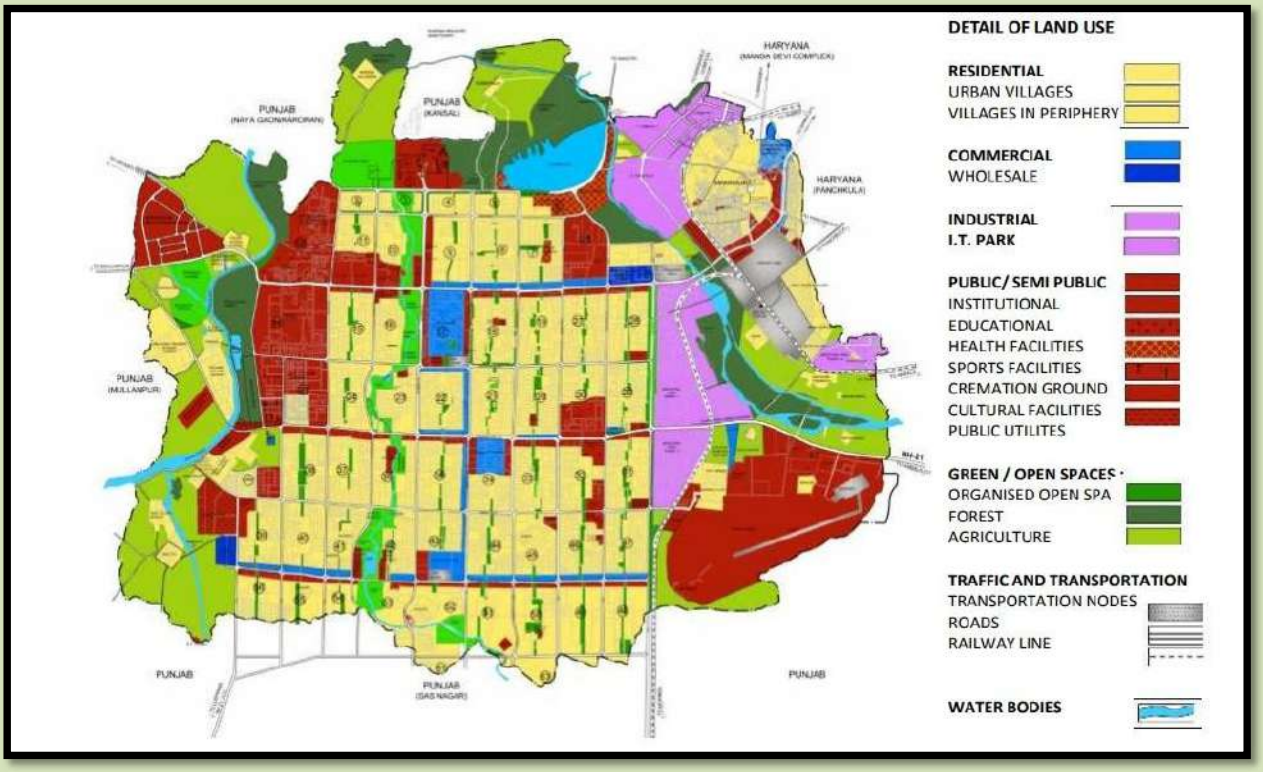
DISTRICTENVIRONMENTPLAN

FOR

U.T.CHANDIGARH



CHANDIGARH ADMINISTRATION

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EXECUTIVE SUMMARY

The Hon'ble National Green Tribunal (NGT) has passed an order on 26th September 2019 in the matter of the Original Application (O.A.) Number 360/2018 to check compliance with several statutory requirements related to waste and environment management and advisories issued in the states. This order was passed in response to the growing concerns regarding non-compliance with the provisions of Waste Management Rules and Regulations of 2016, and other relevant rules and regulations related to water quality and conservation, and air and noise pollution management in the states. Central Pollution Control Board (CPCB) summarized themes from the order of 26th September 2019 that had directed the state governments to compile information with reference to the following specific thematic areas viz.:

1. **Waste Management:**
   a. Solid Waste
   b. Plastic Waste
   c. Construction & Demolition Waste
   d. Biomedical Waste
   e. Hazardous Waste
   f. E-Waste
2. **Air Quality Management**
3. **Water Quality Management**
4. **Domestic Sewage**
5. **Industrial Wastewater Management**
6. **Noise Pollution Management Plan**
7. **Forest, Wetland & Water Bodies**
8. **Renewal Energy**

This order has directed that such information is to be furnished to the CPCB by the Chief Secretaries of all the States/UTs. This may include current status, desirable level of compliance in terms of statutes, and gap between current status and desired levels. The action proposal needs to address the gap with an action plan including time lines. TheDepartment of Environment of all States and Union Territories are required to collect such District Environment Plans of their respective States and finalize the 'State Environment Plan' covering the specific thematic areas. The action for preparation of State's Environment Plan

shall be monitored by the respective Chief Secretaries of States and Administration of UTs. Based on the Environment Plans of the States and UTs, the Ministry of Environment and Forests and Climate Change (MoEF&CC) and CPCB shall prepare country's Environment Plan accordingly.

Thus, as per the hearing of Hon'ble NGT on 29.01.2021, the State Governments are required to submit a State Environment Plan (SEP) to take stock of the compliance with the statutory provisions and the action plan to safeguard against health risk and environmental degradation. Following this order, the Department of Environment, U.T., Chandigarh has prepared the DEP by compiling information from Municipal Committee, Chandigarh; Pollution Control Committee, Chandigarh and Chandigarh Smart City Limited as per the thematic areas.**Being a Union Territory, State Environment Plan & District Environment Plan shall be same for Chandigarh.**

The District Magistrate, U.T. Chandigarh vide Memo No. DM/MA/2021/3733, dated 25.02.2021 has appointed the A.D.A. posted in the office of the District Magistrate as the Nodal Officer w.r.t. the order dated 29.01.2021, passed by the Hon'ble N.G.T. in the case- "O.A. no. 360 of 2018. Following this, the District Level Monitoring Committee was constituted vide Order No. ED/2021/1016-1026 dated 08.06.2021 under the chairmanship of the District Magistrate for the monthly meetings to review the status of implementation and updation of the District Environment Plan as per the Hon'ble NGT orders.

Following the monthly meetings and orders of the Hon'ble NGT dated 05.07.2022, the revised DEP had been prepared in accordance to the Indicative Template as provided by Central Pollution Control Board, New Delhi and in compliance to the various orders of the Hon'ble N.G.T. in the matter 360/2018. The District Environment Plan so prepared with the information submitted by the stakeholder departments had also been uploaded on the website of Chandigarh Administration.

Furthermore, vide the orders of the Hon'ble NGT dated 08.02.2022, Hon'ble NGT has also given certain suggestions for preparation of District Environment Plan, which have been included in the Volume I of Revised DEP. It had also been directed that the plans so prepared **need to be periodically revised and updated preferably as on 31st March** for every year and executed in respect of all concerned thematic areas.

The recent orders of the Hon'ble NGT dated 17.01.2023in the case – "O.A. No. 360 of 2018", it has been directed that "State Environment Plan taking into account District Environment Plans or any other relevant data may be finalized by 28th February every year and placed on respective State websites", with further mention that the District, State and National Environment Plans be prepared and updated accordingly on continuous basis annually and therefore the application (O.A. No. 360/2018) stands disposed off.

The information w.r.t. to the thematic areas as provided by the stakeholder departments is summarized as under:

WASTE MANAGEMENT

(i) Solid Waste Management

Chandigarh has more than 100% treatment capacity. The treatment capacity of 787 TPD is available against the municipal solid waste generation of approx. 500 TPD. This waste consists of wet, dry and horticulture waste from households. MCC has engaged 524 GPS installed compartmentalized vehicles for door-to-door collection and transportation of segregated waste (wet, drydomestic hazardous and sanitary waste). At present, 100% waste is collected door to door from households in four categories viz Dry, Wet, Sanitary and Domestic Hazardous waste.

(ii) Plastic Waste Management

With a view to control the menace of single use plastic &Plastic/polythene carry bags, Chandigarh Administration vide its notification No. ED/2019/1648 dated 27.09.2019 and its amendments No. ED/2020/2818 dated 30.01.2020and ED/2020-247 dated 01.07.2020, has imposed a complete ban on identified Single Use Plastic items. Further, vide order no. ED/2023/73-78 dated 12/01/2023 the Chandigarh Administration has also adopted and implemented the notification from the Ministry of Environment, Forest & Climate Change, GoI, dated 12.08.2021. A total estimated quantity of plastic waste generated in Chandigarh for year 2023 is 5967 MT i.e. 16.34 TPD.

(iii) Construction & Demolition Waste Management

Municipal Corporation, Chandigarh has started C&D Waste Processing Facility in

Industrial Area, Chandigarh. A total of approximately90 TPDof C&D waste is generated in Chandigarh on an average daily these days. C&D Waste management policy has also been notified to comply with the Solid Waste Management Rules, 2016. Special drives are being organized by MCC to aware general public regarding proper disposal of C & D waste and proper dust mitigation measures to be taken during construction.

(iv) Biomedical Waste Management

At present 950 nos. (50 bedded HCFs and 900 non-bedded HCFs) of Healthcare Facilities are operational in Chandigarh and around 6347 kg/day of(incinerable and non-incinerable) biomedical waste is generated. All the health care facilities have registered themselves with Chandigarh Pollution Control Committee for authorization under Biomedical Waste Management Rules, 2016. One Bio-medical Waste Treatment Facility (BMWTF) is authorized by CPCC for collection, transportation, treatment & disposal of the bio-medical waste of Healthcare Facilities of Chandigarh.

(v) Hazardous Waste Management

Presently, there are 1236 units(including Standalone DG sets) generating Hazardous Waste in Chandigarh. Whole of the hazardous waste is collected and transported through authorized Treatment Storage Disposal Facility (TSDF), incinerator and recyclers to their facilities located in Punjab, Haryana and U.P. For disposal of landfill able waste, Chandigarh Pollution Control Committee has made agreement with Punjab Pollution Control Board for utilizing their TSDF facility namely M/s Re Sustainability Limited (Formerly known as M/s Ramky Enviro Engineers Ltd.

(vi) Electronic Waste (E-waste) Management

E-waste generated in Chandigarh is being collected, segregated, dismantled, recycled, treated and disposed off through authorised E-waste recyclers from the other states of Punjab and Himachal Pradesh as there are no dismantlers or recyclers in Chandigarh.

AIR QUALITY MANAGEMENT

There are three real time ambient air quality monitoring stations installed by

Chandigarh Pollution Control Committee, U.T. Chandigarh at sector 25, 22 and 53 to monitor the ambient air pollutants in the city. Additionally, there are five manual monitoring stations installed different locations of the city. As per the orders of Hon'ble NGT, Air Quality Monitoring Committee (AQMC) has been constituted in Chandigarh to monitor the air quality management under National Clean Air Programme.

WATER QUALITY MANAGEMENT

Under the National Water Monitoring Programme, CPCC is monitoring ground water, drains and lake as per the schedule decided by CPCB. The present water supply service area of Municipal Corporations Chandigarh (MCC) is 114 Sq. Km, which includes MCC area of 79.34 Sq. Km and rural area of 34.69 Sq. Km. The rural area comprises of 13 villages overseen by the Engineering Department. The water supply to the villages is provided with tube wells in and around the villages. Other urban/rural areas have water source of 72 MGD(Millions of Gallons per day) is received presentlyfrom Bhakra Main Canal which is 27 km away from Chandigarh and 18.26 MGD from 248 tube-well located in the city.

DOMESTIC SEWAGE & INDUSTRIAL WASTE WATER MANAGEMENT

The Chandigarh has more than 100% treatment capacity. The treatment capacity of 253.5MLD is available against the sewage water generation of 232 MLD. At present eight (8) Sewage Treatment Plants (STPs) are operational and all the STPs are meeting with latest norms.

MINING ACTIVITY MANAGEMENT PLAN

There is no major mining activity in Chandigarh.

NOISE POLLUTION MANAGEMENT PLAN

Chandigarh Administration is divided the various parts of Chandigarh into different zones i.e. Industrial Area, Commercial Area, Residential Area and Silence Zone. The noise levels are maintained at these locations as per Noise Pollution (Regulation and Control) Rules, 2000.

FOREST, WETLAND & WATER BODIES

Chandigarh is blessed with 72.16 sq. km. of green cover which is 51.542% of UT's total area. The forest cover of UT Chandigarh is 25.00 sq. km which is 21.93 % of

geographical area (114 sq km) and another 25.98 sq. km. area of Sukhna Wildlife Sanctuary. The total Green Cover (Forest Cover + Tree Cover) of Chandigarh as per ISFR -2021 was 45.63%, which has increased to 51.542% as per ISFR –2023.

1. DISTRICT PROFILE

Chandigarh was planned by the famous French Architect Le Corbusier. Picturesquely located at the foothills of Shivaliks, it is known as one of the best experiments in urban planning and modern architecture in the twentieth century in India. Chandigarh derives its name from the temple of "ChandiMandir" located in the vicinity of the site selected for the city. The deity 'Chandi', the goddess of power and a fort of 'Garh' laying beyond the temple gave the city its name "Chandigarh-The City Beautiful".

Since the medieval through modern era, the area was part of the large and prosperous Punjab Province which was divided into East & West Punjab during partition of the country in 1947. The city was conceived not only to serve as the capital of East Punjab, but also to resettle thousands of refugees who had been uprooted from West Punjab.In March, 1948, the Government of Punjab, in consultation with the Government of India, approved the area of the foothills of the Shivaliks as the site for the new capital. The location of the city site was a part of the erstwhile Ambala district as per the 1892-93 gazetteer of District Ambala.

The foundation stone of the city was laid in 1952. Subsequently, at the time of reorganization of the state on 01.11.1966 into Punjab, Haryana and Himachal Pradesh, the city assumed the unique distinction of being the capital city of both, Punjab and Haryana while it itself was declared as a Union Territory and under the direct control of the Central Government.

