



संघ राज्य प्रशासन, लद्दाख
पर्यटन एवं संस्कृति विभाग
संघ राज्य सचिवालय, लेह, लद्दाख
टेलीफोन /Telephone: 01982- 255786

THE ADMINISTRATION OF UNION TERRITORY OF LADAKH
DEPARTMENT OF TOURISM & CULTURE
UT SECRETARIAT, LEH, LADAKH
ईमेल / Email: comsecytourismutl@gmail.com

NOTIFICATION

Subject: "Ladakh STP Policy, 2024".

The Tourism Department, Union Territory of Ladakh hereby notifies the STP Incentive Scheme, 2024 for the UT under the nomenclature "Ladakh STP Policy, 2024", annexed herewith, for environmental protection and public health regulations.

Encl.: As above.

(मुहम्मद अली टाक/Muhammad Ali Tak) 17.09.24
अवर सचिव/ओएसडी / Under Secretary/OSD
पर्यटन एवं संस्कृति विभाग / Tourism & Culture Department
संघ राज्य लद्दाख /UT Ladakh

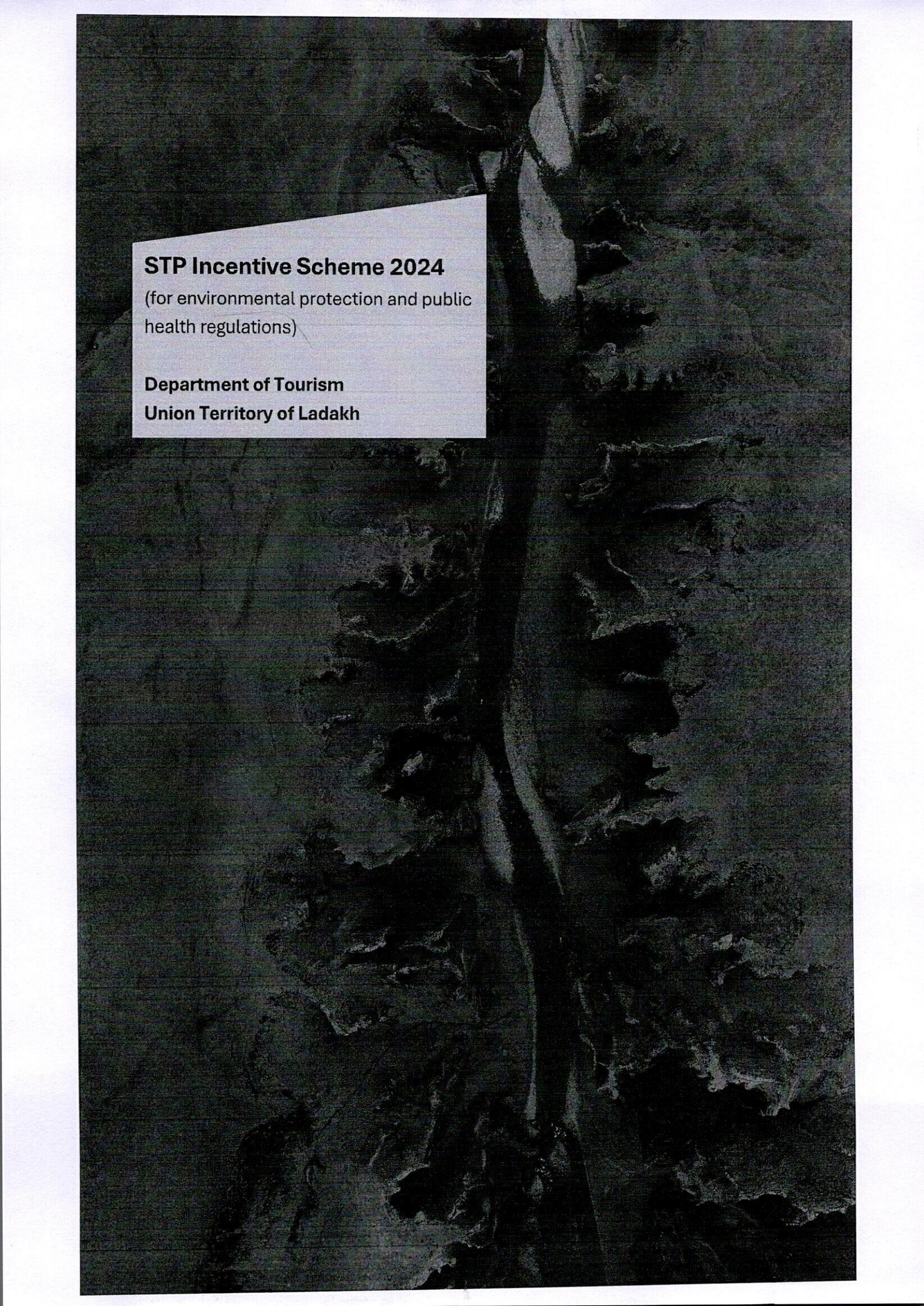
No.: Secy(Trm)/STP/2024/(224)/ 1729-42

Dated: 17.09.2024

Copy to the:

1. Joint Secretary (JKL), Ministry of Home Affairs, New Delhi.
2. Member Secretary, Ladakh Pollution Control Committee for information & necessary action.
3. Deputy Commissioner/CEO, LAHDC, Leh/Kargil for information & necessary action.
4. Director, Tourism Department, Ladakh for information & necessary action.
5. Technical Director, NIC, Ladakh with the request to upload the notification on the official website of the UT Administration Ladakh and District Websites of Leh and Kargil districts.
6. Assistant Director, Tourism Department, Leh/Kargil for information & necessary action.
7. OSD to the Hon'ble Lieutenant Governor, Ladakh for kind information of the Hon'ble LG.
8. Private Secretary to the Hon'ble Chairman/CEC, LAHDC, Leh/Kargil for kind information of the Hon'ble CECs.
9. Private Secretary to Advisor to Hon'ble LG, Ladakh for kind information of the Advisor.
10. Office file.

(मुहम्मद अली टाक/Muhammad Ali Tak) 17.09.24
