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No. M/121/2024-OFFICE OF APCCF (FEnE)/38-40
THE ADMINISTRATION OF THE UNION TERRITORY OF LADAKH
OFFICE OF THE ADVISOR TO THE LIEUTENANT GOVERNOR
E-mail id: advisor-lg-ladakh@gov.in , Phone No. 01982-257560

UT Secretariat, Ladakh.
Dated 24th of January, 2024

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

Subject: Filing of 6th Monthly Progress Report before Hon'ble NGT in compliance with directions dated 06-04-2023, issued in O.A. No. 606/2018.

Ref.: Hon'ble NGT's Original Application No.606/2018 dated 06.04.2023.

Sir,

Kindly find enclosed herewith the 6th Monthly Progress Report with verifiable progress in respect of the Union Territory of Ladakh for kind information of the Hon'ble National Green Tribunal.

Enclosures: 31 pages.

- i. 6th Monthly Progress Report: 16 pages
- ii. Annexure-I: 07 pages
- iii. Annexure-II: 08 pages

Yours sincerely,

(Dr. Pawan Kotwal) IAS,
Advisor to the Hon'ble Lt. Governor,
UT of Ladakh.

Copy to the:

1. Chairman, Ladakh Pollution Control Committee, UT of Ladakh.
2. Secretary to Hon'ble Lt. Governor, UT of Ladakh.

**BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH AT NEW DELHI**

Original Application No.606/2018

(In respect of Union Territory of Ladakh)

In the matter of: -

Compliance of Municipal Solid Waste Management Rules, 2016

And Other Environmental Issues

(Union Territory of Ladakh)

6th MONTHLY PROGRESS REPORT

BY ADMINISTRATION OF UNION TERRITORY OF LADAKH IN

COMPLIANCE TO ORDER DATED: 06/04/2023

1. The afore titled matter relating to Municipal Solid Waste and allied issues was listed before the Hon'ble NGT on 06.04.2023 wherein the Advisor to the Lt. Governor, Union Territory of Ladakh appeared before Hon'ble NGT. A comprehensive power point presentation was made before Hon'ble Principal Bench NGT along with the submission of a compliance report by UT Ladakh w.r.t compliance status of the Solid Waste Management Rules, 2016.
2. Pursuant to the hearing on **06.04.2023**, Hon'ble Tribunal passed an order dated **06.04.2023** in respect of Union Territory of Ladakh where it observed gaps in management of solid and liquid waste and the need for improved governance on the subject and further initiatives that were required to be planned to bridge the existing gaps in solid and liquid waste management. In reference thereof, **Hon'ble NGT** directed the Union Territory of Ladakh to file a 6th (sixth) monthly progress report with verifiable progress in respect of the directions contained in the order dated **06.04.2023** of the Hon'ble Tribunal for UT Ladakh.

I/18053/2024 The observation/directions issued by the Hon'ble Tribunal as per order dated 06.04.2023 are as below: -

- 3.1. Environmental Compensation:** Hon'ble Tribunal refrained from directions for levy of environmental compensation against Ladakh having regard to the ground situation in the said area and also in view of statement voluntarily made by the Advisor/Chief Secretary that adequate funds will be made available and the entire estimated cost of handling solid and liquid waste will be provided by way of deposit in an appropriate account preferably within one month. On the pattern of compensation awarded in respect of other States where gaps have been found in waste generation and management, as per the Hon'ble Tribunal the estimated cost of remediation is about Rs. 30 crores for UT Ladakh.
- 3.2.** Open to the UT to raise funds from contributors of waste. Suitable mechanism to be down such as user charges by households/contribution of corporate, business sectors, commercial establishments who contribute to waste. Further steps have to be taken in a mission mode to comply with MSW Rules.
- 3.3. Handling Solid Waste:** For bridging the gap in management of MSW, segregation of the solid waste at source and its earliest processing nearest to the point of generation with defined destination to be undertaken. Adequate composting/vermicomposting/bio-methanation centers to be set up and upgraded nearest to the source of generation of wet solid waste. establishing de-centralized and centralized waste processing facilities. Waste generators can themselves be required to process the waste under guidance and handholding by the Administration, with the assistance of identified empanelled service providers and such details may be posted on State's/Center's GeM portal. This may perhaps reduce planned expenditure. In order to reduce the gap in waste generation and processing, option of waste energy projects for bigger cities or at regional/cluster level needs consideration.
- 3.4.** Execution plan may include setting up of requisite waste processing plant at Kargil (centralized and decentralized) and remediation of left out legacy waste at Leh and Kargil. Bio-remediation/bio-mining process need to be executed as per CPCB guidelines and the stabilized organic waste from biomining as well as from compost plants need to comply with laid down specifications. Other material recovered during such processes is to be put to use through authorized dealers/handlers/users. Instead of creating more dumping sites for waste

W/18055/2024 generated on day-to-day basis, waste processing plants of adequate capacity should be set up so that no further legacy waste is generated.

3.5. Fencing and maintaining legacy waste sites: Legacy waste sites must be maintained free from fires and safety of workers engaged should be ensured. Such sites may be fenced with row of trees or wall, as may be viable, for aesthetics, preventing foul smell and safety. Provisions of Schedule-I of the SWM Rules, 2016 may be strictly followed. Water quality in the vicinity of legacy waste dump sites may be periodically monitored. If any contamination is found, remedial action may be taken. Environmental safety aspects associated with legacy waste dump sites be complied with as specified in Schedule I of MSW Rules, 2016. All efforts may be made that towns/villages located on hilly terrain, do not dispose waste on sloppy terrain thereby affecting streams and rivers. Such hilly towns need to follow provision 20 and provision I of Schedule I of MSW Rules, 2016.

3.6. Use of reclaimed occupied by legacy waste sites: Legacy waste dump sites have resulted in huge damage to the environment and population in the vicinity of such dump sites who have suffered in safety, health, and comfort. For compensating them for such damage, one third of land occupied by legacy dump sites (on reclamation) needs to be reserved for dense forest and in the process of afforestation, Campa Funds can be utilized in accordance with the provisions of Compensatory Afforestation Fund Management and Planning Authority Act, 2016 (CAMPA Act). One third of reclaimed land out of the said dump site needs to be reserved for integrated waste management facilities. Remaining one third can be used for any other purpose, consistent with the above purposes, including a part of it being utilized for monetizing, if funding is required for tackling the legacy waste. Legacy waste clearance has to be in minimum further time as laid down statutory timelines have already expired and serious damage is taking place. It may be noted that remediation of legacy sites may be one-time affair and such situations should not arise in future. User of land, to be reclaimed, needs to be declared in advance so that further steps can be taken in that direction.

3.7. Reclaimed land at Leh to the extent of 7 acres out of total area of 20.26 acres where waste of 10,544 tonnes has been remediated, can be put to use. Further, plans be executed expeditiously for dump site having legacy waste at Kargil as well as remediating remaining waste of 48,370 tonnes at Leh.

I/18055324 **3.8. Regarding liquid waste/sewage**, gap mentioned is 15 MLD in generation of sewage and Treatment. Compliance status of laid down standards at the outlets of STPs has to be ensured. If there are unauthorized colonies or old establishments where sewage is generated and remains untreated, the same be remedied. Timeline for the establishing requisite treatment systems in terms of judgment of Hon'ble Supreme Court in Paryavaran Suraksha vs. Union of India, supra has long expired, speedy further action had to be ensured.