The Union Territory Administration is headed by the Administrator who is appointed by the President of India under Article 239 (2) of the Constitution of India. The Administrator is assisted by the Chief Secretary, who is an IAS officer of the AGMUT cadre. He is assisted by eight Administrative Secretaries and a number of IAS, IPS, IFS, DANICS, PCS and HCS officers. The Chief Secretary oversees the day-to-day administration. The powers to legislate vest with the Parliament. The nodal Ministry for the Union Territory, Chandigarh is the Ministry of Home Affairs. Being a Union Territory without a legislature, the entire plan and non-plan expenditure is met directly from the Consolidated Fund of India. All its income goes directly to the Consolidated Fund of India. Therefore, a single demand, covering all functions of the Administration is presented to Parliament as a part of Demands for Grants of the Ministry of Home Affairs. The Union Territory, Chandigarh comprises of one Parliamentary Constituency and one District. The Municipal Corporation in Chandigarh came into existence in May, 1994 under the Punjab Municipal Corporation Act, 1976 (as

extended to Chandigarh) by an Amendment Act of 1994. An elected Mayor heads the Corporation.

The Master Plan of UT Chandigarh covers an area of approximately 114 sq km (excluding 26 km area of Sukhna Wildlife Sanctuary). This includes the nearly fully developed 70 sq km of the area planned by Le Corbusier and his team and the 44 sq km of its 3% share of the 16 km periphery-controlled area. The 44 sq km periphery area of Chandigarh is regulated by the Punjab New Periphery Control Act, 1952 with the exception of the abadideh of the villages falling within it namely Sarangpur, Khudda Ali Sher, KhuddaJassu, KhuddaLahora, Maloya, Dadumajra,Palsora, Kajheri, Raipur Kalan, Raipur Khurd, Behlana, Hallomajra, Makhanmajra, Kishangarh and Manimajra. The area also includes the three natural rivulets of the Patiala Ki Rao, N-Choe and the SukhnaChoe.As per the exact cartographic extent, Chandigarh is from30°40′Nto 30º47'30"N and from 76°42′15"Eto 76º51'E. It has an average elevation of 320 metres and shares its borders with the states of Haryana and Punjab.

The Union Territory of Chandigarh is located in the foothills of the Shivalik hill ranges in the north, which form a part of the fragile Himalayan ecosystem. It is occupied by Kandi (Bhabhar) in the north east and Sirowal(Tarai) and alluvial plains in the remaining part. The subsurface formation comprises of beds of boulders, pebbles, gravel, sand, silt, clays and some kankar. The area is drained by two seasonal rivulets viz. SukhnaChoe in the east and Patiala-Ki-Rao Choe in the west. The central part forms a surface water divide and has two minor streams. The stream passing through the central part is called N-Choe and the other is ChoeNala which initiates at Sector29.

There are two Eco Sensitive Zones notified in the Union Territory of Chandigarh, namely Sukhna Wildlife Sanctuary Eco Sensitive Zone and City Bird Sanctuary Eco Sensitive Zone. The extent of zone for the former varies from 2.0 kilometres to 2.75 kilometres from the boundary of the Sukhna Wildlife Sanctuary in the city.The Administration has divided the Eco-sensitive Zone in two zones i. e., Zone-I and Zone-II. The extent of Zone-I is upto 0.5 km of from the boundary of the Sukhna Wildlife Sanctuary and the balance area shall be in Zone-II and this has been done with the purpose of having stricter norms in Zone-I for protection of wildlife habitat.The area of Eco-sensitive Zone is 1050.0 hectares (on the side of Union territory of Chandigarh). The Central Government has also notified an area to an extent varying from 80 to 125 meters from the boundary of the

City Bird Sanctuary Union Territory Chandigarh as the City Bird Sanctuary Eco-SensitiveZone.

With total area of 140 sq. km, Chandigarh is blessed with 63.03 sq. km. of green cover which is 50.05% of UT's total area. The forest area of UT Chandigarh is 22.03 sq. km which is 19.32 % of geographical area (114 sq km) and another 25.98 sq. km. area of Sukhna Wildlife Sanctuary. In the last two decades, city has observed 39% increases in green cover.

Ample areas have been provided in the master plan of the Capital for parks. Out of a total area of 20,000 acres acquired for the first phase, about 2000 acres are meant for development of parks. Leisure Valley, Rajendra Park, Bougainvillea Park, Zakir Rose Garden, Shanti Kunj, Hibiscus Garden, Garden of Fragrance, Botanical Garden, SmritiUpavan, Topiary Garden and Terraced Garden are some of the famous parks of Chandigarh. Sukhna Lake, Rock Garden, Government Museum and Art Gallery are major tourist attractions of Chandigarh.

As per census 2011, over 10.54686 lakh people reside in Chandigarh with a population density of 9,252 persons/ sq.km. Maximum land use of Chandigarh is in urban category. Census of 2011 reveals that 97.01% of households are in urban area and 2.98% is in rural area. Categorization of total area is as given below:

Out of total area in Chandigarh, 10672.16 acre is under residential area, 1339.73 acre of land is under commercial area, 2046.1 acre is under transport, 1326.5 acre is under industrial area, 2968.79 acre is under public/semi-public, 2428.47 acre is under recreational use, 302.33 acre is under public utilities, 136.29 acre is under railway land, 1573 acre is under defence, 2113.97 acre of land is under forest land, 2046.1 acre of the total land is vacant, 277.29 acre of land is under green belts and 302.33 acre of land is under water treatment plant/ sewage treatment plant.

Chandigarh falls under Koeppen's CWG class, for example, it has cold dry winter, sweltering summer, and subtropical storm. Vanishing ordinarily surpasses precipitation and the climate is commonly dry. The territory encounters four seasons (i) Summer or sweltering season (mid-March to Mid-June) (ii) Rainy season (late- June to mid-September); (iii) Post storm fall / progress season (mid-September to mid-November); (iv) Winter (mid-November to mid-March). The drought of summer is long however with the incidental sprinkles or tempests. May and June are the most sizzling a very long time of the year with the mean day

by day greatest and least temperatures being about 37°C and 25°C, individually. Most extreme temperatures can ascend to 44°C. Southwest rainstorm with high-power showers starts in late June. The climate right now is hot and moist. The variety in yearly precipitation on year-to-year premise is obvious for example 700 mm to 1200 mm. The 20-year normal precipitation for Chandigarh is 1100.7 mm. January is the coldest month with mean most extreme and least temperatures being around 23°C and 3.6°C respectively. Winds are commonly light and blow from northwest to southeast course with a special case of easterly to south-easterly breezes that blow on some days amid the mid-year season.

ACTION PLAN STATUS FOR THEMATIC AREAS OF DISTRICT/STATE ENVIRONMENT PLAN OF U.T. CHANDIGARH

2 INDICATIVE GAP ANALYSIS AND ACTION PLANS FOR COMPLYING WITH WASTE MANAGEMENT RULES.

2.1 Solid Waste Management

The Municipal Corporation, Chandigarh (MCC) is collecting daily around 500(approx.) tonnes of municipal waste from all over Chandigarh. This waste consists of wet, dry, domestic hazardous waste, sanitary waste and horticulture waste. The status of management of solid can briefly be discussed as below:

- **Collection and Transportation of Segregated Waste**

  MCC has engaged524 GPSinstalled compartmentalized vehicles for door-to-door collection and transportation of segregated waste (wet, drydomestic hazardous and sanitary waste). Adequate no. of triple bin dustbins havebeen installed in market/commercial areas. At present, around100% of door-to-door collection of segregated waste has been achieved.

- **Collection and Transportation of Waste Generated by Bulk Waste Generators (BWGs)**

  21 nos. BWGs have been identified in the city and all are managing their wet waste within their premises. Only dry waste is disposed through MCC.

- **Management of Domestic Hazardous Waste**

  Whole of the hazardous waste collected is transported to 03 No. Material Recovery Facilities.Currently,compartmentalized vehicles of MCC are collecting the domestic hazardous waste in separate compartment.MCC has executed an agreement with M/s Nimbua Greenfield Punjab and M/s Re-sustainability Ltd. for processing of hazardous waste.

- **Management of Horticulture Waste**

  One Horticulture Waste Processing plant of 30 TPD is operational for processing of pruned horticulture waste. Along with this, aerobic composting of on-site horticulture waste is being done in 104 parks/ green belts of Chandigarh. All the other green belt areas are practicing onsite anaerobic composting. MCC has hired 20 tractor trolleys to lift horticulture waste.

In addition to above, Horticulture Waste processing plant of capacity 30 TPD is established at Industrial Area-I, Chandigarh. Pruning Waste 12 TPD (avg) is generated in the city which is processed to make Biomass briquettes and sold to industries for use as bio-fuel.

- **Processing and Disposal of Waste**

  The Plant is now run by Municipal Corporation Chandigarh. The plant has Dry Waste processing unit of capacity 200 TPD and wet waste processing facilities of 120 TPD capacity.Also, MCC has recently established 300 TPD windrow composting plant for processing of wet waste at dumping ground,Dadumajra with the aim to treat 100% of the wet waste being generated in the city. The city also has bio-methanation unit of 5 TPD capacity.The total capacity for processing of wet waste is 425 TPD

- **Bio-remediation of Legacy Waste**

  The work for remediation of 5 Lakh Ton Legacy Waste was commenced under Chandigarh Smart City Limited and the Bio-remediation work has been completed. The area has been cleaned and levelled with fresh soil.No fresh waste is being dumped at this legacy waste site. 20 Acres of the land is reclaimed after bioremediation of the legacy waste.

  The second dumping site at DaduMajra measuring 8 Acres, has 7.67 LMT of Legacy waste dumped therein. The Project for Bio-remediation of the same was allotted on dated 26.08.2022. The work of bio-mining of 2nd Dumpsite has been completed as on 31.12.2024.

  That despite best waste management efforts, previously about 70-80 TPD of inseparable mixed waste and 4-5 TPD of unprocessed dry waste comprising of Cloth, Seat covers, mattresses were being dumped at the dumping ground which led to formation of a third dump of approx. 2.40 LMT.

  Now even the bio-remediation of the third dump comprising 2.40 LMT has also commenced from 25.01.2025.

Chandigarh is processing its floral waste which is collected daily from temples across the city, into incense sticks, earthen diyas and cones. The project dovetails both

National Urban Livelihoods Mission (NULM) and Swachh Bharat Mission (SBM) as women Self Help Group (SHGs) have been trained to make these products thereby providing them the livelihood.

Chandigarh rose to 11th spot in 2023 Swachh Survekshan from 12th in 2022 and 66th in 2021. The Swachh Survekshan for the year of 2024 is in process.Government of India has awarded Chandigarh as best performer among Union Territories in SafaiMitra Suraksha in Swachh Survekshan 2023.

Chandigarh is one of the very few cities which is processing 100% of its sanitary waste.

2.1.1 Current Status related to Solid Waste Management

	Urban Local bodies	No of Wards	No of Households	Population	Solid Waste Generatedper day
1.	Municipal corporations (Nagar Nigamor MahanagarPalika).	35	241171(approx.)	1227000 as per estimated data 2018	500 TPD

2.1.2 Identification of Gaps and Action plan:

S.No.	Action points For villages / blocks/ town municipalities / Citycorporations	Identification of Gap	Action Plan	Responsible agencies	Timeline for completion of action plan
1.	**SEGREGATION**				
(i)	Segregation of waste at source	For achieving 100 % segregation at source, a gap analysis has been done for a. Areas not segregating waste properly; b. Garbage collectors not cooperating in segregation of waste; c. Household not segregating waste properly, though physical inspection of quality of	Overall achievement in the City is 96%. The following steps are being taken to achieve 100 % segregation at source: a. Extensive awareness programmes involving advertisements in newspapers, Radio Jingles, Door to door Campaign by Garbage Collectors, SwachtakiPaathshala- a unique	MCC	Target Achieved

		segregated waste in each vehicle at the GTS cum MRF; d. Non practicing household identification through garbage collectors	initiative to sensitize students. b. Identification of non-practicing households and challaning. c. Award to best performing garbage collectors d. Felicitation of citizens practicing segregation at source e. Inter ward competitions and cash prizes.		
2.	**SWEEPING**				
(i)	Manual Sweeping	100 % road lengths of residential and commercial areas are covered through manual sweeping. Gap analysis w.r.t machinery available, tools and equipment available, PPE kits available have been done.	The Municipal Corporation, Chandigarh is already practicing manual sweeping in all the residential/commercial areas. 100% road length is covered. All the equipment'sfor road sweeping and PPEs are being distributed to Sanitation Workers on routine basis. As per Gap analysis equipment and	MCC	Target Achieved

			tools has been procured and distributed to the staff on regular basis.		
(ii)	Mechanical Road Sweeping & Collection	All city roads comprising from V1 to V4 has been covered through mechanized road sweeping machines during night on regular basis. And V5 roads have also been covered through road sweeping machines in southern sectors. Gaps analysis with respect to machinery available and requirement has been done.	Shortfall of machinery has been identified and process of procurement has been initiated and will be deployed soon.	MCC	Target Achieved
3.	**WASTE COLLECTION**				
(i)	100% collection of solid waste	Whether 100% collectionachieved? Shortfall of Machinery, Equipment and Tools etc.	MCC is already collecting waste through their vehicles. 100% door to door collection is already activated in the City through MCC vehicles. Adequate no. of triple bin dustbins has been procured and installed in market/commer	MCC	Target Achieved 100% Collection is already achieved Target achieved

			cial areas.		
(ii)	Arrangement for door-to-door collection	Arrangement for door to door provided:% of blocks/wards covered	100% wards are covered under door-to-door collection The MCC collects garbage door to door from 100 % residential areas 6 days a week.	MCC	Target Achieved
(iii)	Waste Collection trolleys with separatecompartments	Check availability and adequacy and if it needsup gradation	MCC has deployed dedicated vehicles for collection of horticulture waste, special trolleys/closed trucks from the designated sites. MCC has hired 20 tractor trolleys to lift horticulture waste. 524 mechanized vehicles with four compartments, along with driver and garbage collector have been deployed. The collection of garbage is done in four categories i.e. Dry, Wet, Sanitary and Domestic Hazardous Waste. Garbage is being	MCC	Target Achieved

