया जाये। इसके अलावा जाजमऊ नगरीय प्राथमिक स्वास्थ्य केन्द्र के ओपी0डी0 रजिस्टर में संबंधित अपर मुख्य चिकित्साधिकारी, के द्वारा उपलक्षण किया जाये तथा इराकी रूतना मुख्य चिकित्साधिकारी, कानपुर नगर एवं निदेशक(स्वास्थ्य) को समय-समय पर उपलब्ध कराना सुनिश्चित किया जाय।

भवदीय,

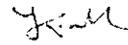
संयुक्त निदेशक (स्वास्थ्य)

पत्रांक-निदे0स्वा0/कैम्प/2020-21/1068

तद्दिनांक।

प्रतिलिपि-निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1 मुख्य चिकित्सा अधिकारी कानपुर नगर।


संयुक्त निदेशक (स्वास्थ्य)

प्रेषक,

महानिदेशक,
चिकित्सा एवं स्वास्थ्य सेवायें,
उत्तर प्रदेश, लखनऊ।

सेवा में,

मा0 अध्यक्ष
ओवरसाइट कमेटी,
राष्ट्रीय हरित अधिकरण, उ0प्र0, लखनऊ।

पत्रांक: निदे0स्वा0/कैम्प/2020-21/ 243

लखनऊ/ दिनांक: 14 मई, 2020

विषय:-मा0 एन0जी0टी0 द्वारा OA No985/2019 with 986/2019 in Re-Water pollution by tanneries at Jajmau, Kanpur UP with in Re: Water pollution at Rania, KanpurDehat & Rakhi Mandi, Kanpur Nagar,U.P.में पारित आदेश दिनांक 15.11.2019 के सम्बन्ध में।

महोदय,

उपरोक्त विषयक दिनांक 13.05.2020 को आयोजित बैठक में दिये गये निर्देशों के अनुपालन में रनिया, जनपद-कानपुर देहात तथा राखी मण्डी, जनपद कानपुर में लगाये गये स्वास्थ्य कैम्पों की रिपोर्ट एवं भारतीय विषविज्ञान अनुसंधान संस्थान, लखनऊ द्वारा प्रेषित विश्लेषण/सर्वे रिपोर्ट आपके सादर अवलोकनार्थ प्रेषित की जा रही है।

सादर सूचनार्थ प्रेषित।

संलग्नक-यथोपरि।

भवदीय

E/C निदेशक, स्वास्थ्य
तददिनांक

पत्रांक: निदे0(स्वा0)/कैम्प/2020-21/ 244-246

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. प्रमुख सचिव, चिकित्सा स्वास्थ्य एवं परिवार कल्याण, उ0प्र0 शासन।
2. सचिव, चिकित्सा स्वास्थ्य एवं परिवार कल्याण, उ0प्र0 शासन।
3. स्टाफ ऑफिसर, महानिदेशक, चिकित्सा एवं स्वास्थ्य, उत्तर प्रदेश।

C/L निदेशक (स्वास्थ्य)

Dinesh
14.05.2020

प्रेषक,

महानिदेशक,
चिकित्सा एवं स्वास्थ्य सेवायें,
उत्तर प्रदेश, लखनऊ।

सेवा में,

मा0 अध्यक्ष
ओवरसाइट कमेटी,
राष्ट्रीय हरित अधिकरण, उ0प्र0, लखनऊ।

पत्रांक: निदे0स्वा0/कैम्प/2020-21/ 243

लखनऊ/ दिनांक: 14 मई, 2020

विषय:—मा0 एन0जी0टी0 द्वारा OA No985/2019 with 986/2019 in Re-Water pollution by tanneries at Jajmau, Kanpur UP with in Re: Water pollution at Rania, KanpurDehat & Rakhi Mandi, Kanpur Nagar,U.P.में पारित आदेश दिनांक 15.11.2019 के सम्बन्ध में।