3.9. As already noted, and also observed in the judgement of the Hon'ble Supreme Court in Paryavaran Suraksha, quoted earlier, the matter falls in 11th and 12th Schedules to the Constitution. It is constitutional responsibility of the State and the Local Bodies to provide pollution free environment and to arrange necessary funds from contributors or others. Being part of right to life, which is also basic human right and absolute liability of the State, lack of funds or other resources such as land (sites for waste management) cannot be plea to deny such right. Such resources have to be found by the UT by its policies and according due priority to the subject. Further, while there may be no objection to any central funds being availed, the UT cannot avoid its responsibility or delay its discharge on that pretext. Free ship or other policies involving State resources cannot take priority over basic need for hygiene and pollution free environment.

3.10. Sewage Management: Sewage can be required to be processed by cost-effective methods at least at several identified locations with least expenses. Decentralized and the prefabricated/modular treatment plants can be explored, apart from imposing condition of ZLD on industries, Group Housing Societies etc. Reduced load can be processed partly with the help of water using commercial establishments requiring water for their processes enforcing consent conditions in CTEs and CTOs whereby State's financial burden can be reduced. In this context, the draft Notification of MoEF&CC dated 25.02.2022 etc. as applicable, may be referred. <http://www.indiaenvironmentportal.org.in/files/file/Building%20Construction%20Environment%20Regulations%202022.pdf>.

3.11. Maintaining sources of clean water: We also find that sanctity and significance of natural streams, storm water drains, lakes need to be maintained. Storm water drains/streams, if left unpolluted, can be source of drinking water for humans, birds, animals or aquatic life and discharge of sewage or even treated water which is not of standard of drinking water, seriously affects such drinking water resource adversely affecting their health. They are not to serve as

I/18055/2024 wage carrier. The Tribunal has comprehensively dealt with this issue on 03.08.2022 in OA No. 1002/2018, Abhisht Kusum Gupta vs. State of Uttar Pradesh & Ors.

3.12. Efforts are also required on utilization of treated sewage such as by establishments like malls, industrial estates, automobile establishments, power plants, playgrounds, railways, bus stands, local bodies, universities etc. to save potable water for drinking. The treated sewage can be utilized for industrial/agricultural/other non-drinking uses like washing railway wagons/yards, buses, roads, water sprinkling and several such models reportedly exist.

3.13. As already observed, there is need for planning to prevent sewage (treated or untreated) entering the potable water resources. Instead, the same is to be suitably treated and channelized for non-potable purposes – agriculture, industrial or others. By way of illustration, we may refer to certain models which can be considered at appropriate locations. The same have been mentioned in order of this Tribunal dated 11.10.2022 in M.A. No. 43/2022 in OA No. 41/2020, Pushpendra Kumar vs. Nagarpanchayat, Kadaura & Ors.

3.14. The restoration measures with respect to sewage management include identifying sites for setting up of centralized/decentralized sewage treatment and utilization systems, upgrading systems/operations of existing sewage treatment facilities to ensure utilization of their full capacities, ensuring compliance of standards, including those of fecal coliform and setting up of proper fecal sewage and sludge management in rural areas. STPs need to have co-treatment facilities of septage rather than having isolated FSTPs. Guidelines of SBM - U 2.0 may be referred to in this respect. For urban areas, SBM-U 2.0 provides co-treatment of fecal sludge at STPs with sewage for which funding provisions are made.

3.15. Utilization of already set up STPs: We have found that even where STPs of adequate capacity have been set up, the capacity is not fully utilized and standards of water quality not always met. This aspect needs to be looked into on continuous basis by a centralized mechanism which may be set up preferably within a month.

3.16. Sewage treatment facilities adopted in terms of septic tank/soakage pit/FSTP may be reviewed in view of health, hygiene and the guidelines of Ministry of Housing and Urban Affairs (MoH&UA).

1/1805532074 Need to consider change in approach for administrative processes: We have suggested change in approach in realizing that remedial action cannot wait for indefinite period nor loose ended time lines without accountability can be a solution. Responsibility of the UT is to have comprehensive time bound plan with tied up resources to control pollution which is its absolute liability. If there is deficit in budgetary allocations, it is for the UT alone to have suitable planning by reducing cost or augmenting resources. People must be involved in the problem by appropriate awareness and strategies to encourage public participation and contribution. At the cost of repetition, health issues cannot be deferred to long future. Long future dates breach of which has taken place frequently in the past without accountability is not a convincing solution. It is poor substitute for compliance within laid down timelines for long past. This approach may project lack of concern or not realizing the grim ground situation crying for emergent remedial measures on priority. There is no time for leisure, reflected in timelines proposed for bridging the acknowledged gaps.

3.18. *It may be necessary to brain storm with available experts and other stake holders in the UT at different levels, evolve models for both solid and sewage management which can be fast replicated, initiate special campaigns with community/media involvement in the larger interest of protecting environment and public health with determination for prompt action. Such brain storming sessions may enable capacity enhancement of the regulators and the processes. Campaigns and community involvement may result in reducing the financial and administrative load on the administration.*

3.19. *Compliance of environmental norms on the subject of waste management has to be on high on priority. UT to realizes its duty to law and to citizens and adopts further monitoring at its own level.*

3.20. Adhering to timelines: *Since the issue has been pending since long and there are adverse effects of continuing delay on environment and public health, it cannot be a matter of satisfaction that some steps are taken till the entirety of the problem is tackled on war footing. Planning has to be to resolve the problem without any further delay, in shortest possible time. Whatever timeline is laid down, it should not be breached. If breached, adverse consequences for such failures must follow on the designated accountable officers instead of loose-ended processes.*

I/1805532014 **Community involvement:** Not only for IEC activities but also for planning and execution of waste management activities. Welfare associations, corporates, religious, educational and charitable institutions can play their role. The District Environment Plans must have authentic and updated database which can be helpful for policy making and execution of projects.

3.22. To explore implementation mechanism: First change required is to set up a centralized single window mechanism for planning, capacity building and monitoring of waste management at the State level. Local authorities have to do their duty and stocktaking at the district levels may continue but subject to supervision and control of such mechanism. It should be headed by an officer of the rank of Additional Chief Secretary with representation from concerned departments – Urban Development, Rural Development, Environment and Forest, Agriculture, Water Resources, Fisheries, and Industries. The mechanism should be working on fulltime basis. Its functions should include preparing a comprehensive blue print, periodic review of progress in bridging the gaps in sewage and solid waste management and establishing, continuous interaction with the stakeholders, including experts and institutions, concerned departments, community members and all other stakeholders. There must be a continuous training programme for those involved in execution of waste management projects. It should be responsible for selecting service providers and simplifying procedures for fixing terms of engagement. Best practices are to be evolved and followed procedures for fixing terms of engagement.

3.23. Mechanism be considered to engage service providers by due diligent process who may execute work relating to solid and sewage management simultaneously throughout the UT. Selection of service providers may be done taking into account of his past performance and number of projects and capacity to handle successfully.

3.24. Need for monitoring by NMCG and MoU&HA for centrally assisted/sponsored schemes: In view of continuing huge gap in solid and liquid waste generation and treatment, it is high time that MoH&UA and National Mission for Clean Ganga (NMCG) who have programmes like Swachh Bharat Mission (SBM – Urban 2.0), AMRUT 2014, Swachh Bharat Mission (Grameen) and River Cleaning, appropriately monitor compliance of waste management norms by concerned States/UTs and take remedial action on their part. Central Funding and State budgetary provisions need to be adequately allocated and apportioned keeping in view of environment compensation which is based on the

I/18055/2024 restoration work estimate. While granting/disbursing funds to States/UTs, execution mechanism for centralized tendering at the State level to overcome delays at each city/town level may be considered. This may facilitate timely utilization of funds. MoEF&CC and CPCB may continue monitoring as per MSW Rules and the Water Act. MoH&UA and NMCG may also note the gaps reported by the States and UTs in solid and liquid waste management. MoH&UA may further consider to render proper financial and technical support to States and UTs having special importance like J&K and North Eastern States.