			collected from all market areas in three categories viz Dry, Wet and Hazardous.		
(iv)	Mini Collection Trucks with separate compartments	Check if adequate or needsupgradation or not required	The Municipal Corporation Chandigarh has deployed 99 Bolero, 390 Tata Intra and 35 Tata Ace CNG for collection of garbage.	MCC	Target Achieved
4.	Waste Depositioncentres (for domestic Hazardouswastes)	Number of depositioncentres required and no's available orany alternateArrangement	Currently vehicles of MCC are taking the domestic hazardous waste separately in its vehicles and MCC has executed an agreement with M/s Nimbua Greenfield Punjab and M/s Re-sustainability Ltd. for processing of hazardous waste.	MCC	Target Achieved
5.	**WASTE TREATMENT AND DISPOSAL**				
(i)	Wet-waste Management: On-site composting by bulk waste generators (Authority may decide on requirement as per Rules)	Whether number of bulk waste generators identified for installation Re-	Bulk waste generators generating more than 100 kgs/day waste have been identified. All the BWG's in the City are processing their wet wastes on	MCC	Target Achieved Total372.043 Tone of wet waste has been

		consideration of policy of a 100 kg/day threshold for residential or commercial sectors of 1 Kanal or more, lowering it to 50 or even more.	site. The O/o SLG has been requested to make amendment in the policy w.r.t. change in definition of Bulk Waste Generator under Bye Laws 2018, wherein the capacity of waste generator is to be reduced from 100 Kg/day to 50 Kg/day in view of the SwachhSurveksh han 2023.		processed by BWGs in the month of August, September, October, November & December 2024.
(ii)	Wet-waste Management: Facility(ies) for central Bio-methanation/Composting of wets waste.	Whether facility exists / functional/ needs up-gradation? A gap of processing capacity of about 230 TPD of wet waste as on date.	A 5TPD bio-methanation plant is installed in Industrial Area Ph-I, Chandigarh. 01 Nos. Compost Plant having capacity 120 TPD is already in existence in Sector 25. MCC has recently established 300 TPD windrow composting	MCC	The city has two wet waste processing facilities, the first is a composting facility of rated capacity of 300 TPD and second is biomethanation unit of 5 TPD. The work of upgradation of Bio-methanation plant has been completed and presently 4.5 MT/Day of wet waste is being processed at the plant. The

			plant for processing of Wet waste at Dumping ground, Dadumajra.		composting facility is processing 100 TPD of wet waste as on date and We are upgrading the wet waste plant by constructing more sheds/flouring to increase the capacity further. The BWGs are all processing their own wet waste in situ.
(iii)	Dry-Waste Management: Material Recovery for dry-waste fraction	Whether MRF facility exists? / is there any arrangement to sending the dry-waste to anycommon MRF or sent to Waste to energy plant or% dry-waste converted as RDF or Need to set-up own Waste to Energy plant?	03 Nos. mechanical MRFs are operational. 01 RDF Plant having capacity 500 TPDis already in existence.	MCC	Target Achieved. RDF Plant is now operational since 01.12.2022. Also, at wet waste processing 100 TPD of wet waste is being processed. MCC is upgrading the wet waste plant by constructing more sheds/flooring to increase the capacity further.
(iv)	Disposal of inert and non-recyclable wastes: Sanitary Landfill	Does the agency still dispose waste in dumpsites? Whether sanitary landfill available? /	01 SLF is being bio-mined by M/s Akansha Enterprises and another newly built SLF is now ready with	MCC	Target Achieved The work of newly built SLF has been completed and the existing SLF

		Plan for constructing sanitary landfill or arrangementwith ULBs	LTP of 23 KLD for safe disposal of inertfrom recyclable wasted for landing filling.		is being bio-mined by M/s Akansha Enterprises within 43 months from the date of allotment i.e. dated 26.08.2022. **Budgetary Allocation: 68.00 Cr. (approx.)**
(v)	Remediation of historic/ legacy dumpsite	Whether existing old dumpsite if any requiredRemediation as per rules?	One dumpsite is identified in the city. Work for remediation of 5 lakhs ton legacy waste has been commenced under Chandigarh Smart City Ltd. However, for remaining legacy waste, DPR is being prepared for land reclamation.	MCC	Work for remediation of first dumpsite of 5 Lakh Ton Legacy Waste and 2nd dumpsite of 8 Lakh Ton is complete as on 31.12.2024. However, removal of RDF from site is in progress. Despite best waste management efforts, dumping of mix waste lead to formation of 3rd dump of 2.4 LMT. The work of remediation process of this dumpsite has started on 25.01.2025.

					Budgetary allocation – Rs. 28.80 Cr.
(vi)	Involvement of NGOs	Whether involvement of NGOs envisaged	NGOs are involved for awareness campaigns for management of solid waste and collaborated for sensitization of public	MCC	Swarmani Youth Welfare Association, Yuvsatta-Youth for Peace and Green Dream Foundation are already working for IEC campaigns digital awareness of SWM and collaborated for sensitization of public. The Green Dream Foundation (NGO) is engaged in various social activities for example.: a. Underpass and Subway re-development initiative at Manimajra Underpass and ISBT Subway with the objective to sensitize the citizens about Sustainable Waste Management . b. Plogging Activity wherein

					more than 70 volunteers of Green Dream Foundation cleaned up the park near Community Centre.
(vii)	EPR of Producers: Linkage with Producers / Brand Owners	As per rules, producers and brand-owners should facilitate in collection of packaging waste	PROs/Waste Management agencies have been listed by Chandigarh Smart City Limited for disposal of 70,000 MT of RDF produced from legacy remediation. 63147 MT (approx.) RDF generated 19980 MT (approx.) RDF disposed off Bio-soil Disposal-60815 MT	CSCL	**PROs/waste Management agencies–** 1)Go Clean India 2) Ambuja Cements LTD 3) M/S Saahas Waste Management PVT.LTD. 4)Indian Pollution Control Association 5) Fly Ostrich India PVT. LTD. 6) Shoonya Environmental solution PVT. LTD. 7) Nepra Resource Management PVT. LTD.
(viii)	Authorization of Waste Pickers	Yes/NO	List of 1284 Nos. waste pickers/door to door collectors identified by MCC and also a list of 926 nos. door to door collectors	MCC	Waste collectors are identified and authorized.

			enrolled with MCC after signing of MOU.		
(ix)	Preparation of own by-laws to comply with SWM Rules 2016	Yes/NO	Already Prepared	MCC	The Municipal Corporation, Chandigarh Solid Waste Management Bye-Laws 2018 has already been notified and widely available on the official website of Chandigarh Administration as well as MC Chandigarh.

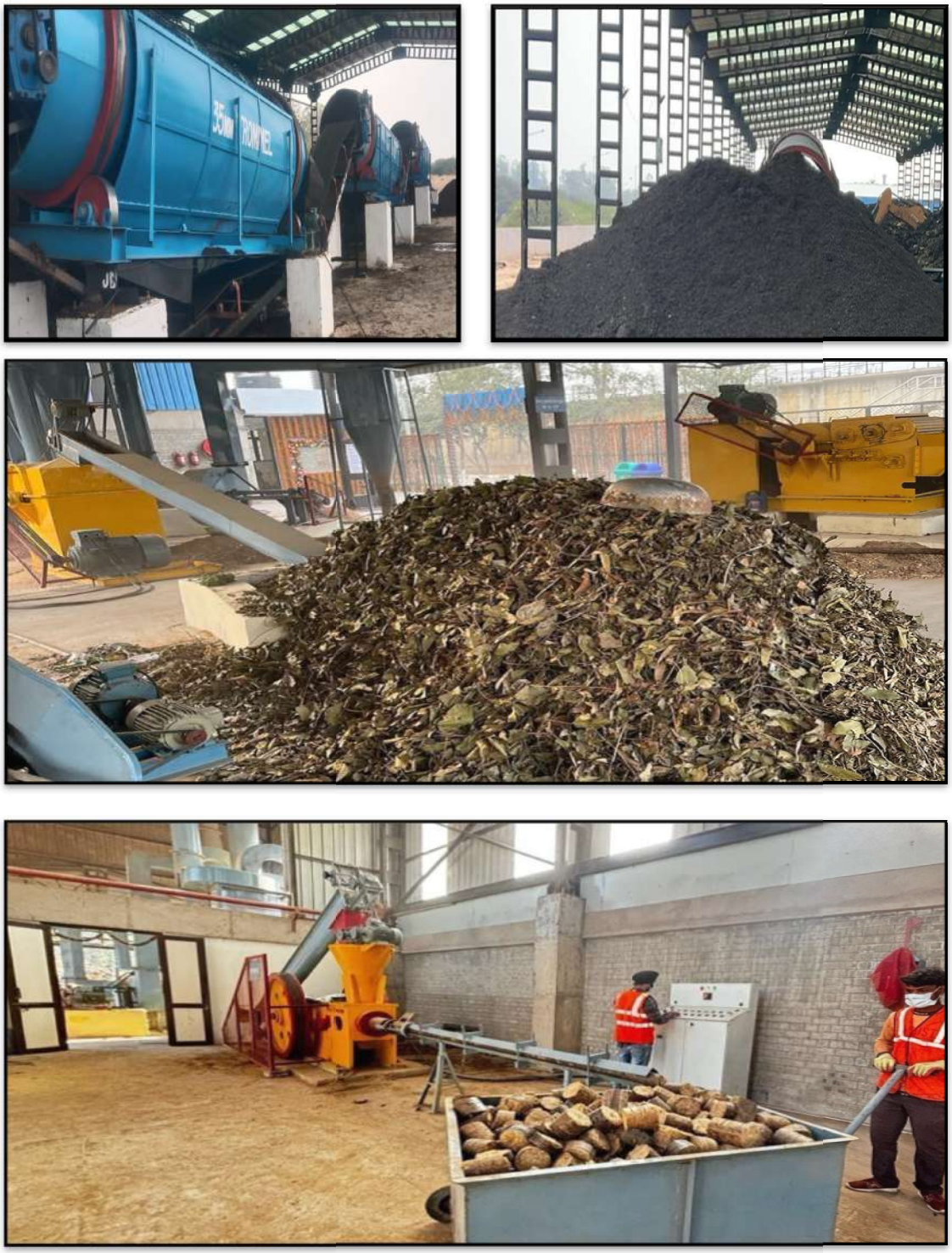

Figure 1: Wet Waste Management Facilities

Figure 2: Material Recovery Facilities

Figure 3: Bio-Methanation Plant

2.2 Plastic Waste Management

A total estimated quantity of plastic waste generated for 2024 is 5967 MT.

With a view to control the menace of single use plastic & polythene carry bags, Chandigarh Administration vide its notification No. ED/2019/1648 dated 27.09.2019 and amendments ED/2020/2818 dated 30.01.2020, and ED/2020-247 dated 01.07.2020,has imposed a complete ban on identified Single Use Plastic items. Further, vide order no. ED/2023/73-78 dated 12/01/2023 the Chandigarh Administration has also adopted and implemented the notification from the Ministry of Environment, Forest & Climate Change, GoI, dated 12.08.2021.

In addition, till the time there is no alternative available for the multi layered packaging (MLP), Chandigarh Administration vide above mentioned notificationhas coveredMLP under the Extended Producer Responsibility (EPR).The Plastic Waste Management Rules, 2016 cast Extended Producer Responsibility on Producer, Importer, and Brand Owner. Extended Producer Responsibility is applicable to both pre-consumer and post-consumer plastic packaging waste. Chandigarh Pollution Control Committee register Waste Management Agency (WMA) that manage (collection & disposal) of plastic waste on the behalf of producers & brand owners

Chandigarh Administration has constituted a Special Task in compliance to D.O. Letter No. 17/6/2021/HSMD, dated 25.03.2021 and Comprehensive Action Plan has also beenprepared for mitigation of plastic pollution and phasing out of single use plastics. Furthermore, State Level Monitoring Committee has been constituted in compliance with the Rule No. 16(1) of the Plastic Waste Management (Amendment) Rules, 2018, responsible for effective monitoring of implementation of the Plastic Waste Management Rules.

2.2.1 Current status related to Plastic Waste Management

	Local Bodies	Estimated quantity of Plastic Waste Generated per day
	Urban Local bodies	
1	Municipal Corporations (Nagar Nigam or MahanagarPalika)	40 TPD (Calender Year 2024)
2	Municipalities (Nagar Palikas)	----
3	Nagar Panchayats (Town area Councils)	----
	Rural Local Bodies	
1	Block /Taluk / Mandal Tehsils	----
2	Village/Gram Panchayats	----