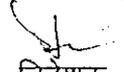
महोदय,

उपरोक्त विषयक दिनांक 13.05.2020 को आयोजित बैठक में दिये गये निर्देशों के अनुपालन में रनिया, जनपद—कानपुर देहात तथा राखी मण्डी, जनपद कानपुर में लगाये गये स्वास्थ्य कैम्पों की रिपोर्ट एवं भारतीय विषविज्ञान अनुसंधान संस्थान, लखनऊ द्वारा प्रेषित विश्लेषण/सर्वे रिपोर्ट आपके सादर अवलोकनार्थ प्रेषित की जा रही है।

सादर सूचनार्थ प्रेषित।

संलग्नक—यथोपरि।

भवदीय



निदेशक, स्वास्थ्य
तद्दिनांक

पत्रांक: निदे0(स्वा0)/कैम्प/2020-21/

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. प्रमुख सचिव, चिकित्सा स्वास्थ्य एवं परिवार कल्याण, उ0प्र0 शासन।
2. सचिव, चिकित्सा स्वास्थ्य एवं परिवार कल्याण, उ0प्र0 शासन।
3. स्टाफ ऑफिसर, महानिदेशक, चिकित्सा एवं स्वास्थ्य, उत्तर प्रदेश।

निदेशक (स्वास्थ्य)

प्रेषक,

महानिदेशक,
चिकित्सा एवं स्वास्थ्य सेवायें,
उत्तर प्रदेश, लखनऊ।

सेवा में,

मा0 अध्यक्ष
ओवरसाइट कमेटी,
राष्ट्रीय हरित अधिकरण, उ0प्र0, लखनऊ।

पत्रांक: निदे0स्वा0 / कैम्प / 2020-21 /

लखनऊ / दिनांक: 14 मई, 2020

विषय:—मा0 एन0जी0टी0 द्वारा OA No985/2019 with 986/2019 in Re-Water pollution by tanneries at Jajmau, Kanpur UP with in Re: Water pollution at Rania, KanpurDehat & Rakhi Mandi, Kanpur Nagar, U.P. में पारित आदेश दिनांक 15.11.2019 के सम्बन्ध में।

महोदय,

उपरोक्त विषयक दिनांक 13.05.2020 को आयोजित बैठक में दिये गये निर्देशों के अनुपालन में रनिया, जनपद—कानपुर देहात तथा राखी मण्डी, जनपद कानपुर में लगाये गये स्वास्थ्य कैम्पों की रिपोर्ट एवं भारतीय विषविज्ञान अनुसंधान संस्थान, लखनऊ द्वारा प्रेषित विश्लेषण/सर्वे रिपोर्ट आपके सादर अवलोकनार्थ प्रेषित की जा रही है।

सादर सूचनार्थ प्रेषित।

संलग्नक—यथोपरि।

भवदीय

निदेशक, स्वास्थ्य
तददिनांक

पत्रांक: निदे0(स्वा0) / कैम्प / 2020-21 / 244-246

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. प्रमुख सचिव, चिकित्सा स्वास्थ्य एवं परिवार कल्याण, उ0प्र0 शासन।
2. सचिव, चिकित्सा स्वास्थ्य एवं परिवार कल्याण, उ0प्र0 शासन।
3. स्टाफ ऑफिसर, महानिदेशक, चिकित्सा एवं स्वास्थ्य, उत्तर प्रदेश।


निदेशक (स्वास्थ्य)

Kanpur Dehat

S.no	District Name	PHC/UPHC Name	No. of Doctors	No. of Para Medical Staff	No. of Male Patients Registered	No. of Female Patients Registered	No. of Child Patients Registered	Total No. of Patients	No. of Patient (Liver)	No. of Patient (Respiratory)	No. of Patient (Gastro)	No. of Patient (Diabetes)	No. of Patient (Skin)	No. of Patient (TB Suspected)	No. of Patient (Anemia)	No. of Patient (Hypertension)	No. of Patient (Cancer)	No. of Patient Referred	No. of Patient (Mat/Inf/Child)	No. of Patient (Other)	
02-02-2020	1	Kanpur Dehat	Sarawankheda	3	3	25	15	18	58	0	0	0	0	0	0	0	0	1	0	0	
09-02-2020	2	Kanpur Dehat	Sarawankheda	3	3	52	64	22	138	7	16	12	2	8	1	6	1	1	10	2	
16-02-2020	3	Kanpur Dehat	Sarawankheda	3	4	51	54	19	124	0	6	15	5	20	0	6	1	0	9	2	
23-02-2020	4	Kanpur Dehat	Sarawankheda	4	13	71	81	25	177	10	30	30	20	4	2	15	20	0	8	2	
01-03-2020	5	Kanpur Dehat	Sarawankheda	3	10	52	48	22	122	6	8	4	4	11	2	6	2	0	9	2	
08-03-2020	6	Kanpur Dehat	Sarawankheda	3	12	54	52	22	128	8	4	10	2	8	4	10	2	0	13	3	
15-03-2020	7	Kanpur Dehat	Sarawankheda	3	16	58	42	26	126	6	18	4	6	18	6	4	0	7	3	5	
Total				22	61	363	356	154	873	37	82	75	39	69	15	47	26	1	57	14	33

