



**Office of the Deputy Commissioner cum Chairman District  
Environment Committee, Ludhiana**

No...2936

Date...20-9-2021

To

Director of Environment and Climate Change (DECC)  
Deptt. of Science, Technology & Environment, Govt. of Punjab  
MGSIPA Complex, Sector-26, Chandigarh-160019

**Sub:-**

**Modified Environmental Plan for District Ludhiana as per the  
Direction of Hon'ble NGT in O.A No. 360/2018 on new template of  
CPCB.**

It is intimated that Hon'ble NGT vide its order 26.09.2019 in O.A No. 360/2018 had directed to prepare the District Environmental Plan in each District.

The Environment Plan for District Ludhiana was prepared on the template provided by the CPCB after incorporating the special issues of the District, Ludhiana. This plan was forwarded to your department vide letter no. 768 dt. 16.11.2020.

Thereafter, the revised plan was also sent to your department by the District Administration as per the latest directions through E-note no. 60865.

Thereafter, a meeting was held with the State level Officers under the Chairmanship of Justice Jasbir Singh, Former Judge, Punjab & Haryana High Court and now as Chairman of the Monitoring Committee on 30.03.2021. In this meeting, it was decided that District Environmental Plans for District Ludhiana and Jalandhar be modified/upgraded incorporating the latest information as discussed in the meeting and 220 data points as mentioned in the orders of Hon'ble National Green Tribunal by 30.04.2021.

The above plan was also sent to your office vide letter no. 714 dated 20.05.2021 and 2473 dated 16.07.2021.

To review the above plan, the meeting was taken by the Justice Jasbir Singh, Former Judge, Punjab & Haryana High Court now Chairman of Monitoring Committee on 25.06.2021, 05.08.2021 and 09.09.2021 at Forest Complex, SAS Nagar. In this meeting, it was decided that District Environmental Plans for District Ludhiana be prepared on the new indicative Template of CPCB after incorporating the observation of Monitoring Committee.

The Modified District Environment Management plan for District Ludhiana on new template of CPCB, as per the direction of the Hon'ble NGT in O.A No. 3.60/2018 is hereby sent to you for your kind information and further necessary action in the matter.

**DA/As above**

  
Deputy Commissioner cum- Chairman  
District Environment Committee, Ludhiana

21

R.T.O

Endst. No. 2937

Date 20.9.2021

A copy of above is forwarded to the Chairman, Punjab Pollution Control Board, Nabha Road, Patiala for information.

*d/c* Deputy Commissioner-cum-Chairman  
District Environment Committee, Ludhiana

Endst. No. 2938

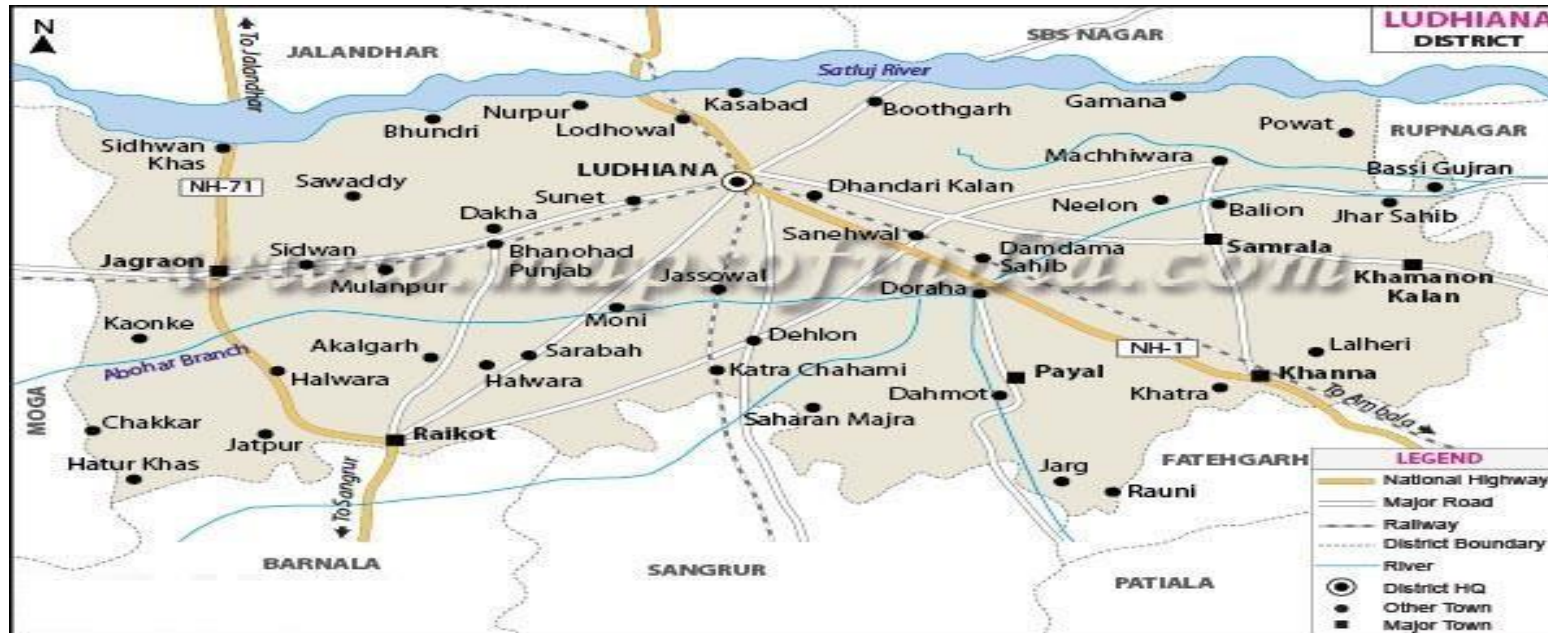
Date 20.9.2021

A copy of above is forwarded to the Chief Environmental Engineer, Punjab Pollution Control Board, Ludhiana for information.

*d/c* Deputy Commissioner-cum-Chairman  
District Environment Committee, Ludhiana

*21*

# District Environment Plan - Ludhiana



## District Administration - Ludhiana

## Table of Contents

1. DISTRICT PROFILE.....	5
(i) District Administrative Set-up.....	6
(ii) Local institutions.....	7
(iii) Natural Resources.....	7
• Water bodies .....	7
• Availability of water resources .....	8
• Forest coverage .....	8
(iv) Geography & Demography .....	9
(v) Land-use pattern.....	9
(vi) Climate.....	10
2. WASTE MANAGEMENT PLAN.....	12
(i) Solid Waste Management.....	12
(a) Current status related to solid Waste management .....	12
(b) Identification of gaps and Acton plan:.....	13
(ii) Plastic waste Management.....	31
(a) Current status related to Plastic waste management .....	31
(b) Identification of gaps and Action plan:.....	32
(iii) C&D Waste Management .....	40
(a) Current status related to C&D Waste .....	40
(b) Identification of gaps and Action plan:.....	40
(iv) Bio medical Waste Management.....	42
(a) Current Status related to biomedical waste.....	42

(b)	Identification of gaps and Action plan:.....	43
(v)	Hazardous Waste Management .....	45
(a)	Current Status related to Hazardous Waste Management .....	45
(b)	Identification of gaps and action plan: .....	45
(vi)	E-Waste Management .....	46
(a)	Current Status related to E-Waste Management.....	46
(b)	Identification of gaps and action plan: .....	46
3.	AIR QUALITY MANAGEMENT .....	50
(a)	Current Status related to Air Quality Management .....	50
(b)	Identification of gaps and action plan: .....	51
4.	WATER QUALITY MANAGEMENT.....	57
(a)	Water Quality Monitoring .....	57
•	Current Status related to Water Quality Management.....	57
•	Identification of gaps and action plan for water quality monitoring: .....	57
(b)	Domestic Sewage.....	59
•	Identification of gaps and action plan for treatment of domestic sewage .....	59
•	Identification of gaps and action plan for treatment of domestic sewage: .....	59
5.	INDUSTRIAL WASTE WATER MANAGEMENT .....	80
(a)	Current Status related to Industrial Waste water Management.....	80
(b)	Identification of gaps and action plan for industrial wastewater: .....	81
6.	MINING ACTIVITY MANAGEMENT PLAN.....	83
(a)	Current Status related to Mining Activity Management .....	83
(b)	Identification of gaps and action plan: .....	83
7.	NOISE POLLUTION MANAGEMENT PLAN.....	89
(a)	Current Status related to Noise Pollution Management.....	89