2.2.2 Identification of Gaps and Action Plan:

S.No.	Action points for village panchayats/blocks/municipalities /corporations	Identification of gap	Action plan	Agencies Responsible	Target time for Compliance
1.	Door to Door collection of dry waste including PW	[100%] / [partial%] / [not initiated]	---	MCC	Already Achieved.
2.	Facilitate organized collection of PW at Waste transfer point or Material Recovery Facility	This infrastructure is linked to SW management. May check gaps with respect to:	There are 03 nos. of Material Recovery Facility (MRF) centres are operational for segregation of waste within the jurisdiction of	MCC	Target Achieved **Budgetary Allocation: 33 Cr.**

			municipal limits of Chandigarh.		
		• Availability of transfer points and material recovery facility • Involvement of informal sector /NGO. • Registering waste pickers • Linkage with PW recyclers • Involvement of producers and brand-owners		MCC MCC MCC MCC	Informal waste pickers have been identified and deployed at Pink MRF, Sec-25. List of 1284 Nos. waste pickers/door to door collectors identified by MCC and also a list of 926 nos. door to door collectors enrolled with MCC after signing of MOU. As per the information received from field supervisory staff, MoU has been signed between MCC and Door to Door collectors as per clause of MoU door to door garbage collector "*The door-to-door collector can take out the saleable material from the dry garbage and can further sell it. For*

					this purpose, he will be provided a bag by MCC." After segregation the Door-to-Door garbage collector sells the plastic waste to scrap dealers who further sells plastic to register waste recyclers. Further the residual plastic along with the segregated garbage is being transported in Garbage Vehicles to 03 Nos. of MaterialRecovery Facility (MRF) centreswhere garbage is being transferred from garbage vehicles to large containers after segregating saleable material (i.e. Plastic, Cardboard, Metals, Packaging material, old clothes, Shoes, Rubber, Tyres

					etc.). Thereafter, auction is being held on 1st and 3rd Wednesday of every month at MRF centre situated at Indl. Area Phase I, Chandigarh, for the sale of that residual plastic at MRF center which is being purchased by the small-scale scrap dealers who further sell to the large Kabaries. The large kabaries purchase the plastic waste at various collection points in the city by segregating categorically i.e. Hard Plastic and Soft Plastic in order to sale to end point recyclers outside Chandigarh. Therefore, the total plastic waste generated in the City, ultimately, reaches to the recyclers situated

					outside Chandigarh.
3.	PW collection Centres	Local Bodies may set-up own centres and also involve producers and brand-owners or their PROs to facilitate setting up of collection centres.	As per MoU signed between MCC and Door to Door collectors; "*The door-to-door collector can take out the saleable material from the dry garbage and can further sell it. For this purpose, he will be provided a bag by MCC.*" After segregation the Door to Door garbage collector sells the plastic waste to scrap dealers who further sells plastic to register waste recyclers. Further the residual plastic along with the segregated garbage is being transported in Garbage Vehicles to 03 Nos. of Material Recovery Facility (MRF) centres. Where garbage is being transferred from garbage vehicles to large containers after	MCC	----

			segregating saleable material (i.e. Plastic, Cardboard, Metals, Packaging material, old clothes, Shoes, Rubber, Tyres etc.). Thereafter, auction is being held on 1st and 3rd Wednesday of every month at MRF centre situated at Indl. Area Phase I, Chandigarh, for the sale of that residual plastic at MRF centre which is being purchased by the small-scale scrap dealers who further sell to the large Kabaries. The large kabaries purchase the plastic waste at various collection points in the city by segregating categorically i.e. Hard Plastic and Soft Plastic in order to sale to end point recyclers outside Chandigarh. Therefore, the total plastic waste generated in the City,		

			ultimately, reaches to the recyclers situated outside Chandigarh.		
4.	Awareness and education programs implementation	Review existing gaps in creating awareness among public for minimizing and recycling PW	Education through mass media, schools, Producer / brand owner campaigns and Other channels.	MCC	Schools, Institutes, MWAs, RWAs, are being made aware from time to time for plastic waste management. Various activities to create awareness and disseminate information among citizens or waste generators (users) by Municipal Corporation Chandigarh: • Swachhata Ki Paathshala Awareness sessions in 75 schools have been conducted by MC Chandigarh to aware the students regarding ban on single use plastic and use

					cloth/paper bag. • Cloth Bag Selling Unit Cloth Bag selling unit was set up in Grain Market, Sector 26, Chandigarh. • Swachhata Stall at different events organized by MC Chandigarh Swachhata Stall regarding ban on single use plastic (SUP) was set-up in the different events organized by Municipal Corporation Chandigarh e.g.PMSvanidhi Event, Teej Festival etc. • Har Gaadi Bin, Har Gaadi Bag

					Chandigarh has the highest vehicular density in the country – 878 registered vehicles per 1000 persons. MCC & Registering and Licensing Authority (RLS) tied up with cars dealers who will provide dustbins and cloth bags to their customers who buy cars or get their car serviced. Also, RLA has made a dustbin and cloth shopping bag mandatory in all four-wheelers who wish to get their vehicle registration renewed. • Market Welfare Associations(MWAs) Initiatives: Sector 46, Sector 22, Sector 20 & Sector 19.

					Sector 46 MWA is offering 2% discount to their customers who carry their own shopping bags. Chandigarh Vyapar Mandal has announced to buy cloth bags from our Self Help Groups and distribute them free to customers. Sector 19 Sadar Bazaar MWA announced shopping coupons of Rs. 1000 to their customers carrying cloth bags through lucky draw. Sector 22 MWA had announced lucky draw coupons of Rs. 1500, Rs. 1000 and Rs. 500 for the customers carrying their own shopping bags. In addition, the Maloya market and Sector 18 markets are

					not using any plastic. • Selfie with Bottle/Bag Movement To gradually phase out polythene bags and packaged drinking plastic bottles, MCC appealed citizens to always carry their bottles and reusable bags everywhere. MCC organized a social media campaign where citizens were asked to share a selfie/picture with their bottles & cloth carry bags and tag MCC social media handle using hashtags which was then reposted by MCC for wider reach to all its followers. #CarryYourBag #CarryYourBottle #CarryDustbinInCar

					#BeTheChange #SwachhSurvekshan2023. Children in the city are also learning the art to make cloth bags. MCM DAV Sec-36 organized such workshop on cloth bag making as part of Home Science project. • Awareness by Brand Ambassador Mr. Kanhaiya Mittal – A religious bhajan singer, has a huge number of local followers and therefore has been chosen as Local Brand Ambassador of Chandigarh. He has been actively appealing the citizens who gather at mandirs in thousands to listen him. Gave out a slogan

					"Saath mein Thaila, Na KareinSheher ko Maila". • Awareness drives in all wards by CSI/SI MCC has reached out to each and every household in the city through the safaikarmis. Door to Door Collectors were pre-trained on source segregation, SUP and home composting. They were instructed to converse with the citizen which was further monitored by the area CSI and SI. Following door to door awareness drive, MCC imposed fines on household who provided mixed waste to garbage collectors.
5.	Access to Plastic	Check if District has	Check if, PW recycling	MCC	The MCC has made

	Waste Disposal Facilities	access to PW recycling / utilization or disposal facilities. There is no PW processing unit in the city.	facilities available at reasonable distance; Channel for sending PW Collected to cement plants for processing; Availability of waste plastic oil producing facilities; Linkage with PWD for usage of PW in road making. Action plan at district should involve Urban and Rural Local bodies. As per rules, producers and brand owners should facilitate in collection of packaging waste.		proper arrangement for management of plastic waste in Chandigarh city. As per the clause 1.1.7 of the MoU with door to door garbage collectors, they are allowed to take out the saleable material. Further, added that the residual plastic along with the segregated garbage is being transported to Material Recovery Facilities which is being auctioned to the small-scale scrap dealers who further sell to the large Kabariesfrom where it is sent to the recyclers out of the Chandigarh city.

Figure 4: Plastic Waste Management Facilities

2.3 Construction & Demolition Waste Management

Municipal Corporation, Chandigarh has started C&D Waste Processing Facility in Industrial Area, Chandigarh. This helps to reduce the carbon footprint by producing recycled sand and aggregated within the city. This also maximize the production of high quality, highly value recycled sand and aggregated which can be used as a replacement for natural materials in a range of construction applications including concrete and asphalt production.

A total of 90 TPD of C&D waste is generated in Chandigarh on an average daily these days. Municipal Corporation Chandigarh has started C&D Waste Processing Facility in Industrial Area, Chandigarh of capacity 150MT/ day in two shifts. C&D Waste management policy has been notified to comply with the Solid Waste Management Rules, 2016. Special drives are being organized by MCC to aware general public regarding proper disposal of C & D waste and proper dust mitigation measures to be taken during construction.

2.3.1 Current status related to C & D Waste

Details of Date Requirement	Present Status
Total C & D waste generation in MT per day (As per data from Municipal Corporations/Municipalities)	90 MT/day
Does the district have access to C&D waste recycling facility?	Yes

2.3.2 Identification of gaps and Action Plan:

Sr. No.	Action points for block/town municipalities/City corporation	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
1.	Arrangement for separate collection of C&D waste to C&D Waste deposition point	Check gaps w.r.t. separate collection point of C&D Waste Identification common C&D waste deposition points.	Action Plan for every local body in may identify common C&D waste deposition points.	M.C., Chandigarh	Already implemented. MCC has designated 22 collection centres at the city. Annexure I
2.	Whether local authority have fixed user fee on C&D waste and introduced permission system for bulk waste generators in a month?	Check gaps with respect to: Local by-laws to pay user fee implementation of a system to permit bulk generators (>20 tons per project	Common by-laws may be implemented in District Local C&D waste management plans can be integrated to develop common collection and recycling facilities	M.C., Chandigarh and Local Govt. Office	C&D Waste Management Policy has been notified on 01.02.2022 to comply with the Solid Waste Management Rules, 2016.

3.	C&D recycling Facility	Check whether district has any C&D waste recycling facility	Action plan for setting up Chandigarh C&D recycling facility in the district ortie-up with any other district or ULB for setting up common facilities. Plan should ensure viable operation of C&D plant including assured market for C&D products.	M.C., Chandigarh	Recycling facility already set up at Industrial Area Phase-1 Chandigarh since May 2019 and C&D Products being casted regularly. Automation of the casting unit at the recycling facility has also been completed.
4.	Usage of recycled C&D waste in none—structural concrete, paving blocks, lower layers of road pavements, colony and rural roads.	Is there any policy on usage of promotion on usage of C&D waste?	Local authority may make give appropriate incentives on usage of C&D waste. A% of usage in public works may be specified/any other Scheme.	M.C., Chandigarh	The same has been covered in the Policy which is already notified on 01.02.2022.
5.	ICE on C&D waste management	Is there any sustained system of creating awareness created among local communities?	Action plan for awareness and education	M.C., Chandigarh	With the help of public notice in local media and newspapers, the residents are informed. Further the area JEs have been instructed to aware the public for checking illegal

					dumping and issuing challan for violation so that the general public can be diverted accordingly. Also, notification has been updated on the official website of MC Chandigarh and Chandigarh Administration.

Figure 5: C&D Waste Management Facility

2.4 Biomedical Waste Management

As per annual report of biomedical waste for the calendar year 2023, 950 nos. (50 bedded HCFs and 900 non-bedded HCFs) of Healthcare Facilities are operational in Chandigarh and around 6347 kg/day(incinerable and non-incinerable) biomedical waste is generated. All the health care facilities have registered themselves with Chandigarh Pollution Control Committee for authorization under Biomedical Waste Management Rules, 2016.

Further, one Bio-medical Waste Treatment Facility (BMWTF) viz. M/s Alliance Envirocare Company Pvt. Ltd. Plot no. 182/9, Industrial Area, Phase – I, Chandigarh for collection, transportation and disposal of the biomedical waste generated by healthcare facilities of Chandigarh. The facility has capacity of 9800kg/day each for incinerable and non-incinerable bio-medical waste.

This facility is authorized by CPCC for collection, transportation, treatment & disposal of the bio-medical waste of Healthcare Facilities of Chandigarh. All the health care facilities operational in Chandigarh have made an agreement with BMWTF for the collection and disposal of their biomedical waste and whole of the biomedical waste generated in all the health care facilities is disposed off properly through the treatment facility.

2.4.1 Current Status related to Biomedical Waste

Inventory of BMW in the District	Quantity
Total no. of Bedded Healthcare Facilities	50
Total no. of non-bedded HCF	900
No. of HCFs authorized by SPCBs/PCCs	950
No of Common Biomedical Waste Treatment and Disposal Facilities (CBWTFs)	1
Capacity of CBWTFs	9800kg/day
No. of Deep burials for BMW if any	Nil
Quantity of biomedical waste generated per day	6347kg/day
Quantity of biomedical waste treated per day	6347kg/day

2.4.2 Identification of Gaps and Action Plan

S. No.	Action points	Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
1.	InventoryandIdentification of Healthcare Facilities	Check whether all HCFs including, clinics, hospitals, veterinary hospitals, Aayush hospitals, animal houses, etc generating biomedical waste area identified and authorized by SPCBs/PCCs.	Action plan for completing/updatingof inventory and authorization of HCFs by SPCBs/ PCCs	CPCC and Health Department, Chandigarh	Completed No. of Health Facilities authorized in 2023: 950
2.	Adequacy of facilities to treat biomedical waste	Check if there is any gap between Quantity of Biomedical Waste generated per day and quantity of Biomedical Waste treated and disposed in the district? In case of no access to CBWTFs, adequacy of existing disposal of BMW	Action plan for setting-up CBWTF or providing access to CBWTF with 75Km from places waste generation. Including identification of site for setting up such facility. Action plan for management of BMW through captive facilities in case of no access to CBWTF	CPCC	Adequate Capacity
3.	Tracking of BMW	Check whether bar code system is	Plan for implementation of bar	CPCC	Already implemented

		implemented by all HCFs and CBWTFs?	code system by all HCFs and CBWTF in the district.		
4.	Awareness and education of healthcare staff	Whether training has been organized for all stakeholders?	Action plan for awareness programs and training to healthcare staff and ULB officials	CPCC and Health Department, Chandigarh	Training of healthcare workers regarding Bio-medical Waste Management is a routine activity. Awareness program are carried out throughout the year for healthcare staff.
5.	Adequacy of funds	Whether adequate funds are allocated to Government health care facilities for bio-medical waste management by State Govt.?	Action plan for ensuring adequate funds to Government health care facilities for bio-medical waste management by State Govt.	Health Department, Chandigarh	Adequate funds are available with State Govt. for Management of Bio Medical Waste being generated at all Health Facilities. The State Govt. has signed an MoU with M/s Alliance Envirocare Company Pvt. Ltd. For collection, transport and disposal of Bio-Medical Waste generated in its Healthcare Facilities.
6.	Compliance to Rules by HCFs and CBWTFs	Is there any district level mechanism to monitor compliance by	Draw action plan to monitorcompliance of HCFs and CBWTFs	CPCC	Routine Activity.

		Hospitals / HCFs?	through SPCBs/PCCs.		
7.	District Level Monitoring Committee	Check whether District Level Monitoring Committee has been constituted and meetings are being organized?	Action plan w.r.t Periodicity of reviews and follow- up byDLMC.Identify teams in health department to monitor compliance.	CPCC and Health Department, Chandigarh	DLMC Constituted and meeting held on regular basis.
8.	Wastewater treatment	Check if HCFS are required to install ETPs for wastewater generated.	Action plan for installation ofETPs by HCFs where applicable.	CPCC	Total 20 nos. of ETP are to be installed by the HCFs having more than 10 beds. Till date 15 nos. of ETPs has been installed. Present mode of treatment and disposal of wastewater: All the HCFs are pre-treating this liquid biomedical waste with suitable reagents i.e. sodium hypo-chlorate followed by neutralization before discharging into sewage system.