3

Kanpur Dehat

S.no	District Name	PHC/UC Name	No. of Doctors	No. of Para Medical Staff	No. of Male Registered Patients	No. of Female Registered Patients	No. of Child Registered Patients	Total No. of Patients	No. of Patient (Liver)	No. of Patient (Respiratory)	No. of Patient (Gastro)	No. of Patient (Diabetes)	No. of Patient (Skin)	No. of Patient (TB Suspected)	No. of Patient (Anemia)	No. of Patient (Hypertension)	No. of Patient (Cancer)	No. of Patient Referred	No. of Patient (Main Nutrition Child)	No. of Patient (Other Disease)
02-02-2020	Kanpur Dehat	Rania	3	3	40	81	18	139	0	0	0	0	0	0	0	0	0	1	0	0
09-02-2020	Kanpur Dehat	Rania	3	3	62	41	12	115	12	6	4	1	6	2	6	1	0	4	2	64
16-02-2020	Kanpur Dehat	Rania	2	6	54	37	23	114	0	6	18	2	32	0	1	1	0	8	1	47
23-02-2020	Kanpur Dehat	Rania	3	17	71	153	21	245	18	26	32	12	71	3	6	0	4	11	2	63
01-03-2020	Kanpur Dehat	Rania	3	16	66	150	18	234	6	22	11	2	16	2	9	5	0	19	1	139
08-03-2020	Kanpur Dehat	Rania	2	17	68	96	38	202	16	24	14	4	18	2	11	0	0	13	4	104
15-03-2020	Kanpur Dehat	Rania	2	21	72	84	42	198	11	14	8	4	10	3	8	4	0	11	4	116
Total			18	83	433	642	172	1247	63	98	87	25	153	12	41	11	4	67	14	533

(3)

Kanpur Naagr

S.no	District Name	PHCU/PHC Name	No. of Doctors	No. of Para Medical Staff	No. of Male Patients Registered	No. of Female Patients Registered	No. of Child Patients Registered	Total No. of Patients	No. of Patient (Liver)	No. of Patient (Respiratory)	No. of Patient (Gastro)	No. of Patient (Diabetes)	No. of Patient (Skin)	No. of Patient (TB Suspected)	No. of Patient (Anemia)	No. of Patient (Hypertension)	No. of Patient (Cancer)	No. of Patient Referred (Malnutrition Child)	No. of Patient (Other Diseases)	
02-02-2020	1	Kanpur Nagar	DTC-Anwarganj	3	3	8	10	2	20	0	0	0	0	0	0	0	0	0	0	
09-02-2020	2	Kanpur Nagar	DTC-Anwarganj	3	3	25	20	10	55	1	8	2	3	12	0	0	0	0	1	27
16-02-2020	3	Kanpur Nagar	DTC-Anwarganj	2	3	11	20	9	40	0	0	0	8	9	0	0	3	0	2	20
23-02-2020	4	Kanpur Nagar	DTC-Anwarganj	2	3	40	39	10	89	0	0	0	20	26	1	11	0	5	0	29
01-03-2020	5	Kanpur Nagar	DTC-Anwarganj	5	3	36	35	18	89	8	7	12	24	12	0	20	0	0	0	5
08-03-2020	6	Kanpur Nagar	DTC-Anwarganj	3	3	50	43	11	104	4	24	3	29	40	1	1	0	0	0	2
15-03-2020	7	Kanpur Nagar	DTC-Anwarganj	2	3	3	3	2	8	0	0	0	2	2	0	1	0	0	0	3
Total			20	21	173	170	62	405	13	39	17	86	101	2	0	36	0	7	1	86