अवर सचिव/ओएसडी / Under Secretary/OSD
पर्यटन एवं संस्कृति विभाग / Tourism & Culture Department
संघ राज्य लद्दाख /UT Ladakh



STP Incentive Scheme 2024

(for environmental protection and public health regulations)

**Department of Tourism
Union Territory of Ladakh**

I. Background

Ladakh, situated in the northernmost region of India, is renowned for its pristine landscapes, unique cultural heritage, and fragile ecological balance. As tourism in Ladakh continues to grow, so does the pressure on its natural resources, including water. The region faces challenges related to water scarcity, especially during the peak tourist season.

Accommodation units like hotels play a significant role in the local tourism economy. However, their wastewater disposal practices can strain local infrastructure and potentially impact the environment, including water bodies crucial for local ecosystems and communities. Climate change is impacting the availability and distribution of water resources, underscoring the critical need for effective resource management. Therefore, it is vital to ensure that the development and operation of hotels adhere to environmental protection and public health regulations.

II. Vision

To promote clean and sustainable waste management practices across accommodation units like hotels in Ladakh fostering responsible tourism, supported by robust sewage treatment infrastructure, contributing to public health standards and environmental sustainability.

III. Introduction

The Union Territory of Ladakh has a population of 274,289, with a population density of approximately 4.6 individuals per sq. km. The two main towns in Ladakh, Leh and Kargil, are also the only Urban Local Bodies in the Union Territory, with populations of 30,870 and 16,338 individuals respectively (Census of India, 2011).