(b) Identification of gaps and action plan: .....	89
List of Nodal Officers (Annexure-X) .....	90

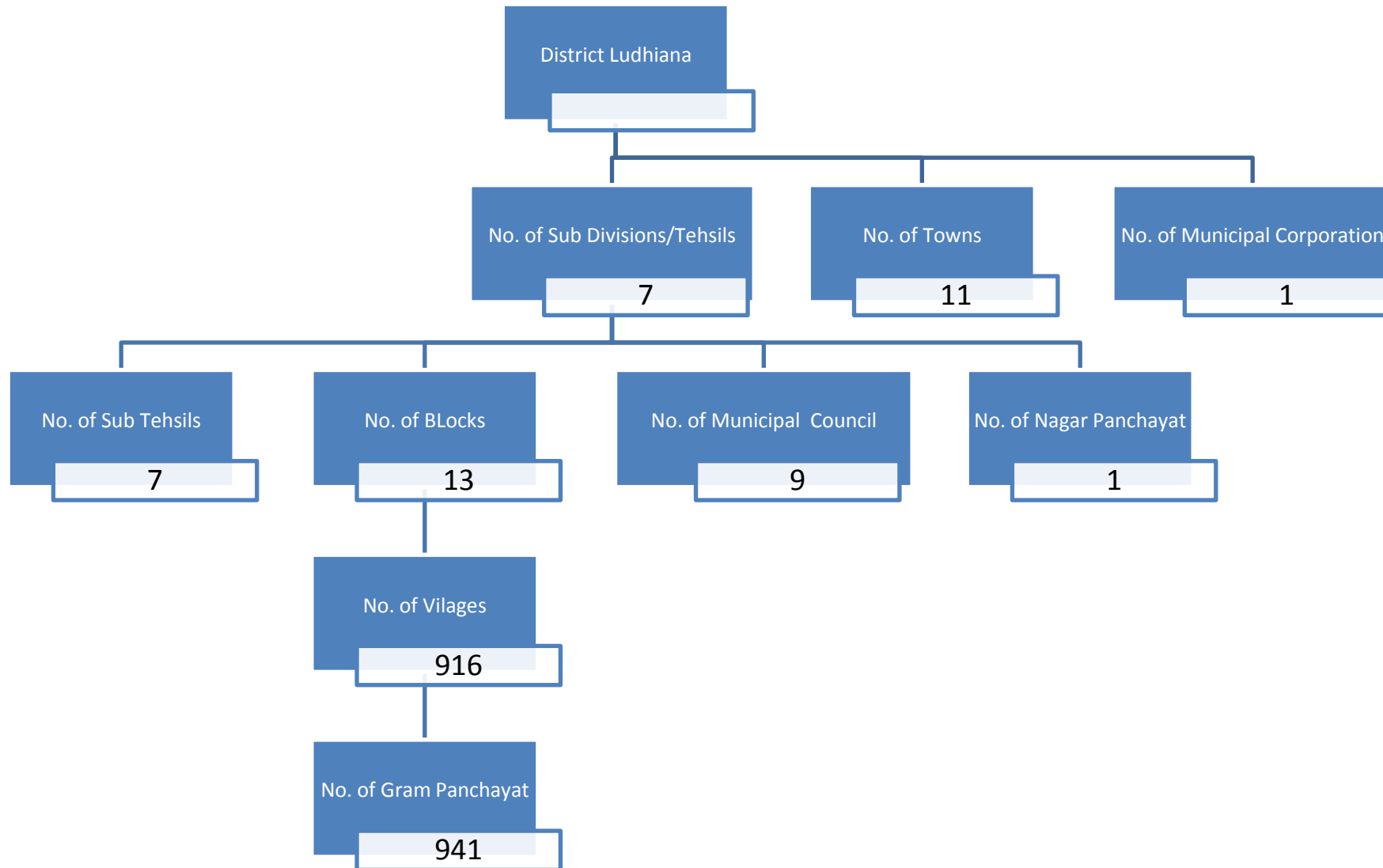
## 1. DISTRICT PROFILE

Ludhiana city was founded in the time of Lodhi dynasty which ruled in Delhi from 1451-1526 A.D. The legend goes that two Lodhi Chief Yusuf Khan and Nihand Khan were deputed by Sikandar Lodhi (1489-1517 A.D.) to restore order in this region. They camped at the site of present city of Ludhiana which was then a village called Mir Hota. Yusuf Khan went across the river Sutlej in Jalandhar Doab to check Khokhars who were plundering the Doab and made a settlement at Sultanpur while Nihand Khan stayed back and founded the present city at the site of village Mir Hota. The new town was originally known as Lodhi-ana, which means the town of Lodhi's. The name later changed to the present name Ludhiana. Ludhiana is now a District Headquarter with Parliamentary Constituency of the same name. It is one of the biggest Municipal Corporations of the State.

Ludhiana is the largest city of the Indian state of Punjab and 28th largest urban agglomeration in India. The city stands on the Sutlej's old bank, 13 km south of its present course. Over the years, the city has turned out to be a vibrant kaleidoscope of different cultures and activities. The city has developed a variety of traits and qualities which are perceptible in various forms.

The district Ludhiana is most centrally located district among 23 districts of Punjab. The district is spread over an area of 3577 sq.km and accommodates approximately 34.98 lacs population, it lies between 30°34' and 31°01' north latitude, 75°18' and 76°20' east longitude. It is surrounded by the districts of Jalandhar & Shahid Bhagat Singh Nagar in the North, districts of Rupnagar & Fatehgarh Sahib in the east, districts of Sangrur & Barnala in the south and districts of Moga & Ferozpur in the west. The district is located on Amritsar- Delhi GT Road i.e. NH-44 and Amritsar-Ambala railway line which are considered the back bone of the state. The Ludhiana city is located at a distance of about 100kms km towards North-West of Chandigarh, the Punjab's capital and is about 310 km from Delhi. The total forest area of the district Ludhiana is 8785.382 hectare.

**(i) District Administrative Set-up**





**(ii) Local institutions**

In District Ludhiana, there are total 7 Sub-Divisions/Tehsils, 11 towns & 01 Municipal Corporation. There are 07 Sub-Tehsil, 13 Blocks, 09 Municipal Council and 1 Nagar Panchayat. There are total 916 Villages in the District & have 941 Gram Panchayats.

**(iii) Natural Resources**

- Water bodies

- River Sutlej

Sutlej River after flowing through Himachal Pradesh territory, it debouches from the Shivalik hills near Roopnagar and enters Ludhiana District somewhere at 32 km East of the boundary of Samrala Tehsil and it flows due west along the top of the district, for about 96 Km and turns, as it leaves Jagraon tehsil slightly to north towards its junction with Beas at Harike during its journey along the district. It maintains east west direction. The Sutlej has experienced a westward drift during recent times. The old towns/ villages of Behlolpur, Machhiwara, Kumkalan etc. were built on its banks. After the construction of Bhakra Dam, the flooding menace of the River Sutlej in the district has considerably reduced. There are total 27 sub drains passing through District Ludhiana & meeting with River Sutlej.

- Budha Nallah:

It runs parallel to Sutlej, on its south for fairly large section of its course in the district and ultimately joins Sutlej at Gorsian Kadar Baksh in the north western corner of the district. The total length of the Budha Nallah is around 47.56 km in district Ludhiana. Ludhiana and Machhiwara are situated to the south of the Budha Nallah. The water of the stream becomes polluted after it enters Ludhiana City with the industrialization/ urbanization of the area, Budha Nallah has become the sullage/ sewage as well as industrial effluent carrier for the Ludhiana city leading to River Sutlej.