(5)

Kanpur District Chromium Dump Site Visit Report



Submitted by -

Dr. R Harsvardhan

Head, Department of Hospital Administration, SGPGIMS

For & On Behalf of the

Expert Committee constituted by Principal Secretary, Department of Medical,
Health & Family Welfare, GoUP

28 December 2019

Site Visit Report

Subject: Report of the Site Visit and Recommendations by the Committee constituted under instructions by Principal Secretary, Department of Medical, Health & Family Welfare, Govt. of Uttar Pradesh.

Background summary: National Green Tribunal instructed Govt. of Uttar Pradesh to ascertain the ill-effects of chromium dump in Kanpur at 2 sites. Principal Secretary, Department of Medical, Health & Family Welfare, Govt. of Uttar Pradesh constituted a Committee for the same and directed the Committee to submit its report.

Problem statement:

An issue of possible chromium toxicity has recently been anticipated due to possible drainage of untreated sewage discharge containing toxic chromium into Ganga in Kanpur. This is expected to result in contamination of groundwater affecting the health and life of the inhabitants and fauna. This may expose inhabitants to serious health hazards. It was also claimed that this problem is existing since last almost 40 years. Major affected sites identified were Rania in Kanpur Dehat and Rakhi Mandi in Kanpur Nagar, U.P. In Rania area, there seems probability of mercury toxicity. All the plan of action will apply equally for mercury toxicity as well after suitable logistical considerations which will add to investigations.

As per recent report provided by CMO Kanpur Nagar of health camp at Rakhi Mandi (dated 24 Nov 2019) and CMO Kanpur Dehat (dated 28 Nov 2019) of health camp at village Khan Chandpur, majority of the health condition identified were of skin, gastrointestinal tract, and respiratory system followed by some cases of anaemia and musculoskeletal problems.

Existing evidence

Clinical manifestation of chromium toxicity depends on the way of entry to the body (i.e. inhalational, ingestion and/ or dermal contact) and site of accumulation of chromium. Some of the common health conditions related to the chromium exposure are: are gastrointestinal (irritation and ulcer), anemia, bronchial asthma, lung and nasal ulcers and cancers, skin allergies, reproductive and developmental problems and this chromium is carcinogenic in nature.

Study conducted by Sharma P. *et al.* (2012) in Kanpur also concluded that the residents living in chromium contaminated areas were having higher prevalence of self-reported

gastrointestinal and skin ailments along with clinical alterations, abnormal hematological function, and spirometric defects.

Details of the visit:

Site 1: Rakhi mandi

As per local residents, earlier the site was used to dump the wastage in form of ash mainly from coal used in rail engine. People started to reside near this dump site and are staying there till date. It was observed by the committee that currently there is no such old ash dump. There was a pile of scrap materials at the old site of dump. The streets in the nearby area were full of sewage water. Main source of drinking water for the people residing in the nearby areas was submersible pump.

Blood samples were collected from around the 40 individuals. Water sample was collected from the hand pump and submersible pump separately. Soil sample was also collected from the dump site for laboratory analysis, report of which is awaited.

Site 2: Village Khan Chandpur

Village was near to the site of solid waste dump. Health camp was already organized by the nearby Primary Health Centre. Various health personnel were present in health camp including ASHA who managed to gather the local peoples. Main source of drinking water for the nearby houses was handpump and submersible pump.

Blood samples were collected from 40 individuals. Water sample was collected from the hand pump and submersible pump separately. Soil sample was also collected from the dump site.

Recommendations of the committee:

After the preliminary assessment of the sites near chromium dump, the committee recommend three-level actions for comprehensive baseline assessment of exposure and for mitigation and prevention of ill-effects due to chromium dump.

Following actions are recommended:

1. Comprehensive assessment of probable source of exposure i.e. chromium dump.
2. Ascertainment of health effects on the population due to chromium dump.
3. Efforts to mitigate, manage and prevention of health effects on the residing population.