2.5 Hazardous Waste Management

In FY 2023-2024, there are 1236 units (including Standalone DG sets)generating Hazardous Waste in Chandigarh. Whole of the hazardous waste is collected and transported through authorized Treatment Storage Disposal Facility (TSDF), incinerator and recyclers to their facilities located in Punjab, Haryana and U.P. For disposal of landfill able waste, Chandigarh Pollution Control Committee has made agreement with Punjab Pollution Control Board for utilizing their TSDF facility namely M/s Re Sustainability Limited (Formerly known as M/s Ramky Enviro Engineers Ltd. (Unit: Punjab Waste Management Project)). CPCC has authorized M/s Re Sustainability Limited (Formerly known as M/s Ramky Enviro Engineers Ltd.) for collection and transportation of landfill able hazardous waste from various units located in Chandigarh to their TSDF located at Village Nimbua, Derabassi,Punjab.

For disposal of incinerable waste, CPCC has authorized M/s Bharat Oil and Waste Management ltd. and M/s Re Sustainability Limited (Formerly known as M/s Ramky Enviro Engineers Ltd.) for collection and transportation of incinerable hazardous waste from various units located in Chandigarh.

For disposal of recyclable waste i.e. used oil, spent acid, acid residue, CPCC has authorized units located in Punjab, Haryana and U.P. for collection and transportation of recyclable waste from various units located in Chandigarh to their facilities.

2.5.1 Current Status related to Hazardous Waste Management

Details of Data Requirement	Present Status
No of Industries generating HW	1236 (In FY 2023-2024)
Quantity of HW in the district	1932.786 MT
(i) Quantity of Incinerable HW	44.44 MT
(ii) Quantity of land-fillable HW	276.025 MT
(iii) Quantity of Recyclable / utilizable HW	1612.321 MT
No of captive/common TSDF	No TSDF in UT Chandigarh. Waste is sent to Re-sustainability Limited (formerly named as Ramky Enviro Engineers), Nimbua, Punjab.
Contaminated Sites or probable contaminated sites	None

2.5.2 Identification of Gaps and Action Plan:

S. No.	Action points	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
1.	Regulation of industries and facilities generating Hazardous Waste	Check whether all hazardous waste industries are identified and authorized by SPCBs/PCCs	SPCB/PCC should ensure that all hazardous waste Industries are authorized and a system of safe disposal is in place.	CPCC	Already implemented, its ongoing exercise and industries are being regulated ensuring proper and scientific disposal.
2.	Establishment of collection centres	Check district has collection centres for hazardous wastes with linkage to common TSDFs / recyclers	Local authority should ensure that adequate number of collection centres should be established and are linked to Common TSDFs.	MCC	There are 3 nos. of MRF Centres established in Chandigarh, where domestic hazardous waste is collected and further on 30.07.2022 MCC has entered into a tripartite agreement with M/s Nimbua Greenfield (Punjab) Ltd.(being developer) and M/s Re-Sustainability Ltd. (being operator) for lifting, treatment & scientific disposal of Domestic Hazardous

					Waste (DHW) excluding Bio-Medical Waste (BMW).
3.	Training of workers involved in handling/ recycling/ disposal of HW	Identify facilities/ industries engaged in recycling / pre-processing/ disposal of hazardous waste in the district.	Action plan to train the workers on safety aspects through Department of Industries as per provisions under HOWM Rules,2016	Labour Department/ Industry Department	There are no facilities/industries engaged in recycling/pre-processing/disposal of hazardous waste in the U.T. Chandigarh.
4.	Availability/ Linkage with common TSDF or disposal facility	Check if the generators of HW have access to common TSDF in the State?	Action plan to ensure all generators are linked to TSDF/Action plan in case thereisnoTSDFinthe district or State in such case evaluate existing storage and captive disposal facilities through SPCBs/PCCs.	CPCC	CPCC has agreement with Punjab Pollution Control Board for utilizing their TSDF facility located at village Nimbua, Tehsil Derabassi, District Mohali, Punjab. CPCC has authorized M/s Ramky Enviro Engineer Ltd. For collection and transportation of landfillable HW from various units located in Chandigarh to their TSDF located at Village Nimbua,

					Tehsil Derabassi, District Mohali, Punjab.
5.	Contaminated Sites	Are there anysites where soils/ sediments/groundwater contaminated due to dumping of industrial wastes	Action plan for identification of Probable contaminated site, incidents of HW dumping, responsible parties for contaminated site etc. and to remediate contaminated sites	-	No Contaminated site in UT Chandigarh

2.6 Electronic Waste (E-Waste) Management

E-waste generated in Chandigarh is being collected, segregated, dismantled, recycled, treated and disposed off through authorised E-waste recyclers from the other states of Punjab and Himachal Pradesh as there are no dismantlers or recyclers in Chandigarh. Regular workshops are being organized by CPCC along with PRO's to aware general public regarding proper disposal of E-waste through authorised recyclers. Also, awareness through print media and radio is being regularly done.

2.6.1 Current Status related to E-Waste Management

Details of Data Requirement	Present Status
Inventory of E-Waste in MT/year	57.4935 MT (FY 2023-2024)
Collection centres established by ULBs in the District	NIL
Collection centres established by Producers or their PROs	01 No. KaroSambhav (PRO), Shop no. 2, Plot No. 51, Raipur Khurd, Ambala – Chandigarh Highway, Chandigarh

Collection points established by authorized recyclers/dismantlers of other states.	02
No authorized E-Waste recyclers / Dismantler	NIL

2.6.2 Identification of Gaps and Action Plan:

S. No.	Action points	Gaps in implementation	Action Plan	Responsible agency	Timeline for completion of action plan
1	Inventory/Generation of E-Waste /Bulk-wastegenerators	Check whether SPCB/PCC has completed inventory of E-Waste in the District. Inventory of bulk waste generators	Completion of inventory	CPCC	Quantity of e-waste **generated** in financial year 2023-24 is 57.4935 MT Inventorization for e-waste generated is completed in the year 2016 as directed by CPCB. (No new directions received from CPCB for inventorization) Inventorization of bulk waste generators is being carried out. Around 50 schools /colleges covered E-waste bins installed at their premises. Awareness in other government offices

					&bulk consumers being carried out. Public Notice is being issued in leading newspapers.
2	E-Waste collection points	Availability of E-Waste collection points / call centres / kiosks in villages - Blocks / /towns / cities	Identification / registering E-Waste collection centres in association with Producers - their PROs or Recyclers	CPCC	03 nos. collection points in association with Producers-their PROs or recyclers are available in Chandigarh. The information is available on CPCC website url: https://cpcc.chd.gov.in as well as LED display boards.
3	Linkage among Stakeholders to channelize E-Waste	Check whether District administration has information on collection centres established by Producers/ PROs? Administration should also identify authorized E-Waste recyclers in the district or in State tochannelizeE-waste collected in District.	Action plan to establish linkages between ULBs / Collection Centres of Producers and PROs / SPCBs / Bulk waste generators /Recyclers / SPCBs / District Administration /Public	CPCC	Collection points have been established by authorized dismantlers/recyclers of nearby states. The information regarding the same has been displayed on Environment Information system website URL: https:// chandigarhenvis.gov.in and the website of

					CPCC URL: https://cpcc.chd.gov.in and regular awareness campaigns are being carried out for proper collection and disposal of e-waste. More awareness programmes will be carried out in future.
4	Regulation of illegal E-Waste recycling / dismantling	Prevalence of informal trading, dismantling, and recycling of E-waste is in District	Action plan in coordination with SPCBs/PCCs and District Administration to check this activity.	CPCC	At present there is no illegal E-waste recycling/dismantling in Chandigarh. If any complaint is received regarding the same, action is taken accordingly.
5	Integration of informal sector	Whether mechanism exists for bringing informal sector into main stream in collection and recycling of E-Waste	Evolve mechanism by involving producers / PROs.	CPCC	PRO i.e. KaroSambhav has organized various E-waste take back campaigns in Chandigarh. They have also integrated informal sector for proper e-waste collection and disposal.

6	Awareness and Education	Are there any programs at district level for awareness about E-waste management?	Plan special workshops and awareness campaigns through Producers / PROs	CPCC	Regular Awareness campaign is being carried out in Chandigarh through NGOs /PROs. Around 800 activities done till date and more than 40,000 people impacted.

3 AIR QUALITY MANAGEMENT

Chandigarh is land-locked Union Territory in which there is no possibility of expansion and obviously there is no possibility of road length expansion. Studies have shown that the air quality in Chandigarh is mostly affected by the vehicular pollution of the city. The fleet of vehicles is over 2 per capita households. Chandigarh has the highest density of vehicles in India. The major contributors of air pollution in Chandigarh are as follows: -

1. Vehicular Density
2. Roadside Dust
3. Burning of dry leaves
4. Litter from trees & gardens in the city
5. Operation of generator sets in certain areas adjoining the city Stubble burning in specific seasons of the year in neighbouring areas of Chandigarh.

Air Quality Monitoring Committee (AQMC)

Air Quality Monitoring Committee (AQMC) has been constituted in Chandigarh to keep a check on the air quality of the city. It comprises of the following members:

1. The Director Environment, Chandigarh
2. The Commissioner, Municipal Corporation, Chandigarh
3. The Director Industries, Chandigarh
4. The Director Transport, Chandigarh
5. The Chief Architect, Department of Urban Planning, U.T. Chandigarh
6. The Member Secretary, Chandigarh Pollution Control Committee, Chandigarh

3.1 Current Status related to Air Quality Management

Details of Data Requirement	Present Status
Number of Automatic Air Quality monitoring stations in the district. a. Operated by SPCB/ State Govt./ Central govt./ PSU agency: b. Operated byIndustry:	03 Operational 01 CEMS by Common Biomedical Waste Treatment & Disposal facility
Real Time Air Quality Monitoring Stations (CAAQMS)	03 nos. (in Sector- 22, 25, and 53, Chandigarh)
Number of manual monitoring States operated by SPCBs	05
Name of towns / cities which are failing to comply with national ambient air quality stations	01 Chandigarh
No of air pollution industries	48
Prominent air polluting sources [Large Industry]/[Small Industry]/[Unpaved Roads]/[Burning of Waste Stubble]/[Brick Kiln]/[Industrial Estate]/[Others]	DG sets, roadside dust, pollens, vehicular pollution, open and unpaved areas

3.2 Identification of Gaps and Action Plan

S. No.	Action points	Indicative Action Plan	Responsible agency	Timeline for completion of action plan
1.	Identification of prominent air polluting sources?	Carry out inventory of air pollution sources in District including hotspots or areas of concern pertaining to air pollution in association with SPCBs/PCCs may	CPCC	SAS is going on in Chandigarh city. Monitoring is being done alongwith survey of the households.
2.	Ambient Air quality data?	Plan to get access to available air quality monitoring stations in the	CPCC	Already implemented

		district operated by both Public and private agencies.		
3.	Setting up of Continuous Ambient Air Quality Monitoring Station	Like weather station, District may also have ambient air quality monitoring at major urban settlements or populated areas. Action plan may propose setting up at least one CAAQMS in District. Also access data generated by CAAQM stations installed by other private/ public agencies. District authority in association withlocaloffice of SPCB/PCC should also ensure that at least one manual Air Quality monitoring station is available in each city. [District admin may set-up its own network of CAAQMS or manual stations]	CPCC	03 CAAQMS are operational 05 Manual Stations are already operational.
4.	District Level Action Plan for Air Pollution	Action plan should be prepared for both improvement of existing air quality as well as for non-attainment days to national ambient air quality standards. [Measures may include multi sectoral approach for air pollution control such as promotion of public transport, use of green	CPCC	Already prepared and approved by CPCB.

		fuels, E-mobility, LPG based cooking, carpeting open areas/kerbs, etc. Action plans envisaged in NCAP project initiated by MoEF&CC may be referred]		
5.	Hotspots of air pollution in District	hotspot with respect to air pollution (such as stubble burning, illegal waste burning, unauthorized operations, cluster activities, forest fires etc.) should be identified and localized action plan for mitigation of the same should be prepared	CPCC	Hotspots identified and action plan has already been prepared.
6.	Awareness on Air Quality	Plan for dissemination of information on local air quality in towns and cities located in District. May consider developing Mobile App / Online portal for dissemination of air quality as well as to take complaints on local air pollution.	CPCC	Regular activity. CPCC is disseminating air quality data at six locations in Chandigarh. Dedicated link in app 'I am Chandigarh' of MC Chandigarh will be created to deal with problems of air pollution.

4 WATER QUALITY MANAGEMENT

Chandigarh Pollution Control Committee is monitoring water quality of Sewage Treatment Plants, Drains, Groundwater, Lakes and waste water discharged from the industries as per the mandate of Water (Prevention and Control of Pollution) Act, 1974 and Environment Protection Act, 1986.

Owing to the efficient efforts of the Municipal Corporation, Chandigarh, every house of the green city has access to clean drinking water. As the numbers of agricultural land holdings are very few, the use of harmful chemicals that have potent lethal effects on land and water is very much under control. Thus, the water quality of Chandigarh lies well within limits as prescribed by the BIS standards of drinking water. Water analysis conducted by the Central Ground Water Board in both deep and shallow aquifers show the absence of heavy metals and any such impurities.

The present water supply service area of Municipal Corporations Chandigarh (MCC) is 114 sq.km, which includes MCC area of 79.34 sq.km and rural area of 34.69 sq.km. The urban area falls in jurisdiction of Municipal Corporation and the water supply system is entrusted to Public Health Wing of MCC. The rural area comprises of 13 villages overseen by the Engineering Department. The water supply to the villages is provided with tube wells in and around the villages. Other urban/rural areas have water source of 72 MGD (Millions of Gallons per day) is received presentlyfrom Bhakra Main Canal which is 27 km away from Chandigarh and 18.26 MGD from 248 tube-well located in the city.

Chandigarh is recipient to heavy rainfall during the months from July to September and receives an average rainfall of 1059.3 mm, which is calculated to be approximately 60380.1 million liters or 13241 gallons or 36.28 MGD per annum. It is this water source that helps in recharging of ground water and various confined/ unconfined aquifers. The demand for water in Chandigarh has increased considerably owing to its highly dense population structure. It is estimated that by 2026, the water demand will be 523.41 (Millions of liters per day) MLD (116.31 MGD) that is about 22.73% higher than the 2011 demand of 426.50 MLD (94.78 MGD). This is due to excessive pumping of water than the required replenishment. As a result, the ground water levels of deep aquifers in Chandigarh have been suppressed on an average of 4m in 6 years at different locations throughout the city.