- 3.25.** *In Ladakh, there are number of armed forces establishments as well as cantonment areas. Administration of such areas, including waste management, is handled by the armed forces themselves under the Defence Ministry. In respect of such areas, the Tribunal has passed order dated 24.05.2021 in OA No. 451/2019, Air Marshal Anil Chopra, considering status reports dated 10.09.2020 and 24.5.2021 filed by the Ministry of Defence. The relevant portion of the said order is outlined in para 50 of the order of the Hon'ble Tribunal dated 06.04.2023.*
- 3.26.** *In the light of above, Secretary, Ministry of Defence, GoI in coordination with DG, MES, DG, Defence Estates and other concerned authorities may ensure that necessary measures are taken for waste management by adequate monitoring in the interest of environment and public health. They may also coordinate with ULBs concerned.*
- 3.27.** *UT of Ladakh will take further measures in the matter by innovative approach and stringent monitoring, ensuring that gaps in solid and liquid waste generation and treatment are bridged at the earliest, shortening the proposed timelines, adopting alternative/interim measures to the extent, and wherever found viable. Environment compensation for restoration can be dovetailed with the UT budget.*
- 3.28.** *The restoration plans need to be executed at the earliest simultaneously in both the districts including rural areas in a time bound manner without further delay. Compliance be ensured by Advisor to the Administrator/Chief Secretary.*

4. In compliance to the aforesaid order, the 6th monthly progress report of UT Ladakh is submitted as follows: -

The UT Level Apex Committee was constituted **vide Order no:129-LA(GAD) of 2022, dt: 17/05/2022** to oversee the implementation of Hon'ble National Green Tribunal orders on Solid Waste Management, Plastic Waste Management, Bio-medical Waste Management, Clean Air and River Pollution and other Environmental concerns in Ladakh. The Meeting of the Apex Committee was immediately held after the directions passed by the Hon'ble NGT dt:06/04/2023 under the chairmanship of Advisor to the Hon'ble Lt. Governor on **19/05/2023**.

The Minutes of Meeting **dt: 13/06/2023** were circulated to the concerned departments to take action as per the directions pertaining to their department in letter and spirit, and the Minutes of Meeting are hereby enclosed as **Annexure-I**.

4.1. Environmental Compensation Fund: -

The Hon'ble NGT refrained from levying any directions regarding Environmental Compensation against Ladakh having regard to the ground situation in the area. A dedicated saving account (**Name of the Bank: Jammu & Kashmir Bank, Account no: 0069040510000078, IFSC Code: JAKA0PRIEST**) as **Environmental Compensation Fund** has been opened in a commercial bank as per the directions of Hon'ble NGT. An estimated cost of remediation i.e. **Rs. 30 Crore** has also been allocated by the Administration for said account to bridge the existing gaps in Solid and Liquid Waste Management.

4.2. Compliance to Solid Waste Management Rules including Legacy Waste in Ladakh: -

4.2.a. Updated Status of Solid Waste Management by Municipal Bodies in UT Ladakh is as follows: -

- i. The Annual Report, for 2022-23, under the provisions of Rule 24 of Solid Waste Management Rules, has been submitted to the CPCB, New Delhi, **vide No: LPCC/UTL/MS/SWM/Annual Report/2023/508-514, dt:12/09/2023**, copy enclosed as **Annexure-II**.

- ii. Total generation, collection, and disposal of Solid Waste in Urban Local Bodies as per the projected population 2023 is as given below: -

S. No	Points	Urban Local Body Leh	Urban Local Body Kargil
1	Total number of urban Local Bodies and their Population	<ul style="list-style-type: none"> 1 Municipal Committee Leh (MC area): Population: 30870 (as per census 2011) 	<ul style="list-style-type: none"> 1 Municipal Committee Kargil (MC area): Population: 16338 (as per census 2011)
2	Quantity of MSW generated (TPD)	14.590	9.340
3	Quantity of MSW collected (TPD)	14.590	9.340
4	Quantity of MSW segregated & transported (TPD)	14.590	Nil
5	Quantity of MSW processed (TPD)	14.590	Nil
6	Gap in Solid Waste Management (TPD)	Nil	9.340

4.2.b. Status of Door-to-Door collection and Waste Treatment Facility: -

Points	Urban Local Body Leh	Urban Local Body Kargil
Total No. of Wards	13	13
ULBs in which waste door-to-door collection is implemented (%)	100%	100%
Transportation/Collection Capacity (TPD)	40.5	25
Number and installed capacity of MSW processing facilities in TPD (bifurcated by type of processing e.g.)		
1) Compost plants (composting, decentralized pit)	<ul style="list-style-type: none"> 1 No. (Capacity-10 TPD) 1 No. (Capacity-500 Kgs) 	1 No. Capacity-10 TPD (under construction)
2) MRF	1 No. (Capacity-20 TPD)	1No. Capacity-15 TPD (under construction)

4.2.c. Action Plan for bridging the gap in treatment: -

For bridging the gap in Solid Waste treatment in Kargil, a Solid Waste Management Plant is under construction with a project cost of Rs.14.32 Cr. The proposed treatment Capacity for Dry Waste is 15 TPD through Material Recovery Facility and Wet Waste Treatment is 10 TPD through In-vessel composting. More than 60% of the work for the Solid Waste Management Plant has been completed and the plant is likely to be commissioned by May-24.

4.2.d. Details of waste segregated, recycled, and disposed at MRF Facility, Leh.:

Wet Waste (TPD)	Plastic (TPD)	Paper (TPD)	Cloth (TPD)	Glass (TPD)	Inert (TPD)	Grand Total (TPD)
3.61	5.16	2.745	1.647	0.878	0.55	14.590

4.2.e. Status of Centralised Waste Treatment Facility and Decentralized Wet Waste Composting Facility in Leh: -

- i Leh has already an operational Integrated Solid Waste Management Plant which was commissioned in 2020 with a capacity of 30 TPD (20 TPD for Dry Waste and 10 TPD for Wet Waste). The sanitary landfill site for Leh is completed in October, 2023 and is under the process of obtaining Environmental Clearance from MoEF&CC, GoI.
- ii The Wet Waste generated is being treated by In-vessel composting.
- iii The details of Wet Waste Treatment Facility are as under:
 - Capacity of Wet Waste Treatment Facility: 10 TPD
 - Wet Waste generated: 3.610 TPD.
 - Compost produced: 3.249 TPD, utilized in MC Parks area development.
 - Inert Transferred to landfill: 0.361 TPD.
- iv The Municipal Committee, Leh has established a decentralized wet waste treatment facility in Ward No. 8 with a capacity of 500 kgs in which treatment of wet waste is done through Enclosed Aerated Treatment method. The facility was inaugurated in September,

I/18055/2024 2023 and based on the performance of technology further replication and scalability options shall be explored.

4.2.f. Compliance Status of Legacy Wastes in Ladakh: -

Points	Urban Local Body Leh	Urban Local Body Kargil
Dump site Location	Bombguard, Leh	Kurbathang, Kargil
Quantity of Waste Legacy Waste	58,910 Tonnes	66,819 Tonnes
Land Area	20.26 Acres	10.16 Acres
Age of Waste	30 years	15 years
Quantity of Waste Remediated	58,910 Tonnes	DPR preparation is in progress and project shall commence by May 2024
Quantity of remaining waste	Nil	66,819 Tonnes
Land Reclaimed	20.26 Acres	DPR preparation is in progress and project shall commence by May 2024

4.2.g. Utilization of Reclaimed Land in Leh: -

H&UDD is coordinating with Forest Department for development of afforestation plan on **6.75 Acres** (1/3rd of 20.26 Acres) of reclaimed land under the provisions of CAMPA. The plan has been prepared by DFO Leh for plantation to be taken up next plantation season, incurring an expenditure of **Rs. 85 Lakhs** for plantation of **8000 plants** to reclaim the area referred.