Comprehensive assessment of probable source of exposure

A number of cases of chromium toxicity has recently been noted in the areas near site of chromium dump. However, to reliably establish that the cases are due to chromium toxicity, it is crucial to establish that the chromium dump has led to elevated levels of the chromium in the environment. To establish it, there is a need to estimate the levels of chromium in the nearby areas. An assessment of chromium levels of air, water, and soil will be done in the nearby areas. Multiple samples of air, water, and soil will be collected from the nearby areas for this purpose. These samples will then be tested in the laboratory for assessment of chromium levels. This will help in establishing the source of chromium exposure for the population residing in the nearby areas. Literature review shall also be done to understand the chain of transmission of chromium from an open source to the population.

Ascertainment of health effects on the population due to chromium dump

A comprehensive assessment of the population residing in the nearby areas will be done to ascertain the ill-effects of the chromium dump on the population. It will be done in following 4 steps:

1. **Record review:** A list of the health care practitioners will be prepared with the help of local health authorities. All the health care practitioners will be contacted and will be requested to provide their mortality, morbidity records to identify the number of probable cases due to chromium toxicity. If records are not available, then structured questionnaire will be administered to seek the information regarding the cases of chromium toxicity.
2. **Interview to elicit chromium related illnesses:** A structured interview schedule will be prepared to elicit chromium related illnesses in the population residing in the nearby areas excluding local healthcare professionals. Questions will be asked to enquire about common illnesses due to chromium exposure which includes respiratory illnesses, skin diseases, and gastrointestinal diseases among others. A total of 200 houses will be surveyed near each of the two sites. Questions regarding the illnesses among all the household members will be asked to the person who can understand the questions. Sampling of houses will be done on the basis of number of houses in the area. If the no. of houses will be more than 200, then random sampling will be adopted and then the area will be surveyed. Affected individuals will be referred to the appropriate higher centres for the evaluation and management.

3. **Clinical investigation:** To confirm the presence of higher levels of chromium in the body, investigations of the probably affected population will be done. From each of the two sites, 200 blood and urine samples will be collected. The sampling methodology will be same as that of questionnaire. Precautions will be taken to avoid contamination. Stainless steel syringes will not be used as they affect the estimation of chromium in the samples.
4. **Clinical assessment and treatment:** For the clinical assessment of affected population, a camp will be organized to understand the morbidity profile of the population. The affected individuals will be provided appropriate treatment as per their illness. If any serious illness will be noted, the patients will be referred to higher centre depending upon the type of illness.

Efforts to manage, mitigate and prevention of health effects on the residing population

1. **Management of affected population:** Population affected due to chromium toxicity will be identified and given appropriate treatment during house visits &/or clinical assessment. If the illness will be serious, the patients will be referred for appropriate management to GSVMMC/SGPGIMS/SSCI&H.
2. **Mitigation of the source:** If the chromium dump will be found to be responsible for the toxic effects in the population, the existing source will be removed with the help of the municipal corporation of Kanpur and local health authorities. The contaminated sources will be detoxified with the help of environment scientists.
3. **Prevention of toxicity:** Nearby population will be routinely screened for the possible ill-effects due to chromium toxicity. The identified individuals will be provided appropriate treatment.

Table 1: Distribution of roles and responsibilities for the recommended actions by the committee

S. No.	Roles	Responsibility
1	Environmental sampling of the nearby areas	BBAU
2	Containers and other logistics for environmental sampling	CMO Office, Kanpur
3	Testing of environmental samples for chromium levels	CSIR-IITR
4	Preparation of list of health care practitioners of the nearby areas	CMO Office, Lucknow
5	Record review/questionnaire administration for health care practitioners	CMO Office, Kanpur under technical guidance of SGPGIMS & SSCIH
6	Preparation of questionnaire for population survey	SGPGIMS, SSCIH & RMLIMS
7	Survey in the nearby areas	Dept. of PSM, GSVM Kanpur & CMO Office, Kanpur
8	Finalization of methodology for survey and clinical investigation of the affected population	SSCIH & SGPGIMS
9	Collection of bodily samples for assessment of chromium	Dept. of PSM, GSVM Kanpur & CMO Office, Kanpur
10	Containers and other logistics for collection of bodily samples	CMO Office, Kanpur