- Availability of water resources

The major source is ground water. However as per CGWA report the ground water development in all the block of the District has been categorized as over exploited. The net annual ground water availability of District is 203448 ham.

- Forest coverage

The Detail of Forest area of District Ludhiana is as under:-

Sr. no.	Category of area	Ownership	Area in Ha
1.	Reserve Forests	Govt., of Punjab	79.72
2.	Protected Forest	Govt., of Punjab	1461.48
3.	Protected Forest	GOI (PF, Laddowal)	88.90
4.	Un-classed Forest	Govt., of Punjab	1944.33
<b>Total Block Forest</b>			<b>3574.43</b>
<b>Strips Forest (Protected Forest)</b>			
5.	Road Strips (P.F)	Govt., of Punjab	1312.17
6.	Railway Strips (P.F)	Govt., of Punjab	421.945
7.	Canal Strips (P.F.)	Govt. of Punjab	2557.887
8.	DHussi Bands (P.F.)	Govt. of Punjab	918.95
<b>Total Strips Forest (Protected Forest)</b>			<b>5210.952</b>
<b>Total Forest Area</b>			<b>8785.382</b>

**(iv) Geography & Demography**

Sr. No.	Title	District Ludhiana	Punjab State
1.	Area (Sq Km)	3767	50,362
2.	Population (in Lakh)	34.99	277.04
3.	Rural Population (in Lakh)	15.28	173.2
4.	Urban Population (In Lakh)	19.71	103.84
5.	% Increase in Population (2001-2011) Decennial Growth rate	15.4	13.55
6.	Density of Population (per Sq km)	978	550
7.	Literacy %	82.02	76.7
8.	Sex Ratio ( Females per thousand)	873	893

The total area of District Ludhiana is 3767 km<sup>2</sup> having population 34.99 lakhs. The rural population of District Ludhiana is 15.28 lakh and urban population of District Ludhiana is 19.71 Lakh. The literacy rate of District Ludhiana is 82.02.

**(v) Land-use pattern**

Sr . No.	Title	Data of District Ludhiana (2020-21)
1.	Total Geographical Area (in Sq km)	3767
2.	Area under Forest (in Ha)	8785.382
3.	Net Area Sown (In Ha)	292,000
4.	Gross Cropped Area (in Ha)	596,000
5.	Total Area irrigated (in Ha)	292,000
6.	% of Net Area irrigated to Total area sown	100%

The total Geographical Area of District Ludhiana is 3767 km<sup>2</sup>. The Net area sown & irrigated is 292,000 hectare. The gross cropped area is 596,000 hectare of District Ludhiana as per financial year 2020-21. The total reserved forest area of district

Ludhiana is 8785.382 hectare.

**(vi) Climate**

Ludhiana features a relatively dry monsoon-influenced humid subtropical climate under the Köppen climate classification, although bordering on a hot semi-arid climate, with three defined seasons; summer, monsoon and winter. Ludhiana on average seems roughly 809.3 millimeters (31.86 in) of precipitation annually. The yearly data of climate of district Ludhiana is as under:-

Climate data for Ludhiana District													
Month	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Year
Record high °C	29.0	30.4	41.1	46.1	48.3	47.9	47.8	44.4	41.7	40.0	35.8	29.4	48.3
Mean maximum °C	23.8	26.9	32.6	40.7	43.8	43.5	37.9	35.8	35.6	34.7	30.7	25.1	44.8
Average high °C	18.6	22.2	27.3	35	38.9	37.9	34.0	33.1	33.0	31.9	27.3	21.6	30.1
Average low °C	5.6	8.2	12.3	17.7	22.9	25.3	25.8	25.1	28.8	16.5	10.7	6.5	16.6
Mean minimum °C	1.2	3.4	7.3	12.0	17.6	20.5	22.0	21.7	18.8	12.6	6.0	2.5	0.8
Record low °C	-2.2	-1.1	1.4	7.1	11.7	18.0	17.4	18	15.2	9.4	0.3	-1.1	-2.2
Average rainfall mm	28.3	37.0	29.9	17.3	22.3	69.2	215.0	205.2	146.0	19.8	4.3	15.1	809.3
Average rainy days	2.2	2.7	2.4	1.7	2.0	4.3	8.4	8.6	5.0	1.0	0.6	1.0	39.9
Average relative humidity % (at 17:30 IST)	63	54.54	46	25	23	41	67	73	65	49	49	63	51

\*Source: India Meteorological Department

# **ACTION PLAN**

## 2. WASTE MANAGEMENT PLAN

### (i) Solid Waste Management

(a) Current status related to solid Waste management

Sr. No.	Urban Local bodies	No of Wards	No of Households	Population	Solid Waste Generated (MT per day)
1.	Municipal corporation , Ludhiana	95	33,8729	1624771	1100
2.	Nagar Council Doraha	15	7750	25424	12
3.	Nagar Council Jagraon	23	15815	65240	23
4.	Nagar Council Khanna	33	27882	128137	95
5.	Nagar Council Payal	11	1787	7923	2.1
6.	Nagar Council Raikot	15	5800	28734	8.92
7.	Nagar Council Samrala	15	5442	19678	14
8.	Nagar Council Machhiwara	15	5629	24916	12
9.	Nagar Council Mullanpur	13	3835	16356	5
10.	Nagar Council Sahnewal	15	5152	22484	12
11.	Nagar Panchayat Maloud	11	1415	7567	1
	<b>Total</b>	<b>261</b>	<b>419236</b>	<b>1971228</b>	<b>1285.02</b>

Sr. No.	Local Bodies	No of Village Panchayats / Blocks	No of Households	Population	Solid Waste Generated perday (MT)
1.	No of Villages Panchayats	941	305600	1528000	764

(b) Identification of gaps and Action plan:

Sr. No.	Action points For villages / blocks /town municipalities / City corporations	Identification of gap	Action Plan	Responsible agencies	Timeline for completion of action plan
<b>1.</b>	<b>Segregation</b>				
I.	Municipal Corporation Ludhiana	A2Z was doing approximate 25-30% of door to door collection and rest is being done by informal sector. Due to termination of contract with M/s A2Z waste management Ludhiana only 50% Source Segregation is being done by informal sector.	For strengthen the door to door collection & segregation MC Ludhiana purchasing 350 Compartmentalized E- rehras and 20 Tata Ace Tipper under 15 FC Grant and 8 Tipper Under SBM Funds.	MCL	31.12.2021 (i) Door to Door Survey Completed :- 30/09/2021 (ii) Procurement of Machinery to strengthen the Door to Door Collection and Source Segregation -31/10/2021 (iii) Deployment of machinery for Door to Door Collection-15/11/2021 (iv) Capacity Building of Informal Sector and integration of Informal Sector -31/12/2021
II.	Nagar Council, Doraha	100 % segregation achieved no gap.	Not required	EO, Doraha	Activity Completed.
III.	Nagar Council, Jagraon	95 % segregation achieved.	Door to door awareness regarding source segregation and home composting is being done	EO, Jagraon	30.09.2021
IV.	Nagar Council, Khanna	95 % segregation achieved.	Door to door awareness regarding source segregation and home composting is being done	EO, Khanna	30.09.2021
V.	Nagar Council, Payal	98 % segregation achieved.	Door to door awareness regarding source segregation and home composting is being done	EO, Payal	30.09.2021

VI.	Nagar Council, Raikot	95 % segregation achieved.	Door to door awareness regarding source segregation and home composting is being done	EO, Raikot	30.09.2021
VII.	Nagar Council Samrala	100 % segregation achieved, no gap	Not Required	EO, Samrala	Activity Completed
VIII.	Nagar Council Machhiwara	100 % segregation achieved, no gap	Not Required	EO, Machhiwara	Activity Completed
IX.	Nagar Council Mullanpur	98 % segregation achieved.	Door to door awareness regarding source segregation and home composting is being done	EO, Mullanpur	30.09.2021
X.	Nagar Council Sahnewal	98 % segregation achieved.	Door to door awareness regarding source segregation and home composting is being done	EO, Sahnewal	30.09.2021
XI.	Nagar Panchayat Maloud	98 % segregation achieved.	Door to door awareness regarding source segregation and home composting is being done	EO, Maloud	30.09.2021
XII.	Villages Panchayat (941)	Segregation not being done in maximum villages.	Yet to prepare.	DDPO	30.10.2026 By 30.10.22 =180 villages By 30.10.23=190 villages By 30.10.24 =190 villages By 30.10.25 =190 villages By 30.10.26 =191 villages
<b>2.</b>	<b>Sweeping</b>				
<b>(i)</b>	<b>Manual Sweeping</b>				
I.	Municipal Corporation Ludhiana	Municipal Corporation Ludhiana doing sweeping twice a day in all residential areas, Public areas, and markets. Municipal Corporation already deployed 5307	For night Sweeping, MC Ludhiana Purchasing 04 Road Sweeping Machines and 04 E-Road Sweeping machines under the 15 FC Grant. There is no Gap in availability of sweeping tools/PPEs	MCL	Regular activity and is being complied with.