4.2.h. The details of the dumpsite/Legacy Waste in Kargil: -

The assessment of site for Kargil is completed with identified **10.16 Acres** of area under dumpsite. The draft detailed project report for Kargil dumpsite is complete with identified waste under dumpsite as 66,819 Tons. The legacy waste at the Kurbathang site of Kargil mostly consists of organic material, stones, plastic material, and rags/clothes. An estimated quantity of about 61.5% of the material consists of soil/silt material. This material will be used for recovering compost and which can be enriched with nutrients. The RDF material makes up about 17.1% of the total and consists of plastics and rags/clothes. The other 20.6% of the waste will be landfilled of which about 14.5 % consists of stones. The recyclables are less than 2%. The project is proposed to be tendered out by Jan-24.

4.3. Overall Compliance Status to Liquid Waste/Sewage Management in Ladakh: -

4.3.a. Estimated Sewage Generation (MLD): -

City	Population (2023)	Population (2025)	Remarks
Leh Town	57515 (Projected)*	60558 (Projected)*	* As per the data/DPR of H&UDD, Ladakh.
Water Demand	9.45 MLD (Projected)*	9.97 MLD (Projected)*	* As per the data/DPR of H&UDD, Ladakh.
Sewerage Generation	7.56 MLD (Projected)	7.97 MLD (Projected)*	Calculated 80% of water demand as per CPHEEO Manual.
Kargil Town	*52285 (Projected) including additional area	55277 (Projected) including additional area	As per the data/DPR of H&UDD, Ladakh.
Water Demand	*8.30 MLD (Projected including additional area)	8.77 MLD (Projected including additional area)	As per the data/DPR of H&UDD, Ladakh.
Sewerage Generation	6.64 MLD (Projected including additional area)	7.01 MLD (Projected including additional area)	Calculated 80% of water demand as per CPHEEO Manual.

4.3.b. Details of existing STP in the UT of Ladakh: -

S. No.	Location	Existing STP capacity (MLD)	Capacity being utilized (MLD)	Operational Status of STP	Remarks
1.	Agling, Leh	3	3	Operational as per norms	Online Continuous Emission Monitoring System (OCEMS) has been installed on the plant and is operational which shall relay data to CPCB and LPCC portal for real time monitoring.

2.	Kargil	None	None	None	The DPR for STPs is finalized, and project tendering will be undertaken by Feb-2024.
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4.3.c. The details of present Gap assessment for Sewerage as on are as follows: -

S. No.	Urban Local Body	Quantity of Sewerage Generated	Functional STP	Gap in Assessment
1.	Leh	7.56 MLD	3 MLD	4.56 MLD
2.	Kargil	6.64 MLD	None	6.64 MLD
Total Gap is derived by deducing functional capacity from the sewerage generation				10.832 MLD

4.3.d. The details of proposed STPs are as follows: -

S.No.	Location	Capacity of the STP proposed (in MLD)	Status of Project and Time Line	Remarks
1	In Leh (near Football Ground)	10	<ul style="list-style-type: none"> DPR Stage- DPR is under finalization with estimated project cost of 326.10 Cr 24 months from date of tendering. 	<ul style="list-style-type: none"> Technology Proposed: Sequential Batch Reactor (SBR) technology. Proposed network length: 126 kms. No. of proposed pumping station: 1 Online Continuous Emission Monitoring System: Proposed in the Detailed Project Report Proposed Project completion time: 24 months from date of project award and depending upon the harsh winter conditions in the UT.

2	In Kargil Town	7.3	<ul style="list-style-type: none"> • DPR Stage- DPR is finalized for 6 STPs with estimated project cost of 254.07 Cr • 24 months from date of tendering. 	
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4.3.e. The details of the Sewage treatment in Leh are as follows: -

- i Gap in treatment capacity: 4.56 MLD for which the DPR is in finalization stage with a proposed design capacity of 10 MLD including handling of sewage from adjoining army establishment.
- ii The timeline for project implementation and commissioning of Sewage Treatment Plant is 24 months from the project award date and depending upon the harsh winter conditions and limited working season.
- iii The project is proposed to be completed by **October, 2026** as per H&UDD plan.

4.3.f. The details of the Sewage treatment in Kargil are as follows: -

- i The tender shall be floated for the development of sewerage scheme of Kargil by Feb-2024.
- ii The existing Gap of **6.64 MLD** is proposed to be addressed with the commissioning of proposed 6 decentralized STPs with a cumulative capacity of **7.3 MLD**.
- iii The timeline for project implementation and commissioning of all the six Sewage Treatment Plants (STPs) is **24 months** from the project award date and depending upon the harsh winter conditions and limited working season.
- iv The project is proposed to be completed by **October, 2026** as per the DPR submitted by H&UDD.
- v The project is proposed to be implemented in decentralized approach in 6 zones with the following details: -
 - DPR for Kargil Town is finalized with a proposed cumulative design capacity of **7.3 MLD**.

Drainage Zone	STP location	STP Capacity (MLD)
Zone 1	Sewerage Treatment Plant at Goma Kargil, Adul Gund, Kako Shilikchey and Balti Bazar, Kargil.	1.0

Zone 2	Sewerage Treatment Plant at Chanchik and Lankore Kargil, Kargil.	1.2
Zone 3	Sewerage Treatment Plant at Baroo Ranthak, Titi Chumik, Kargil.	2.0
Zone 4	Sewerage Treatment Plant at Council Secretariat Area, Kargil.	2.0
Zone 5	Sewerage Treatment Plant at Baghe-e-Khumeni, Kargil.	0.8
Zone 6	Sewerage Treatment Plant at Poyen, Kargil.	0.3
Total (MLD)		7.3

4.3.g. Compliance status of reuse of treated water: -

For reuse of treated water generated by the operational STP of 3 MLD at Agling, Leh, the DPR has been prepared and land acquisition process has also been started with the following details: -

Proposed Length of Pipeline	7.9 kms
Proposed Tanks	8 Nos.
Maximum Capacity of Network	3 MLD
No. of Drawing Locations	15 Nos.
Water usage types	Agricultural, Industrial, gardening and landscaping.
Project Status	Awaiting land diversion approval from the Forest Department, Leh.

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**PAWAN
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THE ADMINISTRATION OF
UNION TERRITORY OF LADAKH
LADAKH POLLUTION CONTROL
COMMITTEE LEH

ई-मेल/email: membersecretarylpcc@gmail.com

Subject: Review meeting to discuss Monitoring of Compliance in terms of orders of the Hon'ble National Green Tribunal Order dt:06.04.2023 in O.A. No. 606/2018.

A meeting was held on May 19, 2023, at 4:00 p.m. in the Conference Hall at UT Secretariat, Leh, under the Chairmanship of the Advisor to the Hon'ble Lieutenant Governor of UT Ladakh, to discuss the Monitoring of Compliance in terms of orders of the Hon'ble National Green Tribunal (NGT), Order dated 06.04.2023 in O.A. No. 606/2018.