11	Testing of bodily samples for chromium levels	CSIR-IITR
12	Clinical assessment of affected population	Dept. of PSM, GSVM Kanpur & CMO Office, Kanpur
13	Management of the affected population	GSVMMC, SGPGIMS, SSCIH
14	Source mitigation	All stakeholders
15	Prevention of toxicity in future	All stakeholders

Dr. Akhilesh K Yadav
CSIR-IITR, Lucknow

Dr. R. Harsvardhan
SGPGIMS, Lucknow

Dr. RK Sahu
BBA University, Lucknow

Dr. Ayush Lohiya
SSCI&H, Lucknow

Dr. Samarjeet Kaur
GSVMMC, Kanpur

Dr. Bhanu Pratap Singh
RMLIMS, Lucknow

Signatures of committee members



सीएसआईआर-भारतीय विषविज्ञान अनुसंधान संस्थान
CSIR-INDIAN INSTITUTE OF TOXICOLOGY RESEARCH



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सीएसआईआर/आईआईटीआर/आरपीबीडी/21/2020

दिनांक: 06.01.2020

महानिदेशक
चिकित्सा एवं स्वास्थ्य सेवाएँ
उत्तर प्रदेश, लखनऊ

महोदय,

आपके पत्र संख्या निदे0 (स्वा0)/केम्प/2019/1480 दिनांक 31.12.2019 के संदर्भ में राखी मडी एवं रनिया खान चंद्रपूर से रक्त, पानी एवं मिट्टी के नमूने जांच हेतु लिए गए थे। उनकी विश्लेषण रिपोर्ट प्रेषित की जा रही है। कृपया पावती से अवगत करने का कष्ट करें।

धन्यवाद,

संलग्न: उपरोक्त

भवदीय

(डॉ के सी खुल्बे)

प्रभारी, आरपीबीडी

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Toxicity Testing: GLP Test Facility



CSIR - INDIAN INSTITUTE OF TOXICOLOGY RESEARCH
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(Constituent Laboratory of C.S.I.R.)



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Date: 06.01.2020

ANALYSIS REPORT

1. Sample Registry No. : Nideshak(Swasthya)/Camp/2019-20/1466 Dated:27/12/2019
Nideshak (Swasthya)/Camp/2019/1480 Dated:31/12/2019
'Analysis of Chromium and Mercury in Blood, Water and Soil'
2. Nature of Sample : Blood, Water and Soil
3. Sealed/Unsealed : By Hand
4. Date of Receipt : 27.12.2019
5. Date of Analysis : 30.12.2019, 31.12.2019, 02.01.2020, 03.01.2020,
04.01.2020 and 06.01.2020
6. Results : Please see Annexure I

1. The report pertains to the sample tested only.
2. This report shall not be used or produced in fragments.
3. This report shall not be used for any other purpose than declared by the sponsor.
4. IITR is not a regulatory and certifying agency hence no part of this report should be used for legal purposes under any circumstances.