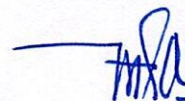
Before the formation of the Union Territory of Ladakh, J&K State Pollution Control Board Guidelines for Regulation of Hotels and Restaurants under Water & Air Acts dated 21.04.2010 (J&K State Pollution Control Board, 2010) were followed. It stated:

1. Hotels up to 6 rooms shall not require consent of the Board, provided they maintain soakage pit/ septic tank and do not become nuisance to the surroundings.
2. Hotels with 7 to 19 rooms with restaurant up to 35 sitting capacity shall be eligible for consent of the Board on maintaining septic tank and soakage pit in efficient manner at all times and restaurant attached with such hotels on maintaining efficient oil and grease traps before discharging effluent arising from its kitchen/ laundry into Municipal sewer or a drain.
3. Hotels with 20 rooms or more and/ or restaurant with sitting capacity of 36 or more shall be eligible for consent of the Board on maintaining a Sewage Treatment Plant (STP) in good and efficient manner at all times.

In the letter no. LPCC/UTL/MSW/2023/1030-42, dated 08.04.2023 (Ladakh Pollution Control Committee, 2023), Ladakh Pollution Control Committee (LPCC) recorded the following observations for further necessary action:

1. Making installation of inhouse STP mandatory for the Hotels, Guest Houses with 10 rooms or more in place of then operational guidelines that mandate the same for hotels having 20 rooms or more.
2. The Hon'ble NGT also advised that mini STPs of 0.75 KLD capacity can be procured and installed in the small hotels/ guest houses.
3. It was also advised that the CPCB should be taken on board in technical matters including latest technology available in the country regarding the Solid Waste Management & Sewage Management.
4. The Hon'ble NGT also advised that penalties should be imposed on the defaulters to force them to install STPs and follow pollution control norms.

In September 2023, LPCC issued draft guidelines for Hotels/ Restaurants/ Marriage Halls/ Banquet Halls/ Party Venues for inviting comments/ suggestions from stakeholders (Ladakh Pollution Control Committee, 2023). As per the draft guidelines, the consent to establish/ consent to operate shall be granted to the Hotels on fulfilment of the given required conditions:


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1. Hotels up to 6 rooms shall not require consent to Establish/ Consent to Operate of the Committee provided they maintain properly reinforced cement concrete Septic Tanks/ Soak Pits and do not become nuisance to the surroundings.
2. Hotels with 7 to 9 rooms shall obtain Consent to Establish/ Consent to Operate of the Committee on maintaining properly reinforced cement-concrete Septic Tanks or Soak Pits in efficient manner, with proper installation of Oil and Grease traps in efficient manner at all times, before discharging effluent arising from its kitchen/laundry into the Municipal sewer or drains.
3. Hotels with 10 or more rooms shall obtain Consent to Establish/Consent to Operate of the Committee on maintaining a Sewage Treatment Plant (STP) in good and efficient manner at all times.

Also, the treated sewage shall be used for the toilet flushing with dual-plumbing system mandatorily.

In accordance with the above directives, the Department of Tourism has started directing all hotels in Ladakh with 10 or more rooms to install decentralized sewage treatment plants (STPs). This new mandate presents financial challenges, particularly for smaller establishments with less than 20 rooms. Hotels with 20 rooms or more are mandatorily required to install STPs since 2010 and are better equipped to manage the costs of implementing STPs independently. To address this issue, the Department of Tourism, Union Territory of Ladakh is introducing the 'STP Incentive Scheme 2024', which aims to assist hotels with 10-19 rooms by supporting the installation of decentralized STPs. This initiative seeks to alleviate financial burdens, protect water resources, and promote sustainable tourism practices.

IV. Objective

The STP Incentive Scheme 2024 aims to promote the installation and effective operation of decentralized STPs in hotels with 1-19 rooms across the Union Territory of Ladakh. The scheme aims to mitigate environmental impact by ensuring proper treatment of wastewater, thereby safeguarding local water bodies, enhancing public health standards, and promoting sustainable tourism practices in the region.