Water Quality Monitoring

4.1.1 Current Status related to Water Quality Management

Details of Data Requirement	Present Status
Rivers	There is no river flowing through Chandigarh though river Ghaggar flows approx..07 kms away from the Chandigarh
Length of Coastline (if any)	NA
Nalas/ Drains/Creeks meeting Rivers	4 Drains (Sukhna Choe, N-Choe, Faida Choe, Patiala Ki Rao)
Lakes / Ponds	2 main lakes: Sukhna lake (300 ha), Dhanas lake (5.58 ha). One more lake at Sec 42 is filled by Tubewell & MC water supply.
Total Quantity of sewage from towns and cities in District	231 MLD
Quantity of industrial wastewater	6 MLD Approx. * No. of ETPs provided: 269, No. of industries having ZLD provision: NA (No major and big water polluting industry in Chandigarh. Although treated water is being recycled/reused) No. of industries using ground water: 39, No. of industries using tertiary treated sewage: All the Industries after treatment of waste water discharges its treated water into terminal sewage treatment plant. MC is already in the process of laying pipelines for transportation of tertiary treated water to the Industrial Area after which industries will used TT water as much as possible.
Percentage of untreated sewage	0.004% (Out of 232 MLD, quantity of waste water treated is 231 MLD around 1 MLD is untreated).
Details of bore wells and number of permissions given for extraction of groundwater	39 (Municipal Corporation, Chandigarh)
Groundwater polluted areas if any	In Chandigarh, there is no area has polluted groundwater; However, water analysis is being conducted on half yearly basis from both industrial areas (I&II) in Chandigarh as well as from 05 no. other NWMP ground water monitoring stations from various sectors/locations

Polluted river stretches if any	NA

4.1.2 Identification of Gaps and Action Plan for Water Quality Monitoring:

S. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1.	Inventory of water bodies	An environmental monitoring cell shall maintain data of all water bodies (rivers / canals / natural drains / creeks / estuaries / groundwater / ponds / lakes / etc.) in district including its water quality	CPCC/MCC/Engineering Department/Forest Department	09 water bodies (07 ponds & 02 lakes) have been identified for restoration in UT Chandigarh under Hon'ble NGT order OA 325/2015. As per the approval of the Competent Authority on 06.05.2020, Engineering Department, U.T. Chandigarh has been appointed as the Nodal department to review the restoration of water bodies and for preparation of action plan for restoration of Sukhna Lake in U.T. Chandigarh. The identified water bodies come under the jurisdiction of Engineering Department, MCC and Forest Department. Action Plan for all the waterbodies was prepared and implemented, the same is also available on ENVIS website. The identified water bodies are as below: i. Sukhna Lake ii. Dhanas Lake iii. Kaimbwala (near mandir) Pond iv. Sarangpur Pond v. KhudaAlisher Pond vi. Dhanas Pond. vii. KhudaJassu Pond viii. Kaimbwala Pond (adjacent to gram

				sampark centre) ix. Maloya Pond. Later on another pond of Dadumajra has been identified for restoration Restoration work for KaimbwalaPond (near mandir), Sarangpur Pond, Khuda Alisher Pond and Dadumajra pond has been completed and are maintained as regular activity. The ponds are now being used by local public as a place of get together and entertainment. Dhanas Pond: The tender for the work of rejuvenation of pond at Dhanas received on 31.07.2024, which could not mature due to some technical reasons. For 2nd time tender, Technical Bid opened and tender under process for technical evaluation. Sukhna Lake faces the problem of weeding. Work of De-weeding at Sukhna Lake in Progress. (regular repetitive acticity). Budget: 9.9 lacs (2020), 6.12 lacs (2021), 4.25 lacs (2023), 7.53 lacs (2024). 04 No. of Ponds at village Dhanas, KhudaJassu, Kaimbwala& Maloya. Problem of Weeding/ No provision of inflow or out of control measures/ poor embankment. Action Plan- De-weeding,

				desilting of abandoned pond, repairing/ strengthening embankment surrounding, connections of storm water drains to accumulate rain water in pond. • Maintenance/Special work of water bodies for the villages KhudaJassu, Maloya, Dhanas, Kaimbwala Approx. Cost involved Rs. 19,12,724/- • Rejuvention of water bodies at village KhuddaJassu and Kaimbala, Chandigarh approx. Cost involved Rs. 58,13,204/-
2.	Quality of water bodies in the district	Check availability of data on water bodies. Create a district level monitoring cell for periodic monitoring of water bodies for specific parameters in association with SPCBs. It is also necessary to disseminate information pertaining to water quality inthe form of hoardings on river banks, official websites, etc.	District Level Monitoring Cell	Committee has been constituted vide order no. ED/2023/399-407 dated 07.03.2023. Quarterly regular monitoring is being done. Last Monitoring done in December 2024.
3.	Hotspots of water contamination	Check trends of water quality and identify hotspot of surface water and ground wat er. Establish a system or separate cell to monitor water quality.	District Level Monitoring Cell	There is no water contaminated area in Chandigarh

		Implement action points for restoration of water quality in association with SPCBs and department of environment.		
4.	Protection of river / lake water front	Action plan should be prepared for control river side open defecation, dumping of Solid waste on river banks, for idol immersion etc.	Chandigarh Administration/MCC	Already implemented by Chandigarh Administration
5.	Inventory of sources of water pollution	Check whether inventory of all sewage and wastewater discharge points into water bodies in the district. Action plan to complete inventory.	District Level Monitoring Cell	Yet to be done
6.	Oilspilldisasterma nagement (for coastal districts)	Whetherdistrictoilspillcrisis management group and District Oil Spill Disaster Contingency Plan has been created? If not, create District Oil Spill Crisis Management Group and District Oil Spill Disaster Contingency Plan forthe district.	NA	NA
7.	Protection of flood plains	Check whether there is regulation for protection of flood plain encroachment? Action plan should be prepared for protection flood plain and preventionof encroachment.	-	In Chandigarh there is no river.
8.	Rejuvenation of groundwater	Check availability of groundwater and if required	MCC/ CGWB-NWR/ Engineering Department,	MCC is going to phase out tube well by 2029 under the project 24x7 water supply

		prepare action plan to rejuvenate ground water in selected areas. Action plan should be prepared for Rain water harvesting	Chandigarh	which shall be funded by Agency De Francaice De Development. The agreement has been signed on 16.12.2022. 32 No. tubewells have been phased out & similarly the new agreement has been signed on dated 01.03.2024. Total number of 64 tubewell has been phased out till date and there are total 259 No. of tubewells currently in operation.The latest report of groundwater authority Chandigarh 100 ltr availability, the withdraw of water is 81 ltrs. Hence ground water authority has placed Chandigarh in semi critical category. As far as ground water harvesting is concerned ponds are being restored and new rainwater harvesting system are constructed Following waterbodies (Ponds & Lake) identified for restoration in Chandigarh and restoration action plan has been prepared: i. Sukhna Lake ii. Dhanas Lake iii. Kaimbwala (near mandir) Pond iv. Sarangpur Pond v. KhudaAlisher Pond vi. Dhanas Pond. vii. KhudaJassu Pond viii. Kaimbwala Pond ix. Maloya Pond. x. DadumajraPond Restoration work for Kaimbwala Pond (near

				mandir), Sarangpur Pond, Khuda Alisher Pond and Dadumajra pond has been completed and are maintained as regular activity. Dhanas Pond: The tender for the work of rejuvenation of pond at Dhanas received on 31.07.2024, which could not mature due to some technical reasons. For 2nd time tender, Technical Bid opened and tender under process for technical evaluation. The ground water recharging wells are being installed in all Schools, Colleges and the work of 02 No. Community Centres for recharging well have already been completed and working satisfactory. The tender for providing rain water harvesting in 52 no. community centres (where space is sufficient) in 02 batches have been allotted on 15.03.2024 and work in progress and will be completed by march 2025. similarly 02 no. road side rain water harvesting is also provided by constructing the same structure as that of rainwater harvesting system till date. 26 no. shallow bores are developed & 20 no. civil structure of RWH hav been constructed & the work for the same is in progress. Ground Water is an important source of

				drinking water and irrigation. The ground water level at deeper aquifers in Chandigarh falling day by day due to continuous drawing of water from 289 Tube-wells and 32 no. of tubewells have been phased out & similarly new agreement has been signed on dated 01.03.2024. Total no. of 64 tubewell have been decommissioned till date and there are 248 tubewells currently in operation. Water about 18.26Million gallons per day is being drawn from Tube wells. To improve the Ground water level, the following measures are being taken: - 1. The ground water recharging wells are being installed in all Schools, Colleges, Community Centres in the City. 120 Ground water recharging wells have already been installed in Schools and Colleges. 2. The Chandigarh Administration has notified that the residents have to install Rain Water Harvesting System is mandatory for premises having area more than 500 sq.yard. 3. MCC is implementing 24x7 water supply in PAN City and all the tube wells will be stopped in phased manner in the coming 3 to 5 years 4. The Municipal Corporation Chandigarh is upgrading 5 STPs with

				better quality of waste water treatment. The treated water will be used for the maintenance of parks, Green Belts and for industries. The treated water connection is also being given to the residents for maintaining the parks in their houses. Further, the planning of sewerage network and sewage treatment plant is done keeping in view the future growth of the city. It is further intimated that for laying of lines of tertiary networkwith estimated cost of Rs.89 crores has been allotted to the agency on 01.03.2024 and in progress. The date of completion is 30.08.2025. After completing the project the consumption of tertiary treated (TT)water will be enhanced from 8MGD to 20 MGD. 1805 parks/gardens/green belts will be supplied TT water for maintanence of the green cover and the entire industrial area will have TT water available for purpose like floor washing and car washing.
9.	Complaint'sRedressalsystem	Check whether there is any complaint redressing system based on Mobile App / Online, is available? If not, a complaint redressing system based on Mobile App / Online should be available at district level	MCC	Mobile App: Swachhata Website: mcchandigarh.gov.in Complaint No.: 14420

10.		No. of existing bore-wells and the no. of permissions granted	MCC and Engineering Department	Out of the total no. of existing bore-wells in the Municipal Corporation, Chandigarh 64 no. tubewells have been phased out.There are 248 tubewells currently in operation.All the tube-wells are bored with permission of Worthy Commissioner Municipal Corporation Chandigarh.

Figure 6: Restoration and maintenance workof water bodies

5 DOMESTIC SEWAGE

5.1 Current Status related to domestic sewage

Details of Data Requirement	Present Status
No of Class-II towns and above	1
No of Class-I towns and above	-

No of Towns STPs installed	1
No of Towns needing STPs	-
No of ULBs having partial underground sewerage network	-
No of towns not having sewerage network	-
Total Quantity of Sewage generated in District from Class II cities and above	232 MLD
Quantity of treated sewage flowing into Rivers (directly or indirectly)	186 MLD (36to 45 MLD treated water is being supplied to green belts, parks, gardens etc.)
Quantity of untreated or partially treated sewage (directly or indirectly)	1 MLD
Quantity of sewage flowing into lakes	No amount of Sewage is flowing into the lake
Total available Treatment Capacity	253.5 MLD

5.2 Identification of Gaps and Action Plan for Treatment of Domestic Sewage

S. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1.	Sewage Treatment Plants (STPs)	Wastewater generation: 232 MLD Treatment capacity: 253.5 MLD Gap- Nil	CSCL	5 STPs upgraded under Smart Cities Mission 1) STP Dhanas: Plant is upgraded and fully operational with SBR technology and meeting the parameters fixed by Hon'ble National Green Tribunal as BOD <10 mg/l, F.Coli< 100 mpn. 2) 3BRD: Plant is upgraded and fully operational with SBR technology and meeting the parameters fixed by Hon'ble National Green Tribunal as

				BOD <10 mg/l, F.Coli< 100 mpn. 3) STP Diggian:. Plant is upgraded and fully operational with SBR technology and meeting the parameters fixed by Hon'ble National Green Tribunal as BOD <10 mg/l, F.Coli< 100 mpn. 4) STP Raipur Khurd: Plant is upgraded and fully operational with SBR technology and meeting the parameters fixed by Hon'ble National Green Tribunal as BOD <10 mg/l, F.Coli< 100 mpn. 5) STP Raipur Kalan:Plant is upgraded and fully operational with SBR technology and meeting the parameters fixed by Hon'ble National Green Tribunal as BOD <10 mg/l, F.Coli< 100 mpn. 6) STP Maloya : STP is fully operational with SBR technology and meeting the parameters fixed by Hon'ble National Green Tribunal as BOD <10 mg/l, F.Coli< 100 mpn .
		All the sewage outlets in seasonal drains are being plugged.		All the sewage outlets have been plugged.
2.	Underground sewerage network	Whole of Chandigarh is connected with sewerage	CSCL	100% Sewerage network laid in the city. The strengthening of existing sewerage

		network		network in 13 villages namely MauliJagraon, KhudaLahora, KhudaJassu, Dhanas, Sarangpur, KhudaAlisher, Behlana, Daria, MakhanMajra, Raipur Khurd, Raipur Kalan Kaimbwala, Kishangarh have been completed
3.	Illegal disposal of untreated sewage		MCC/CPCC/Engineering Department	**SukhnaChoe :-** • No discharge of sewage • Work of lying sewage network has been completed. • **There was overflow from sump at Daria earlier. Now the pump set has been replaced and at present there is no overflow of Sewage from Sump at Daria.** **Patiala Ki Rao :-** • The work of laying of additional sewer line for diversion of waste water has been completed. • No discharge of sewage. **FaidanChoe:-** On May 19, 2023, a meeting was held at 12:30 pm in the office of the Sub Divisional Magistrate, East Chandigarh, Industrial Area, Phase-I, Chandigarh. The Agenda of the meeting was to address ***the issue of waste water discharge into FaidaChoe***, which has been causing environmental concerns in

				accordance with the guidelines set by the **National Green Tribunal (NGT) & Central Pollution Control Board (CPCB)**. The following decisions were taken: a. On the residents request from the illegal colony, the Municipal Corporation Chandigarh, in collaboration with the Revenue Department Chandigarh, has agreed to conduct a joint survey of the area. The purpose of this survey is to evaluate the feasibility of establishing a sewage system. It is important to note that the intention behind laying the sewer line is to address the NGT issue without changing the colony's illegal status. b. The Executive Engineer clarified that the Municipal Corporation Chandigarh is allowed to do work inside the "*Lal Dora*" area only and is restricted to carry out work outside the "*Lal Dora*" area. But, as the matter relates to compliance of NGT guidelines, he proposed a plan that necessitates a 7-meter wide strip of land on both sides of the choe for the installation of the main sewer line. Additionally, land is also required for the construction of a sewerage sump, which would serve as the point from where waste is pumped into the main sewer line

				for treatment at the STP Diggian. The land will be made available for execution of work free of cost to the Municipal Corporation Chandigarh. c. In response to *point (b)*, the residents have requested some time to consider the proposal and will revert back with their decision. d. The Sub Divisional Magistrate intimated that if the waste water continues to flow into the choe, they will have no alternative but to proceed with the demolition of the illegal construction on the agricultural land, in compliance with the Hon'ble NGT order. e. Again a joint survey has been carried out to identify the owner/tenant who are residing near the choe where the sewer network is to be laid and list has been supplied to SDM (East) for taking necessary action. f. The notices to 198 residents of Village Faidan had been issued to stopped the flow of sewage into Faidan Choe from their premises. g. The duration of water supply hours to the area have also been curtailed to 8 Hrs. in a day. h. The report of demarcation of Village