		Safai Sewak to do Sweeping in all Area. Hence, no gap.			
II.	Nagar Council Doraha	100% sweeping being done, no gap	NA	EO, Doraha	
III.	Nagar Council Jagraon	100% sweeping being done, no gap	NA	EO, Jagraon	Regular activity and is being complied with.
IV.	Nagar Council Khanna	100% sweeping being done, no gap	NA	EO, Khanna	Regular activity and is being complied with.
V.	Nagar Council Payal	100% sweeping being done, no gap	NA	EO, Payal	Regular activity and is being complied with.
VI.	Nagar Council Raikot	100% sweeping being done, no gap	NA	EO, Raikot	Regular activity and is being complied with.
VII.	Nagar Council Samrala	100% sweeping being done, no gap	NA	EO, Samrala	Regular activity and is being complied with.
VIII.	Nagar Council Machhiwara	100% sweeping being done, no gap	NA	EO, Machhiwara	Regular activity and is being complied with.
IX.	Nagar Council Mullanpur	100% sweeping being done.	NA	EO, Mullanpur	Regular activity and is being complied with.
X.	Nagar Council Sahnewal	100% sweeping being done.	NA	EO, Sahnewal	Regular activity and is being complied with.
XI.	Nagar Panchayat Maloud	95% sweeping being done. 5% road is not Covered.	More manpower is being deployed.	EO, Maloud	31.03.2022
XII.	Villages Panchayat (941)	10% sweeping being done. 90% road is not Covered.	More manpower is being deployed.	DDPO	31.10.2024 BY 31.10.2022 = 310 Villages BY 31.10.2023= 315 Villages BY 31.10.2025 = 316 Villages
(ii)	<b>Mechanical Road and Sweeping Collection</b>	Presently target is being achieved in Mechanical Road Sweeping.	For night Sweeping, MC Ludhiana Purchasing 04 Road Sweeping Machines and 04 E-Road Sweeping machines under the 15 FC Grant. There is no Gap in availability of sweeping tools/PPEs	MCL	30.04.2022

3	Waste Collection			
(i)	100% collection of solid waste	<ul style="list-style-type: none"> <li>• MCL =7% gap in MCL</li> <li>• Remaining Municipal Council = no gap</li> <li>• Villages Arrangements are to be provided in villages panchayats (941) = Not adequate arrangements</li> </ul>	At Present Door to door collection is being done by Informal Sector, For strengthen the door to door collection MC Ludhiana purchasing 350 Compartmentalized E- rehras and 20 Tata Ace	MCL and Department of Urban Development
(ii)	Arrangement for door to door collection	<ul style="list-style-type: none"> <li>• Arrangement for D2D collection by MCL = 93 % D2D</li> <li>• Arrangement for collection by remaining Municipal Council = 100 %</li> <li>• Arrangement for Villages Panchayats (941) = Not adequate</li> </ul>	8 Tippers under 15 FC Grant and MC Ludhiana going to study the Door to Door Collection model of Municipal Corporation Chandigarh to achieve 100% D2D Collection. <b>Villages Panchayats (941) =</b>	1.12.2021 (i) Door to Door Survey Completed :- 30/09/2021 (ii) Procurement of Machinery to strengthen the Door to Door Collection and Source Segregation -31/10/2021 (iii) Deployment of machinery for Door to Door Collection- 15/11/2021 (iv) Capacity Building of Informal Sector and integration of Informal Sector -31/12/2021  <b>Villages Panchayats (941) =</b>
(iii)	Waste Collection trolleys with separate Compartments	<ul style="list-style-type: none"> <li>• MCL = Not Adequate</li> <li>• Remaining 10 ULBs = adequate</li> <li>• Villages Panchayats (941) = Not adequate</li> </ul>	<ul style="list-style-type: none"> <li>• Total no. compartment wise solid Waste Collection trolleys/rikshaws required = 2823</li> <li>• No. Available = Nil</li> </ul>	<ul style="list-style-type: none"> <li>• Time target and for arranging remaining vehicles. = 31.10.2026            BY 31.10.2022 =540 vehicles            BY 31.10.2023 =570 vehicles            BY 31.10.2024 =570 vehicles            BY 31.10.2025 =570 vehicles            BY 31.10.2026 =573 vehicles            Source of fund. = State Level</li> </ul> <b>Villages Panchayats (941) =</b>
(iv)	Mini Collection Trucks with separate compartments	<ul style="list-style-type: none"> <li>• MCL = Not Adequate</li> <li>• Remaining 10 ULBs = adequate</li> <li>• Villages Panchayats (941) = Not adequate</li> </ul>	<b>Villages Panchayats (941) =</b> Transport and waste transfer points are being arranged.	<ul style="list-style-type: none"> <li>• Timeline to provide the transport and waste transfer points= 31.10.2026            BY 31.10.2022 =180 villages            BY 31.10.2023 =190 villages            BY 31.10.2024 =190 villages            BY 31.10.2025 =190 Villages            BY 31.10.2026 =190 Villages</li> </ul>

(v)	<b>Waste Deposition centers (WDC) (for domestic hazardous wastes)</b>				
I.	Municipal Corporation Ludhiana	Required = 37 Installed = 11	MC Ludhiana planning to install bins for domestic hazardous waste in all Secondary collection points.	MCL	30.06.2022
II.	Nagar Council Doraha	Required = 39 Installed = 39	Not Required	EO, Doraha	Activity Completed
III.	Nagar Council Jagraon	Required = 8 Installed = 8	Not Required	EO, Jagraon	Activity Completed
IV.	Nagar Council Khanna	Required = 13 Installed = 13	Not Required	EO, Khanna	Activity Completed
V.	Nagar Council Payal	Required = 1 Installed = 1	Not Required	EO, Payal	Activity Completed
VI.	Nagar Council Raikot	Required = 5 Installed = 5	Not Required	EO, Raikot	Activity Completed
VII.	Nagar Council Samrala	Required = 3 Installed = 3	Not Required	EO, Samrala	Activity Completed
VIII.	Nagar Council Machhiwara	Required = 1 Installed = 1	Not Required	EO, Machhiwara	Activity Completed
IX.	Nagar Council Mullanpur	Required = 1 Installed = 1	Not Required	EO, Mullanpur	Activity Completed
X.	Nagar Council Sahnewal	Required = 2 Installed = 2	Not Required	EO, Sahnewal	Activity Completed
XI.	Nagar Panchayat Maloud	Required = 1 Installed = 1	Not Required	EO, Maloud	Activity Completed
XII.	Villages Panchayat (941)	Required=1528 Installed=0	Action plan is yet to be prepared along-with solid Waste Management.	DDPO & XEN Panchayati Raj	31.10.2022 for preparation of Action Plan.  For Implementation 31.10.2027. 162 WDC by 31.10.2023 316 WDC by 31.10.2024 350 WDC by 31.10.2025 350 WDC by 31.10.2026 350 WDC by 31.10.2027