06/01/2020
(Dr D. K. Patel)
Senior Principal Scientist

Analysis of Chromium and Mercury in Blood from Rakhi Mandi, Kanpur Nagar					
S. No.	Name	Age/Sex	Father/Husband Name	Chromium* (ng/ml)	Mercury* (ng/ml)
1	Rahisha Bano	36/F	w/o Mohd. Arsad	2.600	2.151
2	Mahru Nisha	38/F	w/o Sirajuddin	2.040	1.721
3	Mohd. Arsad	38/M	s/o Mohd. Arager Hussain	2.225	1.786
4	Kamala	60/F	w/o Late Ram Jatan	5.800	1.138
5	Maiyadeep	62/M	s/o Late Bhurelal	2.775	0.802
6	Poona Sahu	38/F	w/o Dev Kumar	2.525	3.292
7	Abdul Wakil	60/M	s/o Late Subrati	4.175	0.996
8	Gudhiya	27/F	w/o Ram Chandra	2.350	0.727
9	Munni Devi	50/F	w/o Ramendra Kumar Singh	4.200	0.723
10	Raj Pati	62/F	w/o Mula Patel	9.375	0.689
11	Shakeela Bano	70/F	w/o Asgar Hussain	2.725	0.516
12	Pramila	38/F	w/o Late Ram Kumar	2.750	0.626
13	Sail Kumari	60/F	w/o Late Buduk	4.450	1.129
14	Lal Pati	60/F	w/o Ram Sewak	2.475	0.486
15	Ramkanti	58/F	w/o Harish Chandra	4.675	0.762
16	Anoop Kumar	44/M	s/o Jeetu Lal	3.775	0.627
17	Ram Rati	50/F	w/o Prathvee Pal	2.900	0.525
18	Santosh Kumar	49/M	s/o Kallu Prasad	4.175	0.775
19	Neetu	37/F	w/o Amar Nath	2.950	0.717
20	Sarvan	70/M	s/o Maiku	3.800	0.597
21	Sonu	27/M	s/o Satrugan	BDL	0.734
22	Ruksana	26/F	w/o Sahansa	BDL	0.503
23	Parwati	50/F	w/o Bhagwan Das	BDL	0.705
24	Chandawati	35/F	w/o Sivratn	BDL	0.754
25	Ajay	32/M	s/o Ramkishore	BDL	0.543
26	Chanda devi	48/F	w/o Late Deep Kumar	BDL	0.453
27	Mishree lal	65/M	s/o Manu	BDL	0.748
28	Sumudara Gupta	62/F	w/o Santram	BDL	0.673
29	Rajpati	65/F	w/o Maniram	BDL	0.700
30	Geetanjali	13/F	d/o Umashankar	BDL	0.529
31	Anjali	15/F	d/o Umashankar	BDL	0.443
32	Abdul Ajeem	24/M	s/o Jahid Ali	74.700	0.767
33	Reetu	28/F	w/o Raju	BDL	0.450
34	Ragini	13/F	d/o Mahesh	58.250	0.412
35	Prince Pathak	19/M	s/o Kaniyalal	75.150	1.883
36	Pappi	32/F	w/o Pappu	BDL	1.011
37	Neelam Awasthi	45/F	w/o Pramod Kumar	BDL	0.318
38	Shankar	17/M	s/o Indar Kumar Shahu	BDL	0.582
39	Kaisarbai	55/F	w/o Kaiyaliram	67.300	0.384
40	Heera Bai	50/F	w/o Sanjay	BDL	0.528
41	Hanumaan	45/M	s/o Bhagauti Prasad	BDL	0.368
42	Pappu	35/M	s/o Bahadur	BDL	1.253
43	Vimla	45/F	w/o Kallu	BDL	0.285
44	Anil	40/M	s/o Kamta Prasad	BDL	0.432

BDL: Below detection limit

Detection limit: 0.019 ng/ml for Chromium and 0.100 ng/ml for Mercury

Instrument used for analysis: * ICAP-RQ, LC-ICP-MS (Thermo Scientific)
DMA-80 (Milestone)

Abul Kalam
6/11/2020

Analysis of Chromium and Mercury in water and soil from Rakhi Mandi, Kanpur Nagar			
S. No.	Location	Chromium* (ug/L)	Mercury* (ug/L)
1	Rakhi Mandi-Railway colony, Submersible1 (water sample)	BDL	0.352
2	Rakhi Mandi-Railway colony, Submersible2 (water sample)	BDL	0.187
3	Hand Pump, Rakhi Mandi(water sample)	BDL	0.148
S. No.	Location	Cr (mg/Kg)	Hg (ug/Kg)
1	Rakhi Mandi-Railway colony, (Soil sample)	69.190	98.000
BDL: Below detection limit			
Detection limit:0.019 ng/ml for Chromium and 0.100 ng/ml for Mercury			
Instrument used for analysis: * iCAP-RQ, LC-ICP-MS (Thermo Scientific) # DMA-80 (Milestone)			