V. Applicability

The eligible hotels and guest houses operating in the Union Territory of Ladakh shall fulfil the following minimum criteria to avail incentive under the STP Incentive Scheme 2024:

1. New or existing hotels and guest houses in the Union Territory of Ladakh with room count of 1-19.
2. Registered with the Department of Tourism, UT Ladakh.
3. Shall have necessary permissions & NOCs for operating the hotel/ guest house in the Union Territory of Ladakh.

Note: It is also expected that eligible hotels & guesthouses applying for incentive under the 'STP Incentive Scheme 2024' shall have a fixed meter on borewell at the establishment and have sufficient ground area for STP installation.

VI. Incentive

All eligible hotels and guesthouses operating in the Union Territory of Ladakh who intends to install decentralized Sewerage Treatment Plant (STP), shall reimbursed the cost of the equipment basis the room count and the STP capacity, as below. The eligible expense shall include the cost of equipment, installation charges, transportation and consultancy fee. Expenses related to GST, or any other non-listed item will not be considered as eligible expense.

S. No.	Room Count	STP Capacity	Incentive
1.	10-19 Rooms	10 KLD	75% of the cost of the equipment, subject to a limit of Rs. 5,00,000/- (Rupees Five Lakh only), whichever is less
2.	1-9 Rooms	5 KLD	75% of the cost of the equipment, subject to a limit of Rs. 3,00,000/- (Rupees Three Lakh only), whichever is less

Note: The STP Incentive Scheme 2024 has taken a proactive step towards environmental stewardship and community welfare by extending its incentive benefits to include hotels and guesthouses with 1-9 rooms and homestays operating in the Union Territory of Ladakh. In addition, the STP capacity for hotels and guesthouses with


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10-19 rooms is raised to 10 KLD. Although not explicitly required by the National Green Tribunal (NGT) recommendations, this initiative underscores a commitment to preemptively address the challenges of waste management and sanitation that are likely to arise with the growth of the tourism sector in Ladakh. This forward-thinking approach not only aligns with sustainable development goals but also ensures that even the smallest establishments are equipped to maintain high environmental standards, thereby enhancing the overall sustainability of the region's tourism industry.

Note: To support women entrepreneurship in the Union Territory of Ladakh, the maximum quantum of incentive shall be raised by an additional amount of 10% across each category for a new hotel or guesthouse which is owned by a woman.

VII. Technical Specifications

As per the technical specifications provided by the Member Secretary, Ladakh Pollution Control Committee (LPCC) in the letter no: LPCC/UTL/2024/250-53, dated 26/07/2024, following standards should be followed for installing decentralized STPs in hotels and guest houses with 10-19 rooms.

1. **Treated Sewage Standards/ STP output discharge standards for different parameters:** The treated sewage should meet the following standards as approved by the LPCC board vide decision no: LPCC/UTL/MOM/436-52, dated 16/08/2023:

S. No.	Parameter	Required Standard
1.	pH	6.5-8.5
2.	BOD (3 rd or 5 th Day)	10mg/l
3.	COD	50mg/l
4.	Suspended Solids	10mg/l
5.	Ammoniacal Nitrogen	5mg/l
6.	Total Nitrogen	5mg/l
7.	Faecal Coliform	100MPN/100ml
8.	Phosphate as P	1.0mg/l
9.	Total Suspended Solids	50mg/l
10	Oil & Grease	10mg/l