<b>4 Waste Transport</b>					
(i)	Review existing infrastructure	(i) Existing fleet is Adequate in MCL & all MCs (ii) segregated Waste transport Possible in MCL and all MCs.	Yes  Yes	MC Ludhiana and Ludhiana Improvement Trust	Activity Completed
(ii)	Bulk Waste Trucks	Adequate in MCL and all MCs	Not applicable	MCL and all MCs	Activity Completed
(iii)	Waste Transfer points	Available & Adequate in MCL & all MCs	MC Ludhiana and Ludhiana Improvement Trust going to additional install portable Compactor transfer station at all Secondary Collection Points.  At Present 05 Portable Compactor Station are operational and rest will be Operational before 30.11.2022	MCL and all MCs	30.11.2022
<b>5 Waste Treatment and Disposal</b>					
(i)	Wet-waste Management: On-site composting by bulk waste generators (Authority may decide on requirement as per Rules).	No gap	Bulk waste generators are in directed to insure compliance.	MCL and all MCs	31.10.2022
(ii)	<b>Wet-waste Management: Facilities for central Bio-methanation/ Composting of wets waste.</b>				
I.	Municipal Corporation Ludhiana	Yes, needs up-gradation	Due to termination of contract with M/s A2Z waste management Company LTD., Plant is not in operation.  MC Ludhiana planning to float a new tender for collection and	MCL	Time lines 30.04.2024 as under:- (i) Preparation of DPR- 31.12.2021 (ii) Approval of DPR – 31.01.2022 (iii) Preparation of RFP and Approval – 31.03.2022 (iv) Floating of RFP – 31.05.2022

			transportation and processing/ Bio-methanation / Composting of waste.		(v) Appointment of new concessionaire – 31.07.2022 (vi) Schedule Construction Completion Date-31.01.2024 (vii) Date of Commissioning-30.04.2024
II.	Nagar Council Doraha	39 Compost pits provided. Functional and adequate	Not required	EO, Doraha	Activity Completed
III.	Nagar Council Jagraon	78 Compost pits provided. Functional and adequate	Not required	EO, Jagraon	Activity Completed
IV.	Nagar Council Khanna	121 Compost pit provided functional and Adequate	Not required	EO, Khanna	Activity Completed
V.	Nagar Council Payal	12 Compost pits provided. Functional and adequate	Not required	EO, Payal	Activity Completed
VI.	Nagar Council Raikot	44 Compost pits provided. Functional and adequate	Not required	EO, Raikot	Activity Completed
VII.	Nagar Council Samrala	30 Compost pits provided. Functional and adequate	Not required	EO, Samrala	Activity Completed
VIII.	Nagar Council Machhiwara	38 Compost pits provided. Functional and adequate	Not required	EO, Machhiwara	Activity Completed
IX.	Nagar Council Mullanpur	20 Compost pits provided. Functional and adequate	Not required	EO, Mullanpur	Activity Completed
X.	Nagar Council Sahnewal	34 Compost pits provided. Functional and adequate	Not required	EO, Sahnewal	Activity Completed

XI.	Nagar Panchayat Maloud	11 Compost pits provided. Functional and adequate	Not required	EO, Maloud	Activity Completed
XII.	Villages Panchayat (941)	Not adequate	Plan yet to be prepared	DDPO	31.10.2023
(iii)	Dry-Waste Management: Material Recovery for dry-waste fraction	MCL= Need to set-up own Waste to Energy plant. Remaining 10 ULBs = Provided 1 MRF in each ULB.	Due to termination of contract with M/s A2Z waste management Company Limited Plant is not in operation. MC Ludhiana planning to float a new tender for collection and transportation of waste and processing of waste. Municipal Corporation Ludhiana planning to float tender for Waste to Energy for disposal of RDF.	MCL	30.04.2024 (i) Preparation of DPR- 31.12.2021 (ii) Approval of DPR – 31.01.2022 (iii) Preparation of RFP and Approval – 31.03.2022 (iv) Floating of RFP – 31.05.2022 (v) Appointment of new concessionaire – 31.07.2022 (vi) Schedule Construction Completion Date-31.01.2024 (vii) Date of Commissioning- 30.04.2024
		Villages Panchayat (941)	Plan yet to be prepared	DDPO	31.08.2027 130 villages by 31.08.2023 195 villages by 31.08.2024 208 villages by 31.08.2025 208 villages by 31.08.2026 200 villages by 31.08.2027
(iv)	Disposal of inert and non-recyclable wastes: Sanitary Landfill	Yes MCL = 1, remaining 10 MCs = yet to Establish. Villages Panchayat = Yet to Established	MCL First sanitary land fill site having area 10500 m2 with total capacity of 95000 MT has been commissioned and remaining 4 cells of sanitary land fill site shall be completed by 30.11.2021. Waste processing will be more concentrated to minimize a landfilling.	MCL and Department of urban development	30.11.2021 for MCL. 31.12.2021 for remaining 10 councils.

(v)	Remediation of historic / legacy dumpsite				
i.	Municipal Corporation Ludhiana	Existing legacy waste of quantity around 20 Lakh MT required remediation.	About 20 lakh MT approximately of solid waste is lying dumped at the site and as a trail run the corporation has proposed to process 5 lakh MT of solid waste for which DPR is prepared and approved in CLTC meeting under Smart City Project amounting Rs. 29.15 Cr and the DPR for the Project was vetted and approved by EC in their meeting dated 18.03.2021 and RFP revised as per the eligibility criteria and NITI Ayog (Standard Bidding document) which, is approved by CLTC and RFP under approval from SLTC.	MCL	30.04.2024 (i) Preparation of DPR- 31.12.2021 (ii) Approval of DPR – 31.01.2022 (iii) Preparation of RFP and Approval – 31.03.2022 (iv) Floating of RFP – 31.05.2022 (v) Appointment of new concessionaire – 31.07.2022 (vi) Scheduled Construction Completion Date-31.01.2024 (vii) Date of Commissioning- 30.04.2024
ii.	Nagar Council Doraha	Total legacy waste = 2600 MT Waste Remediated = 1000 MT	Mechanical separator purchased, windrow formed and remediation started.	EO, Doraha	30.06.2022
iii.	Nagar Council Jagraon	Total legacy waste = 750 MT Waste Remediated = 750 MT	Not required	EO, Jagraon	Activity Completed
iv.	Nagar Council Khanna	Total legacy waste = 160000 MT Waste Remediated = 0	Machinery Purchased work started.	EO, Khanna	30.06.2022
v.	Nagar Council Payal	Total legacy waste = 2000 MT Waste	Machinery Purchased work started.	EO, Payal	30.06.2022

		Remediated = 0			
vi.	Nagar Council Raikot	Total legacy waste = 220 MT Waste Remediated = 77 MT	Machinery Purchased work started.	EO, Raikot	30.06.2022
vii.	Nagar Council Samrala	Total legacy waste = 4600 MT Waste Remediated = 2000 MT	Mechanical separator purchase windrow formed and remediation work started.	EO, Samrala	30.06.2022
viii.	Nagar Council Machhiwara	Total legacy waste = 875 MT\ Waste Remediated = 40 MT	Mechanical separator purchase windrow formed and remediation work started.	EO, Machhiwara	30.06.2022
ix.	Nagar Council Mullanpur	Total legacy waste = 600 MT Waste Remediated = 120 MT	Machinery Purchased work started.	EO, Mullanpur	30.06.2022
x.	Nagar Council Sahnewal	Total legacy waste = 70 MT Waste Remediated = 50 MT	Machinery Purchased work started.	EO, Sahnewal	30.06.2022
xi.	Nagar Panchayat Maloud	Total legacy waste = 1500 MT Waste Remediated = 100 MT	Machinery Purchased work started.	EO, Maloud	30.06.2022
xii.	Villages Panchayat (941)	Not Started	Due to large number of legacy Dumpsite, scheme is yet to be prepared accordingly.	DDPO	Step wise Time target to implement plan in all villages. = 31.10.2027 By 31.10.2023 =180 villages By 31.10.2024 =190 villages By 31.10.2025=190 villages By 31.10.2026 =190 villages By 31.10.2026 =191 villages
xiii.	Involvement of NGOs	Yes	NGOs shall be identified for the purpose.	MCL, All MCs, UD, GLADA and	Regular Activity