M. K. Singh
6/11/2020

Analysis of Chromium and Mercury in Blood from Rania, Kanpur Nagar					
S. No.	Name	Age/Sex	Father/Husband Name	Chromium* (ng/ml)	Mercury# (ng/ml)
1	Mangli Prasad	60/M	s/o Rajaram	BDL	1.486
2	Sahajahan	45/F	w/o Chotte	BDL	0.625
3	Nannhi	45/F	w/o Suresh	BDL	0.505
4	Ramshree	50/F	w/o Baijnath	64.800	0.360
5	Baburam	65/M	s/o Maaku	BDL	0.362
6	Sanno	35/F	w/o Irshad	BDL	0.294
7	Jareena	50/F	w/o Lallan	BDL	0.414
8	Bhura Ali	50/M	s/o Ranjani	BDL	0.738
9	Reshma	25/F	w/o Rahis	BDL	0.532
10	Shivani	12/F	d/o Sanjay	BDL	0.391
11	Neetu	35/F	w/o Rajesh	41.550	0.422
12	Divyanshi	13/F	d/o Kaushal	BDL	0.432
13	Sonu	23/M	s/o Santosh	BDL	0.364
14	Arun	30/M	s/o Naresh	BDL	0.366
15	Ajeet Singh	26/M	s/o Jagdish	BDL	1.992
16	Mayank	15/M	s/o Brijesh	BDL	0.412
17	Ramgopal	70/M	s/o Murarilal	BDL	0.372
18	Ajay	38/M	s/o Devi Prasad	70.100	0.418
19	Shreedevi	40/F	w/o Pappu	BDL	0.278
20	Mamta devi	27/F	w/o Naresh	56.700	0.303
21	Vidya Devi	50/F	w/o Ramkishan	BDL	0.287
22	Mithilesh	30/F	w/o Vijaypal	BDL	0.365
23	Rama Devi	26/F	w/o Mathura	45.550	0.394
24	Raju	45/M	s/o Shivram	BDL	0.440
25	Madhai	50/F	w/o Shipahi	57.950	0.346
26	Seema	23/F	w/o Ravi	BDL	0.295
27	Vinay	23/M	s/o Awadhesh	BDL	0.300
28	Pranjul	17/F	d/o Jaswant	53.850	0.408
29	Arun	23/M	s/o Suresh	BDL	0.699
30	Manoj	23/M	s/o Rajjelal	BDL	0.392
31	Suneeta Devi	35/F	w/o Sanjay	BDL	0.308
32	Sudanshu	13/M	s/o Mathura Prasad	BDL	0.384
33	Urmila Devi	33/F	w/o Surendra Pal	95.200	0.331
34	Budhana	52/F	w/o Shiv Raj Pal	BDL	0.552
35	Uma Devi	53/F	w/o Rajhe Lal	BDL	0.385
36	Sahil Pal	18/M	s/o Surendra Pal	BDL	0.767
37	Reeta Devi	30/F	w/o Ajay Pal	BDL	0.486
38	Sulekha Yadav	35/F	w/o Brajesh yadav	BDL	0.354
39	Prasant	14/M	S/o Santosh Kumar	BDL	0.317
40	Amit	15/M	s/o Ashok	45.900	0.481

BDL: Below detection limit
Detection limit: 0.019 ng/ml for Chromium and 0.100 ng/ml for Mercury
Instrument used for analysis: * iCAP-RQ, LC-ICP-MS (Thermo Scientific)
DMA-80 (Milestone)

Shafiq
6/11/2020

Analysis of Chromium and Mercury in water and soil from Rania, Kanpur Nagar			
S. No.	Location	Chromium* (ug/L)	Mercury* (ug/L)
1	Rania, Submercible water sample (water sample)	2940.000	0.120
2	Rania, Hand Pump water sample (water sample)	12370.000	0.134
S. No.	Location	Cr (mg/Kg)	Hg (ug/Kg)
1	Rania (Khan Chandpur), (Soil sample)	1867.000	9.840
BDL: Below detection limit			
Detection limit: 0.019 ng/ml for Chromium and 0.100 ng/ml for Mercury			
Instrument used for analysis: * ICAP-RQ, LC-ICP-MS (Thermo Scientific) # DMA-80 (Milestone)			

Alifatal
6/11/2020