2. To achieve the aforementioned standards, the following CPCB approved technologies may be adhered to:
 - a) **Membrane Bioreactor (MBR)** technology integrates biological treatment with membrane filtration, enhancing wastewater treatment efficiency by producing high-quality effluent in a compact footprint. It operates by using microorganisms to break down organic pollutants while membranes physically separate biomass and solids from treated water, eliminating the need for secondary settling tanks. MBRs offer advantages such as reduced sludge production, flexibility in handling variable flows, and suitability for reuse applications.
 - b) **Moving Bed Bio-film Reactor (MBBR)** is a wastewater treatment technology that combines biological treatment with a suspended growth process. It employs small, plastic biofilm carriers (often referred to as media) that host a community of microorganisms. These carriers move freely within the reactor, providing a large surface area for biofilm growth. Wastewater flows through the reactor, and microorganisms attached to the biofilm carriers degrade organic pollutants. MBBRs are known for their operational flexibility, high treatment efficiency, and robustness against hydraulic and organic load fluctuations.
 - c) **Sequential Batch Reactor (SBR)** technology is a versatile and efficient wastewater treatment process that operates in a cyclic batch mode. It combines multiple treatment steps, including biological treatment, settling and decanting within a single reactor. In an SBR system, wastewater is added to the reactor in batches and undergoes a sequence of treatment stages: filling, reaction (aerobic or anaerobic), settling, and decanting of treated effluent. This cyclic process allows for



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precise control over treatment conditions and can accommodate varying influent characteristics and flow rates.

3. **Unit Requirements for STP:** STPs have different individual units where different sewage treatment processes happen. The units and their criteria according to the guideline's prerequisite are as per the following:

S. No.	Unit	Activated Sludge Process (ASP)	Sequential Batch Reactor (SBR)	Membrane Bioreactor (MBR)	Moving Bed Biofilm Reactor (MBBR)
1.	Equilization Tank	Should have a minimum holding period of 8 hours.	Same as ASP	Same as ASP	Same as ASP
2.	Anoxic tank	Return activated sludge should be pumped to anoxic tank for denitrification.	Not required	Same as ASP	Same as ASP
3.	Aeration Tank	Dissolved Oxygen in an excess of 4mg/L has to be maintained in the Aeration Tank.	Same as ASP	Same as ASP	Same as ASP
4.	Membrane Tank	Not Required	Not required	Membranes should be replaced regularly as per its manufacturer's specifications	Not required
5.	Sludge Holding Tank	Sludge holding should be mandatorily provided for holding excess sludge before its dewatering.	Same as ASP	Same as ASP	Same as ASP
6.	Final Treated Water Holding Tank	Capacity of the tank should be enough to hold water for 2 days minimum.	Same as ASP	Same as ASP	Same as ASP
7.	Sludge Drying Bed	Instead of sludge drying bed, horizontal centrifuge system should be used for >500KLD STPs. For <500KLD STPs, belt press or screw press system should be used.	Same as ASP	Same as ASP	Same as ASP

4. Capacity of decentralized STPs for hotel/ guest house having different room capacity from 10-19 rooms including additional load of kitchen, etc.:
- 10-13 rooms - 5 KLD
 - 14-16 rooms - 7 KLD
 - 17-19 rooms - 8 KLD


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5. **Mechanical Equipment Requirement for STP:** There should be a clear and simple access to the Bar Screen Chamber and Oil and Grease Chamber of STPs established, with separate installation of meters to record the daily consumption of water by the establishment, and separate electromagnetic flow meter at the inlet and outlet of STPs to record actual flows /treatment on a daily basis.
6. **Use of Treated Sewage:** The treated water from the STP must be compulsorily utilized for toilet flushing purposes, gardening, car washing, etc. This practice ensures the conservation of freshwater resources and promotes sustainable water management.

Note: These above specifications do not cover specific environmental conditions of the Union Territory of Ladakh (e.g., cold climate, high altitude).

VIII. Incentive Disbursal Framework

The Department of Tourism, UT Ladakh shall invite application from the eligible applicants through the office of Assistant Director (Tourism), Leh & Kargil. Until the facility for submission of application is made online, eligible applicants shall submit the application in hardcopy.