The following officers were present:

1. Dr. Pawan Kotwal, IAS, Principal Secretary, Forest, Ecology & Environment/ Chairman, LPCC, UT of Ladakh.
2. Sh. Sanjeev Khirwar, Principal Secretary, H&UDD, UT of Ladakh.
3. Sh. Satish Khandare, IPS, ADGP, Ladakh Police, UT of Ladakh.
4. Sh. Ajeet Kumar Sahu, Commissioner/Secretary, Public Works Department, UT of Ladakh.
5. Sh. Ravinder Kumar, IAS, Commissioner/Secretary, Power Development Department, UT of Ladakh.
6. Sh. K. Mehboob Ali Khan, IRS, Commissioner/ Secretary, Tourism Department, UT of Ladakh.
7. Sh. Fayaz Ahmad, Secretary, Law, UT of Ladakh.
8. Sh. Shrikant Balasaheb Suse, IAS, Deputy Commissioner, Leh, UT of Ladakh.
9. Sh. Santosh Sukhadeve, IAS, Deputy Commissioner, Kargil, UT of Ladakh.
10. Sh. Swarn Singh, Deputy Secretary, Food, Civil Supplies and Consumer Affairs UT of Ladakh.
11. Sh. Brig P K Seetaram VSM, Chief Engineer, 14th CORPS, C/O 56 APO.
12. Sh. Brig Deepankar Saha, Station Commander, HQ, Leh.
13. Sh. Kamlesh Gour, Comdt. Engineer, NWFTR, ITBP, Ladakh.
14. Sh. Krishna Kumar Sharma, IC, Admin, Indian Air Force, Station, Leh.
15. M/s. Ashima Gera, Sqn Ldr, Station Adjutant, Indian Air Force.
16. Sh. Col S K Mishra, SM, HIMANK, C/o 56 APO, Ladakh.
17. Sh. Tashi Chombel, Chief Engineer, Public Works Department, UT of Ladakh.
18. Sh. Mohd. Nazir, KAS, Director Industries & Commerce, UT of Ladakh.
19. Dr. Zahida Bano, KAS, Director Urban Local Bodies, UT of Ladakh
20. Dr. Motup Dorje, Director, Health Services, UT of Ladakh.
21. Sh. P K Prasun, Executive Engineer (Civil), VIJAYAK, C/o 56 APO, Ladakh.
22. Smt. Ruksana Parveen, Sr. Scientific Officer, LPCC, UT of Ladakh.
23. Sh. Mohd Ali, District Officer, Kargil, Ladakh Pollution Control Committee, UT of Ladakh
24. M/s Rigzen Yangdol, Law Officer to Advisor to Hon'ble Lt. Governor, UT of Ladakh.

At the outset, the Regional Director, LPCC, welcomed all the participants and with the permission of the Chair briefed the participants about the directions issued in Original Application No. 606/2018, vide Order dated: 06.04.2023 by the Hon'ble National Green Tribunal (NGT).

A) STATUS ON SOLID WASTE MANAGEMENT

I) Solid Waste:

1. The Regional Director, LPCC, informed the Chair that the Hon'ble NGT has issued specific directions to ensure Compliance of the Solid Waste Management Rules, 2016. The Hon'ble NGT placed on record that a gap of 4.56 TPD exists in the treatment and the generation of Solid Waste. The gap exists due to absence of Solid Waste Treatment Plant in Kargil. The Waste generated in Kargil remains unprocessed and adds to the Legacy Waste.
2. The Hon'ble NGT also placed on record that currently, 58,910 Tons of Legacy Waste is present in UT of Ladakh. Out of the total legacy waste, 10,000 Tons of Legacy Waste has been stated to be remediated at Bambgarh site, Leh.
3. The Principal Secretary, Housing and Urban Development Department, informed the Chair that a Solid Waste Management Plant capacity of 25 TPD is targeted to be commissioned by Dec, 2023.
4. Further, the Chair was informed that the Hon'ble NGT observed that there is requirement of adequate Compositing or Vermicomposting or Bio-methanation Centers, which needs to be set up and upgrade, nearest to the source of generation of Wet Solid Waste.
5. The Principal Secretary, H&UDD, apprised the Chair that the Department is under the process of identifying suitable Technology and Mechanism for Treatment and Disposal of Wet Waste at the Decentralized Level.
6. Further, the Chair was informed that the Hon'ble NGT directed that there should be setting up of requisite Waste Processing Plant at Kargil (Centralized and Decentralized) for remediation of left out Legacy Waste at Kargil to bridge the gap. The Principal Secretary, H&UDD, informed the Chair the Legacy Waste assessment for Kargil is under process, and remediation work shall commence by Aug, 2023. In Leh, Bioremediation is in process and shall be completed by Oct, 2023.
7. Further, the Chair was informed by the Principal Secretary, H&UDD, that as per the directions of the Hon'ble NGT, Legacy Waste Sites may be fenced with a row of trees or wall, as may be viable, for aesthetics, preventing foul smell, and safety. Provisions of Schedule-I of the SWM Rules, 2016, may be strictly followed for maintaining Legacy Waste Sites.
8. Accordingly, the Principal Secretary, H&UDD, informed the Chair that fencing of the dumpsite for Kargil shall be done by MC, Kargil and the assessment of the dumpsite shall be completed by July, 2023.

9. The Advisor directed the Director, ULB, to expedite the process of Bio-mining of Legacy Waste Site at Leh and fencing with an adequate row of trees on both sides for preventing foul smell and for safety.

(Action by Director, ULB)

II) Use of reclaimed land occupied by Legacy waste sites:

1. The Regional Director, LPCC, informed the Chair that, as per the directions of the Hon'ble NGT, reclaimed land at Leh, to the extent of 7 acres out of the total area of 20.26 acres, has been remediated for use.
2. The Principal Secretary, H&UDD, informed that the Department is in the process of finalization of the project parcels for the use of reclaimed land occupied by Legacy Waste Sites.
3. Further, the Chair was informed that as per the directions of the Hon'ble NGT, plans need to be executed expeditiously for the dump site having Legacy Waste at Kargil, as well as remediating the remaining waste of 48,370 tons at Leh. The Director, ULB, informed the Chair that an Expression of Interest has been invited for remediating the remaining Legacy Waste, and based on the best technology, work shall be allotted.
4. The Advisor directed the Director, ULB, to expedite the process of Legacy Waste Site remediation at Kargil.

(Action by Director, ULB)

B) STATUS ON SEWAGE MANAGEMENT

I) Treatment of Sewage/Effluent generation in UT of Ladakh:

1. The Regional Director, LPCC, informed the Chair that the Hon'ble NGT has identified a gap of 15.08 MLD in the treatment and generation of Sewage in UT of Ladakh.
2. Further, the Chair was apprised that, as per the directions of the Hon'ble NGT, Decentralized and Prefabricated/Modular Treatment Plants can be explored, apart from imposing the condition of Zero Liquid Discharge (ZLD) on Industries, Group Housing Societies, etc.
3. The Director, Industries & Commerce, informed the Chair that the Industries and Commerce Department is in the process of inventorization of Liquid Waste discharging Industries.
4. The Advisor directed the Industries & Commerce Department, to expedite the process of inventorization of Liquid Waste discharging Industries.

(Action by Director Industries & Commerce Department)

5. Further, the Regional Director informed the Chair that the Hon'ble NGT placed on record that estimated cost of remediation is about Rs. 30 crores, adequate

funds will be made available and the entire estimated cost of handling Solid and Liquid Waste will be provided by way of deposit in an appropriate account. Mechanism and Planning for remedial measures will be finalized within one month.

6. The Principal Secretary, H&UDD, apprised the Chair that the Sewerage Scheme for Kargil town is already decentralized and has 6 zones, and Leh town has a Common STP at Agling, Leh.
7. The Advisor directed the concerned Departments, to convene a meeting regarding grant of subsidy for the Hotel Industry under the existing Industrial Policy and incentives for the installation of Pollution Control Devices, including STPs. Further, the Advisor directed that subsidy be restricted for Hotels/Guest Houses below 20 rooms as more than 19 rooms have been mandated to install STP as per the existing mechanism/guidelines.