				DDPO	
xiv.	EPR of Producers: Linkage with Producers / Brand Owners	Linkage with Producers / Brand Owners	All the producer/brand owners are being directed to submit the action plan for the disposal of its plastic waste under extended producer responsibility.	MCL and Department of urban development	30.06.2022
xv.	Authorization of Waste Pickers	Yes/326	Available	MCL, All MCs, UD, GLADA, and DDPO	Regular Activity
xvi.	Preparation of own by-laws to comply with SWM Rules 2016	MCL and All MCs Prepared. DDPO (for villages 941) yet to be prepared	MCL and All MCs Prepared. DDPO (for villages 941) yet to be prepared	MCL, All MCs and DDPO	MCL, All MCs + Activity Completed  DDPO (for villages 941)= 31.10.2022
xvii.	Removal of garbage vulnerable points(GVPs)	No gap, as activity Completed	<b><u>Municipal corporation Ludhiana</u></b> All the 94 identified (GVPs) have been removed and have been converted into green belts.  <b><u>Remaining 10 Municipal Council</u></b> All the identified (GVPs) have been removed by the all MCs.	All ULBs (Municipal Corporation, Municipal Council and Nagar Panchayat) of the district.	Activity Completed
xviii.	Provision of green belt and boundary wall around solid waste dumping site.	<b><u>Municipal corporation Ludhiana</u></b> Boundary wall = 10% Pending. Green belt around Boundary wall = yet to provided.	<b><u>Municipal corporation Ludhiana</u></b> Boundary wall = 90% work Completed will be completed by 31.12.2021. Green belt around Boundry wall = yet to provided and will be completed by	All ULBs (Municipal Corporation, Municipal Council and Nagar Panchayat) of	<ul style="list-style-type: none"> <li>• 31.12.2021 (for Boundary wall and 31.12.2021 for green belt) for Municipal Corporation.</li> <li>• 30.09.2021 for Remaining 10 Municipal Council.</li> </ul>

		<p><b><u>Remaining 10 Municipal Council.</u></b></p> <p><b>Boundary wall under Construction</b> = In 3 Mcs (Samrala, Maloud and Doraha)</p>	<p>31.12.2021.</p> <p><b><u>Remaining 10 Municipal Council.</u></b></p> <p><b>Boundary wall Completed</b> = In 7 Mcs (Khanna, Payal,Sahnewal, Machiwara ,Jagroan, Raikot and Mullanpur Dakha)</p> <p><b>Boundary wall under Construction</b> = In 3 Mcs (Samrala, Maloud and Doraha)</p> <p><b>Green belt around Boundarywall</b> = Provided by all ULBs.</p>	the district.	
xix.	Providing compartments and GPS tracking in garbage carrying vehicles	<p><b><u>Municipal corporation Ludhiana</u></b></p> <p>Nil as activity completed</p> <p><b><u>Remaining 10 Municipal Council.</u></b></p> <p>Nil as activity completed</p>	<p><b><u>Municipal corporation Ludhiana</u></b></p> <p>All the 27 Tippers and 800 rickshaw rehras, deployed for collection of dry and wet waste, have been provided with Compartments. The mechanical vehicles have been provided with GPS.</p> <p><b><u>Remaining 10 Municipal Council.</u></b></p> <p>All the 45 mechanicalVehicles have been provided compartments with GPS.</p>	All ULBs (Municipal Corporation, Municipal Council and Nagar Panchayat) of the district.	<p><b><u>Municipal corporation Ludhiana</u></b></p> <p>Activity completed</p> <p><b><u>Remaining 10 Municipal Council.</u></b></p> <p>Activity completed</p>
xx.	Stopping solid waste/ garbage being thrown into Buddha Nallah	Solid waste being thrown into Budha nallah	<ul style="list-style-type: none"> <li>The DPR amounting to RS. 1342 Lakh for installation of chain link fencing (10 feet</li> </ul>	Municipal Corporation, Ludhiana	<ul style="list-style-type: none"> <li>Regular activity.</li> <li>Time line for completion the chain link fencing on both side of Budha Nallah = within 04 month after</li> </ul>

			<p>height) on both sides of budhanalla for a stretch of 14 KM within MC limits was prepared under smart city mission to stop the solid waste being thrown into Budhanallah. The work is in progress at site near radha swami satsangbhawan.</p> <ul style="list-style-type: none"> <li>• Whole stretch of Budhha Dariya has been divided into 24 parts and Nodal Officer have been deployed for each part. Regular inspections are being made and Challans are being issued to stop the Solid waste being thrown in budhaa Dariya.</li> </ul>		<p>the completion of the sewer lines along Budha Nalah under Rejuvenation plan.</p>
xxi.	<p>Action Plan for Treatment of leachate generated from legacy waste dumpsite. (Directions of Hon'ble NGT in OA no. 606 of 2018 dated 22.07.2019, 28.02.2019, 14.12.2020)</p>	Treatment of leachate	<p><b>MCL:-</b> Treatment of leachate was in scope of M/s A2Z Waste Management Ludhiana. Due to Termination of contract with M/s A2Z Waste Management Ludhiana, Municipal Corporation Ludhiana Planning to float a new tender for Solid</p>	<p>MCL and Department of Urban Development</p>	<p><b>MCL:-</b> Time lines 30.04.2024 as under:- (i) Preparation of DPR- 31.12.2021 (ii) Approval of DPR – 31.01.2022 (iii) Preparation of RFP and Approval – 31.03.2022 (iv) Floating of RFP – 31.05.2022</p>

			Waste Management.  <b>Department of Urban Development (for other ULBs):-</b> <ul style="list-style-type: none"> <li>Leachate management will be done after completion of Bio-remediation of legacy waste.</li> </ul>		(v) Appointment of new concessionaire – 31.07.2022 (vi) Schedule Construction Completion Date-31.01.2024 (vii) Date of Commissioning-30.04.2024 <b>Department of Urban Development ( for other ULBs):-</b> <ul style="list-style-type: none"> <li>Bioremediation of Legacy waste = 30.06.2022</li> <li>Treatment of leachate waste = 31.12.2022.</li> </ul>
xxii.	Best practices, including setting up of Control Rooms where citizens can upload photos of garbage which may be looked into by the specified representatives of local bodies, at local level as well as State level. (Directions of Hon'ble NGT in OA no. 606 of 2018 dated 22.07.2019, 28.02.2019, 14.12.2020)	No Gap	Swachhata app is widely used by citizens for complaints related to SWM/ SBM, It is resolved and monitored at ULB and state level both.	All Local bodies	Already in place
xxiii.	CCTV cameras be installed at dumping sites. (Directions of Hon'ble NGT in OA no. 606 of 2018 dated 22.07.2019, 28.02.2019, 14.12.2020)	CCTV cameras not installed at dump site of MCs Sahnewal, Maloud, Payal, Jagraon, Mullanpur Dakha. Total 10 cameras installed in all ULB and 18 more cameras are being install MCs.	<b>MCL:-</b> Installed <b>Department of Urban Development ( for other ULBs):-</b> <b>Installed at</b> Machhiwara, Samrala, Doraha, Raikot, Khanna. <b>Pending ULBs :</b> Sahnewal, Maloud, Payal, Jagraon, Mullanpur Dakha will be installed by 30.11.2021	All Local bodies	<b>MCL:-</b> Installed  <b>Department of Urban Development ( for other ULBs):-</b> 31.11.2021