1. Once the eligibility is confirmed, the Assistant Director (Tourism) office shall forward the application to the office of the concerned Deputy Commissioner/ CEO, LAHDC, Leh/ Kargil for assigning an empaneled vendor.
2. The empaneled vendor shall study the requirements and prepare a Detailed Project Report (DPR) for the STP installation. The STP installation work will formally be assigned to the vendor after submission of the DPR.
3. The DPR will be sent to the LPCC for vetting and issuance of 'Consent to Establish'.
4. Following the installation of the STP, the applicant shall obtain the 'Consent to Operate' from the LPCC.
5. Upon successful installation, submission of the 'Consent to Operate,' and submission of the invoices towards eligible expenses with payment proof, the empaneled vendor shall be reimbursed the applicable quantum of incentive.
6. The applicant shall be responsible for paying the remaining amount to the empaneled vendor, which is the difference between the total cost and the incentive amount received.

Note: For the selection of appropriate technology and the construction of the STP, the empaneled vendor shall play a crucial role. These vendors will assist in choosing the most suitable STP technology for the specific needs of the hotel or guest house. They shall oversee the entire construction and commissioning process, ensuring that the installation meets all technical and regulatory requirements. The timeline for this process shall be outlined by the empaneled vendor, including milestones for construction and testing. Throughout this phase, the empaneled vendor shall be responsible for coordinating all activities and ensuring the timely completion of the STP installation.

IX. Committee

A committee shall be constituted with specific functions for the implementation of the STP Incentive Scheme 2024 in the Union Territory of Ladakh. The composition of the committee shall be as under:

Committee Functions	Members
<p>The committee shall be responsible for the following:</p> <ul style="list-style-type: none"> ➤ Identification of beneficiaries. ➤ Empanelment of vendors for the installation of STP. ➤ Inspections, whenever necessary, to ascertain adherence of the guidelines, assess the quality & condition of equipment. ➤ Any other functions for the swift implementation of the scheme. 	<p>The committee shall comprise of the following:</p> <ol style="list-style-type: none"> 1. Secretary Tourism, UT Ladakh 2. Member Secretary, Ladakh Pollution Control Committee 3. Deputy Commissioner, Leh 4. Deputy Commissioner, Kargil 5. Representative of LAHDC, Leh 6. Representative of LAHDC, Kargil 7. Director (Tourism), UT Ladakh 8. Assistant Director (Tourism), Leh 9. Assistant Director (Tourism), Kargil


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Note: The committee can co-opt any expert with sector specific expertise for suggestions or guidance.

References

1. Census of India (2011) – National Population Register, New Delhi, Ministry of Home Affairs
2. J&K State Pollution Control Board (2010) – Guidelines for regulation of Hotels and Restaurants under Water & Air Acts (SPCB/PS/MS/10/111-19), J&K State Pollution Control Board
3. Ladakh Pollution Control Committee (2023) – Inviting Comments/ Suggestions from stakeholders/ general public of the Draft Guidelines for Hotels/ Restaurants/ Marriage Halls/ Banquet Halls/ Party Venues (No: LPCC/UTL/2023/Guidelines/4225-4230), Ladakh Pollution Control Committee
4. Ladakh Pollution Control Committee (2023) No: LPCC/UTL/MSW/2023/1030-42. In respect of O.A. No. 606/2018, Union Territory of Ladakh in compliance of the Solid Waste Management Rules 2016 and other environmental issues, Ladakh Pollution Control Committee
5. Member Secretary, LPCC. (2024) – Technical specification for installation and operation of decentralized STPs for hotels having capacity 10-19 rooms; No: LPCC/UTL/2024/250-53; Dated: 26/07/2024, Ladakh Pollution Control Committee

Note: An applicant who has already availed similar incentive for a hotel or a guesthouse under any policy/ scheme of the Government of India, Administration of Union Territory of Ladakh or Ladakh Autonomous Hill Development Council (LAHDC) shall be ineligible to avail incentive under the 'STP Incentive Scheme 2024' of the Department of Tourism, UT Ladakh.

Note: The Department of Tourism, Union Territory of Ladakh reserves the right to modify the terms & conditions of the 'STP Incentive Scheme 2024' from time to time, as deem appropriate.


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