(Action by Director, Industries & Commerce Department, Director, ULB, Director, Tourism and Regional Director, LPCC)

8. The Advisor directed the Regional Director, LPCC for Opening/Constitution of a separate bank account as per the direction of the Hon'ble NGT.

(Action by LPCC)

II) Channelizing Treated Sewage for Non-Potable purposes:

1. The Regional Director, LPCC, informed the participants about the Hon'ble NGT directions, stating that the Storm Water drains/streams, if left unpolluted, can be a source of drinking water for humans, birds, animals or aquatic life and discharge of sewage or even treated water which is not of standard of drinking water, seriously affects such drinking water resource adversely affecting their health. They are not to serve as sewage carrier.
2. Further, the Chair was informed that, as per the directions of the Hon'ble NGT, the STP needs to have Co-Treatment Facilities of Septage rather than having isolated FSTPs. The Director, ULB, informed the Chair that the STPs proposed in Leh and Kargil are already planned as Co-Treatment Facilities.
3. The Chair was also informed that, as per the directions of the Hon'ble NGT, where STPs of adequate capacity have been set up, the capacity is not fully utilized, and standards of treated water quality are not as per notified standards. This aspect needs to be looked into on a continuous basis by a Centralized Mechanism, which may be set up preferably within a month. The Principal Secretary, H&UDD, informed the Chair that the Household Connections have been incorporated in the DPR for ensuring utilization of STP at peak capacity and regular monitoring of treated water quality. STPs at both Leh and Kargil are proposed to have an Online Continuous Emission Monitoring System (OCEMS), which shall transmit real-time data to the LPCC, and the CPCB and with regard to

the installation of OCEMS at Agling, STP Plant, the work stand allotted and is under implementation.

4. The Director, Urban Local Bodies, informed the Chair that the treated water from the STP is being used for watering roadside plantation and the strategies for reuse of treated water has been finalized.
5. The Advisor directed the Director, ULB, to expedite the process of installation of the Online Continuous Emission Monitoring System (OCEMS) at STP.

(Action by Director, ULB)

III) Community involvement

1. The Regional Director, LPCC, informed the Chair that, as per the directions of the Hon'ble NGT, the District Environment Plans (DEPs) must have an authentic and updated database, which can be helpful for policy making and execution of projects. He further informed the Chair that DC, Leh, and DC, Kargil, are yet to submit the updated District Environment Plan to the CPCB.
2. Further, the Chair was informed that, as per the directions of the Hon'ble NGT, the first change required is to set up a Centralized Single Window Mechanism for planning, capacity building, and monitoring of Waste Management at the Union Territory Level.
3. The Principal Secretary, H&UDD, informed the Chair that the H&UDD is in the process of proposing a Waste Management Module under the National Urban Digital Mission for ensuring a centralized planning and monitoring approach towards Waste Management.
4. The Advisor directed H&UDD, Rural Development Department, Agriculture Department, Forest, Ecology and Environment Department, Public Health Engineering Department, Fisheries Department, and Industries & Commerce Department, to hold a meeting regarding the Centralized Single Window Mechanism.

(Action by Chief Engineer, Public Health Engineering Department, DC Leh, DC Kargil, Regional Director, LPCC, Director, ULB, Rural Development Department, Director, Agriculture Department, Director, Fisheries Department, Director, Industries & Commerce Department)

5. The Regional Director, LPCC, stated that the Tribunal observed that UT of Ladakh is different from other States/UT of India, having a significant and considerable number of Armed Forces Establishments. He further informed that a separate O.A. No 45/2019 dated 24-05-2021, has been issued by the Hon'ble NGT for Defence Estates and other concerned authorities and in this regard Defence Establishments may also continue to coordinate with the ULBs concerned.
6. The Regional Director, LPCC, informed the Chair that a meeting with the representatives of Headquarters Chief Engineer, Leh Zone, was conducted on

8th May, 2023 by the Principal Secretary, H&UDD. The Sewage demand for Army is estimated to be 2 MLD, and the generation of Solid Waste is yet to be intimated by them.

7. The Chairman, LPCC, requested the officials of the Defence Establishments to inform the LPCC regarding the current practices of the Solid Waste Management and the Biomedical Waste Management.

(Action by Core Commandant, 14th CORPS, C/O 56 APO, Inspector General, NWFTR, ITBP, C/O 56 APO, Chief Engineer, HIMANK, 56/APO, Chief Engineer, VIJAYAK, 56/APO)

The meeting ended with vote of thanks to the Chair.

No: LPCC/UTL/MOM/2023/2173-96

Dated:- 13/06/2023

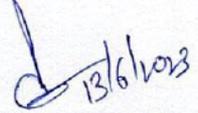
Sd/-
Jigmet Takpa, IFS,
Principal Chief Conservator of Forests/Member Secretary,
Ladakh Pollution Control Committee,
UT of Ladakh.

Copy to the:

1. Dr. Pawan Kotwal, IAS, Principal Secretary, Forest, Ecology & Environment/ Chairman, LPCC, UT of Ladakh.
2. Sh. Sanjeev Khirwar, Principal Secretary, H&UDD, UT of Ladakh.
3. Sh. Satish Khandare, IPS, ADGP, Ladakh Police, UT of Ladakh.
4. Sh. Ajeet Kumar Sahu, Commissioner/Secretary, Public Works Department, UT of Ladakh.
5. Sh. Ravinder Kumar, IAS, Commissioner/Secretary, Power Development Department, UT of Ladakh.
6. Sh. K. Mehboob Ali Khan, IRS, Commissioner/ Secretary, Tourism Department, UT of Ladakh.
7. Sh. Fayaz Ahmad, Secretary, Law, UT of Ladakh.
8. Sh. Shrikant Suse, IAS, Deputy Commissioner, Leh, UT of Ladakh.
9. Sh. Santosh Sukhadeve, IAS, Deputy Commissioner, Kargil, UT of Ladakh.
10. Sh. Swarn Singh, Deputy Secretary, Food, Civil Supplies and Consumer Affairs UT of Ladakh.
11. Sh. Brig P.K Seetaram VSM, Chief Engineer, 14th CORPS, C/O 56 APO.
12. Sh. Brig Deepankar Saha, Station Cdr, HQ, Leh.
13. Sh. Kamlesh Gour, Comdt. Engineer, NWFTR, ITBP, Ladakh.
14. Sh. Krishna Kumar Sharma, IC, Admin, Indian Air Force, Station, Leh.
15. M/s. Ashiva Gera, Sqn Ldr, Station Adjutant, Indian Air Force.
16. Sh. Col S K Mishra, SM, HIMANK, C/o 56 APO, Ladakh.
17. Sh. Tashi Chombel. Chief Engineer, Public Works Department, UT of Ladakh.
18. Sh. Mohd. Nazir, KAS, Director Industries & Commerce, UT of Ladakh.

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19. Dr. Zahida Bano, KAS, Director Urban Local Bodies, UT of Ladakh
20. Dr. Motup Dorje, Director, Health Services, UT of Ladakh.
21. Sh. P K Prasun, Executive Engineer (Civil), VIJAYAK, C/o 56 APO, Ladakh.
22. Smt. Ruksana Parveen, Sr. Scientific Officer, LPCC, UT of Ladakh.
23. Sh. Mohd Ali, District Officer, Kargil, Ladakh Pollution Control Committee, UT of Ladakh.
24. M/s Rigzen Yangdol, Law Officer to Advisor to Hon'ble Lt. Governor, UT of Ladakh.