xxiv.	Installation of Piezometer at Dump Site. (Directions of Hon'ble NGT in OA no. 606 of 2018 dated 22.07.2019, 28.02.2019, 14.12.2020)	Installed by MCL Machhiwara, Doraha, Samrala, Khanna and Rest of ULBs are yet to be installed.	<b>MCL:- Installed Department of Urban Development ( for other ULBs):-</b> Installed by Machhiwara, Doraha, Samrala, Khanna. Rest of ULBs will install by 30.11.2021	Local bodies	<b>MCL:- Installed Department of Urban Development ( for other ULBs):-</b> 31.11.2021
xxv.	Carcass should be utilized by adopting rendering process or incineration and priority may be given to carcass utilization plants which are run by adopting rendering process. (Directions of Hon'ble NGT in OA no. 465/2019 dated 15.04.2021	<b>MCL=</b> Installed, no gap <b>Other 10 MCs =</b> All 10 ULBs have planned to make a cluster and tie-up with Municipal corporation Ludhiana for scientific disposal of animal carcasses, or Plan for their own clustered project if not joined with MCL.	<b>MCL</b> has installed the Carcass Utilization Plant at village Noorpur Bet (Hambran Road), Dist. Ludhiana. Trails of plant have been completed in the month of June 2021.  <b>Other 10 MCs :-</b> Process of tie-up or project planning will be achieved by 31.03.2022	MCL and ADC(UD)	MCL :-Completed  Other 10 MCs :- Process of tie-up or project planning will be achieved by 31.03.2022
xxvi.	Carcass disposal to be done under the supervision Veterinary/Animal Husbandry Department of the State and the Local Bodies. (Directions of Hon'ble NGT in OA no. 465/2019 dated 15.04.2021	No gap	Carcass disposal will be ensured under the supervision of veterinary doctors.	MCL	Regular activity
xxvii.	Management of waste water and solid waste by the unauthorized colonies/residential complex/commercial complex developed by Pvt. Colonizers.	Inadequate management of solid waste and liquid waste in these colonies.	The team has checked so far visited 191 such colonies. The work is huge and different department are involved for joint inspection. Hence, time is required	GLADA and MCL	<b>MC (Within Municipal Limits)</b> <ul style="list-style-type: none"> <li>• Identification by 31.03.2022</li> <li>• Management of solid waste collection &amp; segregation = 31.03.2023</li> <li>• Provision of STPs= 31.03.2023</li> </ul>

			upto 31.12.2021 for the complete for the identification work.		<b>GLADA/DDPO (Outside MC limit)</b> <ul style="list-style-type: none"> <li>• Identification by 31.03.2022</li> <li>• Management of solid waste collection &amp; segregation = 31.03.2023</li> <li>• Provision of STPs= 31.03.2023</li> </ul>
xxviii.	To prepare proposal / scheme for management of solid waste in the villages either in cluster form or independently in individual villages	Inadequate Management of solid waste in the villages.	Scheme is yet to be prepared.	DDPO	31.10.2022
xxix.	Information Education and Communication (IEC) activities in respect of solid waste.	No gap	The IEC activities in this regard are already being done by the concerned departments. Promoters and Residents are informed when the joint team visits their colonies and they are encouraged to follow the solid and liquid waste management rules.	All ULBs (Municipal Corporation, Municipal Council and Nagar panchayat) of the district & GLADA	Regular Activity
xxx.	Constitution of District Environment Committee in view of the constitution provisions under article 243 G, 241 W and 243 ZD read with scheduled 11, 12 & 15 of SWM Rules, 2016.	No gap	Constituted by the State Government.	State Government	Activity completed
xxxi.	Management of carcass in rural area.	Inadequate management of carcass in rural area.	No. of carcasses existing = 504 No. of carcass provided liquid waste management	DDPO	31.10.2024

			= NIL		
xxxii.	Dry-Waste Management: Material Recovery for dry-waste fraction (RDF)	Partial management of dry-waste	Due to termination of contract with M/s A2Z waste management Company Limited Plant is not in operation.MC Ludhiana planning to float a new tender for collection and transportation of waste and processing of waste. Municipal Corporation Ludhiana planning to float tender for Waste to Energy for disposal of RDF.	MCL	<ul style="list-style-type: none"> <li>• MCL= Need to set-up own Waste to Energy plant.</li> <li>• Remaining 10 ULBs = Provided 1 MRF in each ULB.</li> </ul> MCL Time line:- 30.04.2024 as under:- <ul style="list-style-type: none"> <li>(i) Preparation of DPR- 31.12.2021</li> <li>(ii) Approval of DPR – 31.01.2022</li> <li>(iii) Preparation of RFP and Approval – 31.03.2022</li> <li>(iv) Floating of RFP – 31.05.2022</li> <li>(v) Appointment of new concessionaire – 31.07.2022</li> <li>(vi) Schedule Construction Completion Date-31.01.2024</li> <li>(vii) Date of Commissioning-30.04.2024</li> </ul>
xxxiii.	Solid waste management by MCL  i. MCL shall construct compost pits of adequate capacity to treat whole of the wet waste generated by Municipal Corporation, Ludhiana and the timelines for the same may be mentioned in the District Environmental Plan, Ludhiana.	Inadequate management of wet waste	Treatment/Processing of Whole of the wet waste was in scope of M/s A2Z Waste Management Ludhiana.  As per SOP notified by PMIDC on Dated 02-06-2021 , 12 Pits (size 3 meter length x 1.5 meter breadth x 1 meter height)is required to process approximately 1 metric ton of waste daily. So, Municipal Corporation Ludhiana is	MCL	Time lines 30.04.2024 as under:- <ul style="list-style-type: none"> <li>(i) Preparation of DPR- 31.12.2021</li> <li>(ii) Approval of DPR – 31.01.2022</li> <li>(iii) Preparation of RFP and Approval – 31.03.2022</li> <li>(iv) Floating of RFP – 31.05.2022</li> <li>(v) Appointment of new concessionaire – 31.07.2022</li> <li>(vi) Schedule Construction Completion Date-31.01.2024</li> <li>(vii) Date of Commissioning-30.04.2024</li> </ul>

			<p>required approximately more than 7000 Pits to process the 500-600 TPD of wet waste. Due to local resistance for Decentralized approach, Municipal Corporation Ludhiana planning to float a new tender for set up of centralized processing facilities for wet waste.</p> <p><b>Budgetary Provision</b> CAPEX will borne by Centre and State or PPP model and O&amp;M will be borne by Municipal Corporation Ludhiana.</p>		
ii. Dry Waste generated by the Municipal Corporation, Ludhiana may be treated/ managed at the material recovery facilities.	Inadequate management of dry waste.	Treatment/Processing of Whole of the Dry waste was in scope of M/s A2Z Waste Management Ludhiana .Due to Termination of contract with M/s A2Z Waste Management Ludhiana, Municipal Corporation Ludhiana Planning to float a new tender for centralized processing facilities/Material recovery facilities for dry waste.	MCL	Time lines 30.04.2024 as under:- (i) Preparation of DPR- 31.12.2021 (ii) Approval of DPR – 31.01.2022 (iii) Preparation of RFP and Approval – 31.03.2022 (iv) Floating of RFP – 31.05.2022 (v) Appointment of new concessionaire – 31.07.2022 (vi) Schedule Construction Completion Date-31.01.2024 (vii) Date of Commissioning- 30.04.2024	
iii. Municipal Corporation, Ludhiana shall make the		Treatment/Processing of Whole of the waste was	MCL	Time lines 30.04.2024 as under:- (i) Preparation of DPR-	



	solid waste processing plant in operation on priority basis and in a time bound manner.		in scope of M/s A2Z Waste Management Ludhiana .Due to Termination of contract with M/s A2Z Waste Management Ludhiana, Municipal Corporation Ludhiana Planning to float a new tender for Solid Waste Management Processing facilities.		31.12.2021 (ii) Approval of DPR – 31.01.2022 (iii) Preparation of RFP and Approval – 31.03.2022 (iv) Floating of RFP – 31.05.2022 (v) Appointment of new concessionaire – 31.07.2022 (vi) Schedule Construction Completion Date-31.01.2024 (vii) Date of Commissioning-30.04.2024
xxxiv.	Management of Horticulture Waste in MCs.	<ul style="list-style-type: none"> <li>MCL = 563 Compost pits/Jalli constructed out of 922 Parks/Green belt.</li> <li>Remaining 10 ULBs = 41 pits at 39 sites and adequate.</li> </ul>	MCL = work is in progress.	MCL	31.12.2021