				Faidan has been received as the Survey has already been conducted jointly by Punjab and Chandigarh Officials. The said report is under process to setup a pumping station to pump the sewage of the area to the nearest STP. i. The letter no. CE/MC/1798 dated 08.04.2024 in this regard has been addressed by the office of the deponent to the office of Chief Engineer, U.T. Chandigarh with a copy to the office of Deputy Commissioner, U.T. Chandigarh with a request to provide the land free from encroachment so as to take further action for setting up the said pumping station. j. 24 No. notices have been issued to the residents living on the out skirts of Faidan Choe for illegal construction of residential building over agriculture land by Chandigarh Estate Office. k. **The Rough Cost Estimate stands approved from General House and consultancy work amounting to Rs. 3.78 Lakh has been allotted for preparation of detailed estimate and project report.**

Figure 7: Sewage Treatment Plants

6 INDUSTRIAL WASTEWATER MANAGEMENT

6.1 Current Status related to Industrial Waste Water Management

Number of Red, Orange, Green and White industries in the district	Red: 157 Orange:530 Green: 425 Green (only DG sets upto 1000 KVA):579 White: 702
No of Industries discharging wastewater	269
Total Quantity of industrial wastewater generated	6 MLD
Quantity of treated industrial wastewater discharged into Nalas / Rivers	NIL
Common Effluent Treatment Facilities	There is no CETP facility in Chandigarh
No of Industries meeting Standards	All the industries meet the standards as prescribed. As soon as it comes in the knowledge that the unit is non-complying, immediate action is taken.
No of Industries not meeting discharge Standards	As data upto Jan 2023 has been already provided in the last report, during the period of Feb. 2023 to Aug 2024, 02 nos. of industries were not able to meet the standards. Accordingly, Environmental compensation has been imposed upon them.

6.2 Identification of gaps and Action Plan for Industrial Wastewater:

S. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1.	Compliance to discharge norms by Industries	Identify gaps w.r.t industries not Meeting the standards. Necessary actionbe initiated through SPCBs against the industries not Meeting the	CPCC	All the industries are complying with the standards. When they do not meet the norms, action is taken against

		standards.		them.
2.	Complaint redressal system	Check if there is any complaint redressing system based on Mobile App / Online, is available? If not, a complaint redressing system based on Mobile App / Online portal may be preparedat district level.	MCC	Complaint can be sent via "I AM CHANDIGARH" app of MCC.
3.	Others	Industrial activities being carried out in residentialareas/ non-conforming areas and the action plan to deal with it as per law.	CPCC	No red category industry is allowed to operate in residential areas. However, some small units (like bakeries, attachakkis) were allowed to operate in the non-conforming areas before 2017 as per the by-laws of MCC.

7 NOISE POLLUTION MANAGEMENT

Chandigarh Administration has divided the various parts of Chandigarh into different zones i.e. Industrial Area, Commercial Area, Residential Area and Silence Zone. The noise levels are maintained at these locations as per Noise Pollution (Regulation and Control) Rules, 2000.

Chandigarh Administration has designated the following officers for implementation of Noise Rules.

1. Sub-Divisional Magistrate (South)
2. Sub-Divisional Magistrate (East)
3. Sub-Divisional Magistrate (Central)
4. Senior Superintendent of Police (City) Police Department., UT Chandigarh
5. Member Secretary, Chandigarh Pollution Control Committee.

7.1 Current Status related to Noise Pollution Management

Details of Data Requirement	Measurable Outcome
No. of noise measuring devices available with various agencies in district	CPCC (08) and Chandigarh Police (27)

7.2 Identification of gaps and actionplan.

S.No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1.	Availability of Sound/ Noise Level Meters.	Need to check whether concerned agencies that are ULBs, SHOs, Traffic police and SPCB/PCC have noise level meters. District administration may ensure through an action plan that concerned agencies and environmental cell under district administration have adequate number of portable noise level meters.	CPCC and Police	Yes, they have adequate device. 8 sound level meters available with CPCC which are used to address complaints.
2.	Ambient Noise Level monitoring.	ULBs shall ensure that ambient sound levels comply with notified standards for residential, sensitive zones. An action. Apart from portable analyzers, fixed ambient noise level monitoring stations may be installed in major cities and towns, such stations may be installed by ULBs and SPCB/PCC,	ULB/CPCC	4 nos. of ambient noise level meters to be installed in Chandigarh and is under tendering stage and will be procured and installed by March 2025.
3.	Signboards in Noise	District administration may ensure	Chandigarh	Sign boards have already been placed

	zones	that adequate number of sign boards installed at sensitive zones in towns/ cities in towns and cities. An action plan may be prepared by district authority.	Administration	at various locations in the city.
4.	Complaint redressing system	Action plan may envisage implementing a public complaint redressal system for noise pollution. Such application may be used by SHOs, Traffic police ULBs and SPCBs in the district.	CPCC, Police, MC & SDMs	"I am Chandigarh" mobile app has been developed by MC, Chandigarh.

8 FOREST, WETLANDS & WATER BODIES

Chandigarh, the City Beautiful is recognized all over the country for its greenery and various green initiatives taken by the Chandigarh Administration.

Green Cover of Chandigarh (as per ISFR-2023)

Geographical Area	114 sq. km + 26 sq. km = 140 sq. km
Sukhna Wildlife Sanctuary area	25.98 sq.km
Forest Cover-	25.00 sq.km
Tree Cover	21.18 sq.km.
Total Green Cover	72.16 sq.km.
Total Green Cover is 51.542% of the total geographical area	

The total Green Cover (Forest Cover + Tree Cover) of Chandigarh as per ISFR - 2021 was 45.63%, which has increased to 51.542% as per India State of Forest Report (ISFR), 2023 published in 2024.

There are two wildlife sanctuaries in the Chandigarh i.e. Sukhna Wildlife Sanctuary (25.98 sq. km) and City Bird Wildlife Sanctuary (0.029 sq. km). There are two Eco Sensitive Zones notified in the Union Territory of Chandigarh, namely Sukhna Wildlife Sanctuary Eco Sensitive Zone and City Bird Sanctuary Eco Sensitive Zone.

- Sukhna Wildlife Sanctuary Eco Sensitive Zone:- The extent of Eco-sensitive Zone varies from 2.0 kilometres to 2.75 kilometres from the boundary of the Sukhna Wildlife Sanctuary in the Union territory of Chandigarh; the Union territory Administration of Chandigarh has divided the Eco-sensitive Zone in two zones i. e., Zone-I and Zone-II and The extent of Zone-I is upto 0.5 km of from the boundary of the Sukhna Wildlife Sanctuary and the balance area shall be in Zone-II and this has been done with the purpose of having stricter norms in Zone-I for protection of wildlife habitat; the area of Eco-sensitive Zone is 1050.0 hectares (on the side of Union territory of Chandigarh).

- City Bird Sanctuary Eco Sensitive Zone:- The extent of the Eco-sensitive Zone varies from 80 to 125 meters from the City Bird Sanctuary comprising an area of

12.0 hectares approximately.

The Sukhna Wildlife Sanctuary is home to a wide range of plants and animals and has an abode of wide variety of mammals, birds, reptiles, butterflies. It consists of 40 tree species, 28 shrub species, 28 herb species, 16 grass species, 20 species of mammals, 10 species of reptiles, more than 120 species of birds, 3 species of amphibians, 3 species of fish and 30 species of invertebrates (insects).

To enhance staff mobility and ensure effective implementation of the Wildlife (Protection) Act, 1972, a robust communication network is being developed. To minimize and control soil erosion in the hilly catchment areas, a combination of vegetative and engineering methods is employed. These include removing silt from sediment-filled SMC structures, conducting plantation activities, planting Arundo donex along choe beds, constructing retaining walls/revetments to stabilize and prevent further soil erosion etc. Furthermore, invasive weeds such as parthenium and lantana are regularly removed, contributing to the successful eradication of lantana across most of the Sukhna Wildlife Sanctuary.

Chandigarh Administration declared 2.90-hectare area of Sector -21 park as Chandigarh City Bird Sanctuary on 29th September, 1988. There is wide variety of trees, shrubs, herbs, grasses and climbers. The prominent among them are *Ficus virens* (Pilkhan), *Syzygiumcumini* (Jamun), *Schleichera oleosa* (Kusum), *Morus nigra* (Shahtoot), *Terminalia arjuna* (Arjun), *Sepiumsebiferum*(Makhan tree), *Terminalia bellirica*(Bahera), *Dalbergia sissoo* (Shisham), *Thuja compacta* (Morpankhi), *Cinnamomum camphora*(Camphor) , *Ficus religiosa* (Peepal), *Psidium guajava* (Guava), *Manigifera indica* (Mango), *Casurinaequisetifolia*(Casurina), Bougianvillea*glabra* (Bougainvillea), *Ixora coccinea* (Ixora), *Jasminum officinale* (Jasmine), *Hibiscus rosa-sinensis* (Hibiscus), *Cynidindactyon*(Bermuda grass)*, Dicanthiumannulatum, Bothriochola, Echinochloacolonum* etc.

The area was declared as bird Sanctuary because of the presence of huge numbers of birds the most prominent one were Parakeets like Green Alexandrin Parakeets, Rose- ringed Parakeets, Peach headed Parakeets etc. One can also see other bird species like Common Myna, Brahminy Myna, Seven sisters, Grey Wagtail, Grey Hornbill, Blue Rock Pigeon, Indian Robbin, Red vented Bulbul, House Sparrow, Bush Chat, Starling Hoope, Ring Dove,

Green Bee Eater, Spotted Owlet, Flower pecker, Purple Sunbird etc.

The Chandigarh Administration has established a Botanical Garden near the villages of Sarangpur, KhudaLahora, and Dhanas. Spanning across 176 acres, the garden is divided into several sections based on plant types and themes, playing a vital role in conserving various plant species. Various steps have been undertaken, such as the establishment of a nursery for medicinal, herbal, and native plants, planting diverse species of plants, development of a road network to facilitate visitor movement, installation of interpretive signages to raise awareness and sensitize visitors about the importance of conservation etc. A "Nagar Van-City Forest" has been established near Sukhna Lake under the Nagar Van Udyan Yojana, inaugurated on 24th April 2018. This urban forest offers visitors the opportunity to walk and relax in a tranquil, healthy environment, surrounded by lush greenery. The Nagar Van serves as a peaceful escape for city dwellers, promoting well-being while contributing to the conservation of local biodiversity. It provides a serene setting for nature walks, fostering a deeper connection with nature and a better understanding of environmental sustainability.

The Department has developed Butterfly Park in Sector-26, Chandigarh, spread over an area of 7 acres which has been designed to facilitate an ideal environment for the breeding of butterflies.

Department of Forests & Wildlife has also developed a 2.28 ha. green area in Sector-39 as Peacock Park. This area is full of vegetation and a promising habitat for peafowls.

The Department of Forest & Wildlife, UT Chandigarh, established the Chandigarh Bird Park in 2021, located behind Sukhna Lake. The park is home to a variety of exotic bird species, offering them a spacious, natural habitat with a flying height of 58 feet, spread across 6.5 acres. Surrounded by a diverse range of plants with varying canopies, the park creates an ideal environment for birds to fly, breed, and thrive. Notable attractions include African Love Birds, Budgerigars, White Swan, Black Swan, Wood Duck, Golden Pheasant, Yellow Golden Pheasant, Green Wing Macaw, Sun Conures, African Grey Parrot, Finches, and Melanistic Pheasant etc. The lush green landscape is complemented by numerous information boards highlighting various aspects of environmental conservation. Natural walkways have been created throughout the park, allowing visitors to explore and enjoy its beauty while connecting with nature. The Chandigarh Bird Park serves as both an educational resource and a peaceful retreat for bird enthusiasts and nature lovers alike.