**Aditya Madanpotra, IFS,
Regional Director,
Ladakh Pollution Control committee,
UT of Ladakh.**

Annexure-II

संघ राज्य प्रशासन, लद्दाख

THE ADMINISTRATION OF
UNION TERRITORY OF LADAKH
LADAKH POLLUTION CONTROL
COMMITTEE

लद्दाख प्रदूषण नियंत्रण समिति

F. No: LPCC/UTL/MS/SWM/Annual Report/2023/508 - 514

ई-मेल/email: memberssecretarylpcc@gmail.com

लेह/Leh, Dated: -12/09/2023

The Member Secretary,
Central Pollution Control Board,
Parivesh Bhawan, CBD Cum- Office complex,
East Arjun Nagar, Shahadara,
Delhi-110032

Sub: Annual Report of Solid Waste Management Rules, 2016 for the year 2022-2023 - reg

Sir,

With reference to the above cited subject, kindly find enclosed herewith the Annual Report under Solid Waste Management Rules, for the year (2022-23) in the prescribed format alongwith Annexures of Summary Statement on the progress made by Local Bodies in respect of Solid Waste Management as Annexure-I, summary sheet on the progress made by Local Bodies of waste collection, segregation, transportation and disposal as Annexure-II and particulars of MCL & MCK at schedule III.

Encl: A/A.

Yours sincerely,


Sajjad Hussain Mufti, IFS,
Member Secretary,
Ladakh Pollution Control Committee,
UT of Ladakh.

Copy to:

- 1 The Chairman, Ladakh Pollution Control Committee, UT of Ladakh for favour of kind information.
- 2 The Principal Secretary, Housing and Urban Development Department for favour of kind information.
- 3 Regional Director, Ladakh Pollution Control Committee, UT of Ladakh for favour of information.
- 4 Director, Urban Local Bodies, UT of Ladakh for favour of information.
- 5 District Officer, Ladakh Pollution Control Committee, UT of Ladakh for favour of information.
- 6 Office file.

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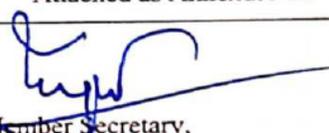
124662/2023/PCC (LEH) SECTION

M/1665/2023-PCC (LEH) SEC
FORM V

[See rule 24(3)]

Annual Report in respect of UT of Ladakh for the Year 2022-2023
on the Implementation of Solid Waste Management Rules, 2016.

PART A

1.	Name of the State/Union Territory:	UT of Ladakh		
2.	Name & address of the Pollution Control Committee:	Ladakh Pollution Control Committee, Skara Yokma, Leh, UT of Ladakh.		
3.	Name of the Local Bodies responsible for management of Solid Waste in the Union Territory under these Rules:	Name of the Local Bodies	Leh	Kargil
		Municipal Committee	01	01
		Total:	02	
4.	No. of Authorization application received	Nil		
5.	A summary statement on progress made by Local Body in respect of Solid Waste Management	Attached as Annexure-I		
6.	A summary statement on progress made by Local Body in respect of waste Collection, Segregation, Transportation & Disposal.	Attached as Annexure-II		
7.	A summary statement on progress made by Local Body in respect of implementation of Schedule-II	Attached as Annexure-III		
	Date: 12.9.23 Place: Leh Ladakh	 Member Secretary, Ladakh Pollution Control Committee, UT of Ladakh.		

Part-B

1.	Towns/Cities	Union Territory of Ladakh
a)	Total No. of Towns/ Cities	2
b)	Total No. of ULB's	2
c)	No. of class I & class II Cities & Towns	N/A
2.	Authorization status (Names/No.)	
a)	No. of applications received	Nil
b)	No. of Authorization granted	Nil
c)	Authorization under scrutiny	Nil
3.	Solid Waste Generation Status	
a)	Solid Waste generation in the UT (TPD)	11.845
b)	Collected (TPD)	11.845
c)	Treated (TPD)	6.736
d)	Landfilled	5.288
4.	Compliance to Schedule-I of SWM, Rules (No./Name of Towns/Capacity)	
a)	Good Practices in Cities/Towns	Local Bodies are implementing waste segregation at source, door to door collection, the collected Solid Waste are transported to the operational Processing / Treatment Facilities or at the existing Landfill / Dumpsites at Skampari, Leh and Kurbathang, Kargil.
b)	House to house collection	100% door to door collection of segregated Waste from Residential, Non-Residential premises including Commercial Establishments, Hotels, Restaurants, Educational Institutions/ Offices are being done in Leh & Kargil.
c)	Segregation	MC Leh has reported that 100% segregating of the waste at source. It has been reported that 100 % segregation at source (13 Wards, 7360 households & 586 Non-Residential premises). MC Kargil has reported that 100% segregating of the waste at source. It has been reported that 100 % segregation at source (13 Wards, 2191 households & 900 Non-Residential premise).
d)	Storage	Leh District: No storage at any location. Kargil District: No of bins placed are 59.
e)	Covered transportation	Leh District: 13 Wards are being covered using 70 % Motorized Vehicle and 30% Tricycle/ Handcart. Kargil District: 13 Wards are being covered using 70 % Motorized Vehicle and 30% Tricycle/ Handcart.

MP.

124662/2023/PCC (LEH) SECTION

M/1665/2023-PCC (LEH) SEC

Processing of SW (Number/Names of towns/ capacity)						
Solid Waste processing Facility setup						
S. No.	Composting	Vermi-Composting	Bio-gas	RDF/ Palletization		
1.	Leh District: Integrated Solid Waste Management in Leh / 01 No./30 TPD.	N/A	N/A	Leh District: Integrated Solid Waste Management		
2.	Kargil District: N/A	N/A	N/A	Kargil District: N/A		
6.	Processing Facility Operational:					
	Composting Leh District: 01 No.	Vermi-composting N/A	Bio-gas: N/A	RDF/ Palletization: 01 No.		
	Kargil District: Nil	N/A	N/A	N/A		
7.	Processing Facility under installation / planned					
	Composting: Under construction	Vermi-composting: N/A	Bio-gas: N/A	RDF/ Palletization: Under construction		
8.	Waste -to – Energy (Number/ Names of Towns/ Capacity)					
	Plant Location	Status of Operation	Power Generation	Remarks		
	N/A	N/A	N/A	N/A		
9.	Disposal of Soid Waste (Number/ Names of Towns/ Capacity)					
a)	Landfill site identified	Leh District: 01 landfill is in Skampari Kargil District: 01 landfill is in Titichumik under construction				
b)	Landfill Constructed	Leh District: 1				
c)	Landfill under Construction	Kargil District: 1 Number in Titichumik under construction				
d)	Landfill operational	Leh District: 1				
e)	Landfill exhausted	Nil				
f)	Landfill capped	Nil				
10.	Solid Waste dumped Sites (Number/ Names of Towns/ Capacity)					
a)	Total No. of existing dumpsite	Leh District: 01 Number in Bombgarh, Leh. Kargil District: 01 Number in Kurbathang, Kargil.				
b)	Dumpsite reclaimed/ capped	Leh District: work started for bio-mining of legacy waste in Bombgarh, Leh and 86% of work is completed. Kargil District: Nil				
c)	Dumpsite converted to sanitary landfill	Leh District: Nil Kargil District: Nil				
11.	Monitoring at Waste Processing/ Landfill sites					
a)	Name of facilities	Ambient Air	Ground water	Leachate Quality	Composed quality	VOCs
	Leh District: Nil	Leh District: Nil	Leh District: Nil	Leh District: Nil	Leh District: Nil	Leh District: Nil
	Kargil District: Nil	Kargil District: Nil	Kargil District: Nil	Kargil District: Nil	Kargil District: Nil	Kargil District: Nil

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12.	Status of Action Plan prepared by Municipalities:	
	Total No. of municipalities	Leh District: 01 Kargil District: 01
a)	Action plan has already been prepared and stands approved.	Yes

ANNEXURE-I

Summary statement on the progress made by Local Bodies of Waste collection, Segregation, Transportation, and Disposal in UT-Ladakh

UT-Ladakh currently conducts periodical waste collection and door-to-door source segregation from all commercial and residential areas.

Municipal Committee Leh:

1. Transportation and collection infrastructure:

For Leh, 84 workers have been deployed for street sweeping, along with 32 workers for Collection and transportation and 12 workers have been deployed for segregation and sorting of Waste at ISWM plant.

2. **Waste collection:** waste collection is conducted once a day in domestic areas and twice a day in commercial areas including night-time waste collection. A fleet of 4 open trucks, 2 refuse compactors, 3 mini-refuse compactor, 1 mini-truck and 5 mini- tipper vehicles conduct the collection of segregated waste, with separate collection fleet for wet waste and dry waste collection.

3. MSW Processing and Disposal infrastructure:

The collected waste is taken to the Solid Waste Management Plant and a sanitary landfill of 30 TPD established in 2020, in Skampari, where dry waste is converted into refuse-derived fuel through sorting and bailing and wet waste is converted to compost.

Municipal Committee Kargil:

1. Transportation and collection infrastructure:

In Kargil, there are 4 tipping trucks, 1 dumper placer, 2 refuse compactors and 4 loaders. There are 65 Nos. of manpower (Permanent-18, Contract 47 Nos) Drivers 14 Nos (permanent-3 Contract 11 Nos) are involved in collection and transportation.

2. **Waste collection:** waste collection is conducted once a day in domestic areas and twice a day in commercial areas including night-time waste collection.

3. MSW Processing and Disposal infrastructure:

In Kargil, collection and resale of waste is currently conducted. Development of SWM Plant and sanitary landfill of 25 TPD is under Construction in Kurbathang.

M.P.

ANNEXURE-II

A summary statement on progress made by local bodies in respect of implementation of Schedule-II:

Items	MC, Leh	MC, Kargil
Segregation	100% source segregation	100% source segregation
Collection	<ol style="list-style-type: none"> 100% collection of segregated waste twice daily in and around the market and densely populated wards. Collection on every alternate basis in the scantily populated wards. 	<ol style="list-style-type: none"> 100% collection of segregated waste twice daily in and around the market and densely populated wards. Collection on every alternate day in scantily populated wards.
Storage	<ol style="list-style-type: none"> HH level storage in colored bins. There is no intermediate secondary storage. Leh town is bin-free. Direct transfer to the Processing plant by the collection vehicles. 	<ol style="list-style-type: none"> HH level storage in colored bins. Details Given in Annexure-A
Transportation	Presently done by 4 open trucks, 2 fuse compactors, 3 mini-refuse compactor, 1 mini-truck and 5 mini-tipper	Presently done by 4 tipping trucks, 1 dumper placer, 2 refuse compactors and 4 loaders.
Street Sweeping	Manual daily street sweeping. Mechanical street sweeping machine is operational and is working on the major roads.	Manual daily street sweeping. Mechanical street sweeping machine is operational and is working on the major roads.
Processing	A 30 TPD capacity of sanitary Landfill and solid waste management plant which is running successfully in Skampari. About 90 per cent of material are recovered at the facility to process the recyclables and biodegradables.	A 25 TPD capacity of sanitary Landfill integrated solar power-based solid waste management plant which is being set up at Kurbathang valley in Kargil. The plant is likely to be operational by Dec 2023.
Disposal	SLF is under construction.	SLF is under construction.
Legacy waste management	Ongoing at Bombgarh. Approximately 86% completed.	To be started once DPR for dumpsite assessment is finalized.

mp.

ANNEXURE-A

S.No	Ward No.	Area	Population	No. of Bins Placed	Total Volume of Bins Placed (Cu.m)
1	Ward No - 01	Kistikor, Changrah, Chuli Harcha, ChuliChas.	1017	06	1.135
2	Ward No - 02	Throngos, Masgang, Bakpanlungma, Chooka.	999	03	0.567
3	Ward No - 03	Tanmosa, Mir Gound, Brongthang, Katur, Changhrah, Thaskang Grong- Proper, Shalti, Brukboo, Lakore, Khachay Grong, & Munshi Grong.	960	05	0.946
4	Ward No - 04	Drathang, Aba Groung, Aba Katpa, Balti Bazar, Changrah, Changrah-Katpa	693	04	0.757
5	Ward No - 05	Dass, Kako Shilikchay, Adul Goung, Pishu, Pishu Longma, Longmitha.	1418	06	1.135
6	Ward No - 06	Yangti, Hartoon, Doks, Gurba, Fretah.	750	04	0.757
7	Ward No - 07	Yabgo, Zabarpa, Shutoo, Gangschan.	705	03	0.567
8	Ward No - 08	Sharah, Shoray, Choposa, Akhone-Mollah, Gongma Sarah Chaychaypa, Somapa, Grounguk, Fali, Khachaypa.	2452	05	0.946
9	Ward No - 09	Hunaki, Lati, Chuka, Kyqlo, Baghe-Khumini.	489	04	0.757
10	Ward No - 10	Zgang, Beamathang, Haidery Mohallah, Silmo Colony.	1520	03	0.567
11	Ward No - 11	Gongma, Giapak, Groung-Mohallah.	1350	04	0.757
12	Ward No - 12	Youkma Strang, Thang- Youkma, Naktoo.	1108	03	0.567
13	Ward No - 13	Titichumik, Baroo Tsoq, Baroo-Colony, Dambahow.	2877	09	1.70

HP.

ANNEXURE-III**1. MUNICIPAL COMMITTEE LEH:**

Sr. No.	Particulars	MC Leh
1.	Area (in Sq. Kms.)	11.6 Sqm.
2.	Population	30870
3.	No. of Wards	13
4.	No. of Households	7360
5.	Solid Waste Generation (in TPD)	6.736
6.	Collection of MSW in TPD (in %)	100% (13 wards)
7.	Premises segregating the waste at source	7360
8.	Processing/ treatment of Solid Waste in TPD (in %)	100%
9.	Disposal of Solid Waste in Landfill/ Dumpsite Sites	15%
10.	Engineered Sanitary Landfill	1 Nos. (Skampari)
11.	Operational Waste to Energy Plant	Nil
12.	Operational Centralised Compost Plants	1 Nos. (10 TPD)
13.	Operational Decentralised Compost Plants and Organic Waste Convertors	Nil
14.	Compost Pits	Nil

2. MUNICIPAL COMMITTEE KARGIL

Sr. No.	Particulars	MC Kargil
1.	Area (in Sq. Kms.)	8.93 Sqm.
2.	Population	16338
3.	No. of Wards	13
4.	No. of Households	2191
5.	Solid Waste Generation (in TPD)	5.109
6.	Collection of MSW in TPD (in %)	100% (13 wards)
7.	Premises segregating the waste at source	2191
8.	Processing/ treatment of Solid Waste in TPD (in %)	0%
9.	Disposal of Solid Waste in Landfill/ Dumpsite Sites	100%
10.	Engineered Sanitary Landfill	Nil
11.	Operational Waste to Energy Plant	Nil
12.	Operational Centralized Compost Plants	Nil
13.	Operational Decentralized Compost Plants and Organic Waste Convertors	Nil
14.	Compost Pits	Nil

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