8.1 Current Status related to Forest, Wetland &Water Bodies

Details of Data Requirement	**Measurable Outcome**
Forest Area Wetland/s Water Bodies	Total Area- 35 sq km (approx.) Total No.- 01 For restoration- 10 water bodies have been identified in U.T. Chandigarh (02 lakes and 08 ponds)
Name of Water Body	**Maintained By**
Sukhna Lake	Engineering Department, Chandigarh Administration
Pond at Village Kaimbwala	-do-
Pond at Village KhudaJassu	-do-
Pond at Village Maloya	-do-
Dhanas Lake	Forest Department, Chandigarh Administration
Pond at Village Khuda Ali Sher	Municipal Corporation, Chandigarh
Pond at Village Sarangpur	-do-
Pond at Village Kaimbwala	-do-
Pond at Village Dhanas	-do-
Pond at Village DaduMajra	-do-
Wetlands	
Sukhna Wetland	Area- 493 acres

8.2 Identification of gaps and action plan

S. No.	**Action points**	**Action**	**Responsible agency**	**Timeline for completion of action plan**	**Estimated Cost**
1.	Dhanas Lake	• Maintenance of	Department of Forest	31st March, 2025	Approximately 35.85 lacs

		Dhanaswater body, flowering beds, plantations and other assets • Biological Method to clean the impurities from waste water coming to the DhanasLake. Bio-remediation is being done of waste water & floating solar fountains installed for aeration of water & to add recreational value.	& Wildlife, U.T. Chandigarh	(Routine maintenance)	upto 31st December, 2024
2.	Steps to be taken to pres erve the forest area.	• Multiple plantation activities will be carried out at various locations, incorporating a wide range of tree and shrub species to promote and strengthen biodiversity. • Soil and Moisture Conservation activities will be implemented to support biodiversity by enhancing water retention, soil fertility,	Department of Forest and Wildlife, U.T. Chandigarh.	31st March, 2025 (New as well routine maintenance works)	Approximately 18.76 cr. upto 31st December, 2024

		soil productivity, and overall water supply, among other environmental factors. • Free Distribution of plants			
3.	Wetland Conservation	• Biodiversity importance Flora and Fauna. • Invasive species and degrading habitat to support biodiversity. • Ecosystem Services to improve biodiversity. • Providing floating bamboo shelter to migratory birds at Sukhna Wetland.	The Department of Forest & Wildlife, UT Chandigarh is Nodal Department for Sukhna Wetland for its better management and upkeep	Draft Integrated Man agement Plan for Sukhna Wetland is under process.	The Chandigarh Administration vide Notification No. Forest/ 2020/ 74 dated 16.06.2020 has declared the area of Sukhna Lake comprising of 493.00 acres as Wetland under the Wetlands (Conservation & Management) Rules, 2017. The said Notification enlisted the activities of prohibited/ regulated/ promoted in the part of Sukhna Catchment and its Catchment Area/Zone of Influence falling within the jurisdiction of UT Chandigarh.

9 RENEWABLE ENERGY - SOLAR

To scale up the solar rooftop development in the city, the Chandigarh Administration has been an active participant of the “Development of Solar Cities” programme notified by the Ministry of New and Renewable Energy (MNRE) through the Chandigarh Renewable Energy and Science & Technology Promotion Society (CREST), which is the nodal agency for promotion and development of projects based on non-conventional energy.

The city was developed as the 'Model Solar City' by the Chandigarh Renewable Energy, Science and Technology Promotion Society (CREST) in 2012. Chandigarh as Model Solar City was formally launched in 2013 with the inauguration of two Roof top Grid Interactive Solar Photovoltaic Power Plants at Paryawaran Bhawan, Sector 19- B, Chandigarh(50kWp) and at Model Jail, Burail (100kWp). Chandigarh has adopted policies in the building bye laws that mandate solar power installations which has made rooftop solar power plants must in new and existing properties measuring 500 sqyds and above and in group housing societies. The city has made substantial strides in promoting solar energy to meet its renewable energy targets. Various projects, including rooftop solar installations, parking shed-type solar systems, and floating solar power plants, have been installed.

Saturation of Govt rooftop:

As of December 31, 2024, Chandigarh has installed a total of 89.69 MWp of grid-tied rooftop solar power across 10,689 sites. A total of 6621 government buildings and government residential houses have been identified for solar saturation with an aggregate capacity of 52.85 MWp and 100% saturation of govt. Residential and buildings have been achieved in Dec 2024. The 89.69 MWp solar power plants have cumulatively generated 270.26 million units of electricity, resulting in a reduction of 1,86,479.4 metric tons of CO2 emissions.

Installation of Rooftop Solar in all the Government Schools:

Out of a total of 114 government schools, 108 schools were identified as feasible for rooftop solar installations, and solar power plants have been successfully commissioned on these premises. The total solar energy consumption by these schools during the previous year was 6.1 MU (Million Units) and the total solar energy generation recorded during the same period was 7.32 MU, resulting in a surplus of solar energy. Thus, making the schools

in Chandigarh Net Zero.

PM Surya Ghar: Muft Bijli Yojana (Private Residential Sector)

Chandigarh is actively implementing the PM Surya Ghar: Muft Bijli Yojana, to accelerate solar energy adoption in residential households. The scheme offers financial assistance of up to ₹78,000 for rooftop solar systems up to 3 kWp, enabling cost savings and promoting sustainable energy use. To date, 5,433 registrations have been completed, 1,352 applications submitted, and 637 installations successfully executed under the initiative.

Action Plan of Rooftop Solar Saturation in UT, Chandigarh is as following:

9.1 Rooftop Solar Installation– Baseline and Proposed Targets (MW)

Category	Current Installations	2025-2026	2026-28	2028-30
Residential	21.534MWp	100	10	10
Government	52.852MWp	0	5	5
Others	10.303MWp	8	5	5
Total	84.689 MWp	108	20	20

9.2 Rooftop Solar Installation– Baseline and Proposed Targets (No.of Installations)

Category	CurrentInstallations	2025-2026	2026-28	2028-30
Residential	6247	20000	2000	2000
Government	374	0	200	200
Others	4065	500	250	250
Total	10686	25000	2450	2450

9.3 Projects under Execution other than above

Sr. No.	Project Name	Capacity (MWp)	Estimated Date of Completion
1	Floating SPV Power Plant, Tank No. 5 & 6, Water Works, Sec-39 Chandigarh	3	**Installation Complete**
2	Gaushala, Makhan Majra	0.7	**30.06.2025**
	Sub Total	**3.7 MWp**	

9.4 Projects under Pipeline:

Sr. No.	Project Name	Capacity (kWp)	Estimated Date of Completion
1	RESCO tender for Private Residential	100	**31.12.2025**

	Houses under BOT-model target to cover **20,000 private residential units**		
2	Floating SPV Power plant installation at Water Works , Sector 39, UT Chandigarh	4	**31.12.2025**
3	SPV Power plant installation at DT Mall Parking, IT Park, UT Chandigarh (Phase-II)	1	**31.12.2025**
4	SPV Power Plant at parking area of Sports complex, UT Chandigarh	1	**31.12.2025**
	Sub Total	**106 MWp**	

9.5 GovernmentConsumersProfile

No. of Government Buildings with rooftop solar installed	Number and Capacity in MW **6,621 Nos. and 52.852 MWp**		
No. of Government Buildings under UT/Central Govt. without rooftop and Potential	Number and Capacity in MW **16 Campus and 8.325 MWp under Central Govt.**		
Other Government Buildings	Number and Capacity in MW **658 Nos. (Buildings under Punjab & Haryana Govt.)**		
Top 3 Government Departments with Highest rooftop potential	**Department**	**# of Buildings**	**Potential**
	PanjabUniversity, Sector-14, Chandigarh	34	2.5MWp
	AirForce Residential Area, Sector-30	452	2.2MWp
	PGIMER, Sector-12, Chandigarh	20	2 MWp

Figure8: Solar panel installed at various location

10 MEASURES TO BE UNDERTAKEN TOWARDS SUSTAINABLE DEVELOPMENT FOR COMBATING CLIMATE CHANGE

Climate Change Cell has been established by the Department of Environment, Chandigarh Administration through the grant received from Department of Science and Technology, GoI, with the aim to assist the U.T. Administration to support or undertake research studies that are critical with the perspective of climate change and the environment of Chandigarh City. The current initiatives undertaken by the Climate Change Cell are as follows:

- Climate change monitoring & evaluation dashboard is developed to fetch satellite data automatically from data sources at the scheduled frequency with data ingestion, pre-processing and post-processing capability with fully integrated algorithms. This platform serves as a large repository of data relevant to climate change which can be utilized by researchers, policymakers, various administrative local bodies etc for research, policy formulation devising mitigation measures etc. 3 parameters have been developed so far-
    - Forest management (Vegetation Indices)
    - Urbanization Management (Chandigarh Heat Stress Index and Urban Heat Island)
    - Land Classification
- **Chandigarh State Action Plan on Climate Change (Chandigarh- SAPCC 2.0):** Chandigarh State Action Plan on Climate Change (SAPCC) examines and documents the current and projected climate risks faced by the UT in respect of climatic variables. It will also contain a road map for implementation, in terms of institutional mechanism, monitoring, and evaluating the progress and financing the implementation of the interventions identified. The final draft of revised Chandigarh SAPCC 2.0 sent to the ministry for peer reviewing and final approval. Based on the approval, prioritized mitigation and adaption activities will be planned.
- Prioritized mitigation activities will be planned. Policies related to Energy Sector (Solar Power policy, Solar Rooftop Scheme, EV Policy), Energy Efficiency (Ujala Scheme), Transport (Electric mobility, BRTS), Forestry (Social/Urban Forestry Programme), Waste (Urban Waste Management, Waste to Energy policy, Liquid Waste management) will be discussed.

- **Power sector:** The UT aims to de-carbonize its power consumption by 2030. The main strategies include making all efforts to making the city a Model Solar City by 2030 by implementing various solar rooftop programmes including PM Suryaghar Muft Bijli Yojna, and sourcing the balance power needs from the non-fossil energy sources-hydro, solar, wind, and nuclear. Installation of 224 MW through various solar rooftop programmes is planned.

- **Transport sector:** The Chandigarh Electric Vehicle Policy 2022, sets the targets and direction for shifting the energy consumption from non-fossils to electricity. In all there are 14315 Electric vehicles registered in UT Chandigarh after launch of the EV Policy and 28 EV Charging Stations spread over the entire city are functional in public spaces. In addition, there are 20 EV Charging Stations in Private commercial buildings.

  Chandigarh Administration has disbursed Rs. 32.31 Cr incentive to 4700 beneficiaries. As of January 31, 2025, CREST received 5,118 applications for release of EV incentive under the Chandigarh EV Policy, demonstrating a strong response and growing interest from the community in transitioning to electric mobility. The UT has plans to convert its entire bus fleet to electric buses with the SAPCC plan period. It also aims at achieving the highest penetration of Zero Emission Vehicles amongst all Indian cities, by the end of policy period by providing incentives, promoting environment-friendly commute systems (including converting all buses to electric buses), building EV charging infrastructure, introducing integrated transport management system (ITMS), and creating public awareness. In 2024, EVs accounted for 15.26% of total vehicle registration which is targeted to be increased to 70%.

Figure 9: EV Charging Stations

- **Energy efficiency and buildings:** The UT has introduced the Energy Conservation Building Code (ECBC) in 2024 and promoting energy efficient appliances and cost-effective solutions that help in reducing the overall energy consumption and carbon emissions. The need of mandating energy and green certifications for buildings are also being done for creating energy efficiency in the building sector.

- **Waste sector:** Chandigarh has 100% collection efficiency for Municipal Solid Waste. With a view on processing and managing the waste, Chandigarh has already established waste management plants for managing construction waste, biomedical waste and sewage. More focus is being given towards implementing various systems to consolidate the existing operations and deriving energy from solid waste in terms of overall energy generation. City also plans to establish Integrated Solid Waste Management (ISWM) system.

- Priority sectors identified for adaptation are Forests, Biodiversity, Water, Health etc. Increasing Green Cover, biodiversity, protecting forests against forest fires, improving the preparedness to risk of rising instances of vector and water borne diseases.

  - **Water sector:**The UT's vulnerability in terms of water resources has increased due to poor drainage density, water logging, groundwater declines and lack of efficient wastewater treatment. Increasing the STP capacity is central to adaptation in water sector. These interventions are suitably aligned with the Mission LiFE, SDGs, LT-LCDS, National Water Mission, and NDCs.

  - **Forest and biodiversity:**In line with the Green India Mission, National Biodiversity Strategies and Action Plans, Kunming-Montreal Global Biodiversity Framework (GBF), LT-LCDS, NDCs, SDGs, Mission LiFE, and Ek Ped Ma Ke Naam campaign, the interventions in the forest and biodiversity sector focus on increasing public participation in the various plantation drives with a clear emphasis on replacing invasive plant species with native species, developing a Citizen's Biodiversity Register, restoration of water bodies, and avoidance of forest fires.

- **Health sector:**Extreme temperature coupled with increased variability in rainfall in future provides favourable conditions for pathogens and vectors such as mosquitos, thus increasing the risk of water and vector-borne diseases.

- Climate Change Cell, Chandigarh, spearheaded numerous initiatives to raise environmental awareness and promote sustainability. Highlights included the first-ever 'Biospectacle: When Nature Takes the Spotlight', an immersive nature carnival engaging 2,000 participants, and the 'Paani Panni Re' street play on water pollution, which reached 10,000 people. Other initiatives included capacity-building programs on e-vehicles, Mission LiFE, and solid waste management, a tree plantation drive with 350 participants, and workshops on climate change and backyard birding.

Annexure I

C & D WASTE COLLECTION CENTRE'S (CHANDIGARH)

1. Sector-9 C: Near SSK near existing B&R store.
2. Sector-16 D: Back side of Govt. School
3. Sector-19 B: Back side of maintenance booth.
4. Sector-23 D: Near SSK
5. Sector-25 (W): Along boundary wall of IOC.
6. Sector-26: MC Store (B&R) near Timber Market.
7. Sector-28 B: Between substation and green belt.
8. Sector-29 C: Near SSK.
9. Sector-31 B: Backside of SSK
10. Sector-47 D: Near SSK
11. Sector-48 C: Side of tubewell along V-5 road.
12. Sector-51 D: Near SSK.
13. Industrial area phase-II: Near petrol pump.
14. Dadumajra: Inside Dumping Ground.
15. Maloya: Opposite pond near Gaushala.
16. Sector-38 west: Along V-4 road opposite Shahpur Colony.
17. Sector-56 A: Along V-5 road near Garbage Bin.
18. Sector-45 D: Along V-4 road open space opposite Community Centre.
19. Industrial Area Phase-I: Along tile factory.
20. Ramdarbar Colony: Near multi storey houses and community centre.
21. Manimajra: Adjoining Cremation Ground.
22. Manimajra: Back side of New Darshani Bagh near Tube well.