## (ii) Plastic waste Management

### (a) Current status related to Plastic waste management

Sr. No.	Urban Local bodies	Estimated quantity of Plastic Waste Generated MT/per day
1.	Municipal corporation , Ludhiana	82
2.	Nagar Council Doraha	2
3.	Nagar Council Jagraon	0.2
4.	Nagar Council Khanna	5
5.	Nagar Council Payal	0.02
6.	Nagar Council Raikot	2
7.	Nagar Council Samrala	1
8.	Nagar Council Machhiwara	2

9.	Nagar Council Mullanpur	1
10.	Nagar Council Sahnewal	0.5
11.	Nagar Panchayat Maloud	0.02
	<b>Total</b>	<b>95.74</b>

Sr. no.	Local Bodies	Estimated quantity of Plastic Waste Generated (in MTD)
1	Villages Panchayats (941)	55

(b) Identification of gaps and Action plan:

S. No.	Action points Forvillage panchayats/ blocks/ municipalities / corporations	Identification of gap	Action plan	Agencies Responsible	Target timefor Compliance
1.	Door to Door collection of dry waste including PW	<ul style="list-style-type: none"> <li>• MCL =Partial collection (93%).</li> <li>• Other 10 ULBs =100% collection.</li> <li>• Villages Panchayat (941) =Not initiated.</li> </ul>	At Present Door to door collection is being done by Informal Sector, For strengthen the door to door collection MC Ludhiana purchasing 350 Compartmentalized E-rehras and 20 Tata Ace Tippers under 15 FC Grant and 8 Tippers Under SBM Funds.	MCL & DDPO	<b>MCL:-</b> <b>31.12.2021</b> (i) Door to Door Survey Completed :- 30/09/2021 (ii) Procurement of Machinery to strengthen the Door to Door Collection and Source Segregation - 31/10/2021 (iii) Deployment of machinery for Door to Door Collection-15/11/2021 (iv) Capacity Building of Informal Sector and integration of Informal Sector -31/12/2021  <b>DDPO:-</b> 31.10.2022 For preparation

					of Action Plan 31.08.2027 For Implementation 130 villages by 31.08.2023 195 villages by 31.08.2024 208 villages by 31.08.2025 208 villages by 31.08.2026 200 villages by 31.08.2027
2.	Facilitate organized collection of plastic Waste at Waste transfer point or Material Recovery Facility	<ul style="list-style-type: none"> <li>• MCL = partial Collection and final disposal of plastic bags/waste.</li> <li>• Other 10 ULBs = 100% Collection and MRF facility provided.</li> <li>• Villages panchayats (941) = partial collection.</li> </ul>	<ul style="list-style-type: none"> <li>• Waste to energy plant is being setup in District Ludhiana by MCL.</li> <li>• Ban will be proposed on single use plastic as per the guidelines of the Centre and State Government.</li> <li>• NGOs are involved for awareness to avoid plastic use.</li> <li>• Registration is being done for waste pickers.</li> </ul>	MCL & DDPO	<b>MCL</b> = Time lines 30.04.2024 as under:- (i) Preparation of DPR- 31.12.2021 (ii) Approval of DPR – 31.01.2022 (iii) Preparation of RFP and Approval – 31.03.2022 (iv) Floating of RFP – 31.05.2022 (v) Appointment of new concessionaire – 31.07.2022 (vi) Schedule Construction Completion Date-31.01.2024 (vii) Date of Commissioning- 30.04.2024 <b>DDPO</b> = 31.08.2027 For Implementation 162 MRF by 31.10.2023 316 MRF by 31.10.2024 350 MRF by 31.10.2025 350 MRF by 31.10.2026 350 MRF by 31.08.2027

3.	Plastic Waste collection Centres	Provision of proper Plastic Waste collection Centres.	<ul style="list-style-type: none"> <li>MCL = Total required 18 MRFs, out of which 11 MRFs Constructed and rest is in Progress.</li> <li>Other 10 MCs = 1 MRF in each ULB and adequate</li> </ul>	MCL and Department of urban development	30.06.2022
4.	Awareness and education programs implementation	No gap	Awareness among public for minimizing and recycling PW is being done on regular basis	MCL and Department of urban development	Regular activity. One camp will be organized quarterly.
5.	Access to Plastic Waste Disposal Facilities	Inadequate Plastic Waste Disposal Facilities	<p><b>MCL</b> Municipal Corporation Ludhiana planning to float tender for Waste to Energy Plant <b>ADC(UD)</b></p> <p><b>a.</b> Utilization of the plastic waste in road construction 2500 kg (April to Jan, 2021) through third party.</p> <p><b>b.</b> Utilization of plastic waste for making oil through pyrolysis 56000 kg through third party.</p>	MCL and Department of urban development	Time lines 30.04.2024 as under:- (i) Preparation of DPR- 31.12.2021 (ii) Approval of DPR – 31.01.2022 (iii) Preparation of RFP and Approval – 31.03.2022 (iv) Floating of RFP – 31.05.2022 (v) Appointment of new concessionaire – 31.07.2022 (vi) Schedule Construction Completion Date-31.01.2024 (vii) Date of Commissioning- 30.04.2024

6.	Plastic Industry Registration. Total no. of plastic unit required registration. Total no. of plastic unit obtained registration. (Directions of Hon'ble NGT in EA no. 13/2019 dated 08.01.2021)	No gap, Regular Activity	Total no. of plastic unit required registration = 187 Total no. of plastic unit obtained registration = 122	PPCB	Timeline for registration of the remaining units: 31.12.2022
7.	Development and setting up of infrastructure for segregation, collection, storage, transportation, Processing, and disposal of Plastic Waste either on its own for by engaging agencies or producers. (Directions of Hon'ble NGT in EA no. 13/2019 dated 08.01.2021)	Inadequate disposal arrangement of plastic waste	<p><b>MCL:-</b> Earlier, the disposal of plastic waste with RDF was in scope of M/s A2Z Waste Management Ludhiana .Due to Termination of contract with M/s A2Z Waste Management Ludhiana, Municipal Corporation Ludhiana Planning to float a new tender for Solid Waste Management.</p> <p><b>Department of Urban Development ( for other ULBs):-</b> Recyclabe plastic Plastic waste is collected, transported and stored seperately by all ULBs. Currently such plastic is being stored at MRF. Contract For</p>	All Local bodies & DDPO	<p><b>MCL:-</b> Time lines 30.04.2024 as under:- (i) Preparation of DPR- 31.12.2021 (ii) Approval of DPR – 31.01.2022 (iii) Preparation of RFP and Approval – 31.03.2022 (iv) Floating of RFP – 31.05.2022 (v) Appointment of new concessionaire – 31.07.2022 (vi) Schedule Construction Completion Date-31.01.2024 (vii) Date of Commissioning- 30.04.2024</p> <p><b>Department of Urban Development ( for other ULBs):-</b> 30.09.2021 for rest of the ULBs.</p>

			channelization/ processing of both recyclable and non-recyclable plastic have been done with Max Specialty Films Pvt. Ltd. By ULBs Machhiwara, Maloud, Samrala, Khanna, Mullanpur Dakha, Doraha. Rest of ULBs agreement will be done by 30.09.2021.		
8.	Framing of bye-laws incorporating the provisions of Plastic Waste Management Rules, 2016. (Directions of Hon'ble NGT in EA no. 13/2019 dated 08.01.2021)	Yet to frame in rural area	MCL and all MCs = already framed Rural Panchayats (941) = yet to prepared	MCL, ADC(UD) and DDPO	31.10.2022
9.	Set up, operationalize and co-ordinate for Plastic Waste management in Ruler area. (Directions of Hon'ble NGT in EA no. 13/2019 dated 08.01.2021)	Inadequate Plastic Waste management in Ruler area.	Awareness regarding it is being done to the Gram Panchyat for segregation, Collection and transportation will be done with Compartmentalized Rischshaw and stored in the Extra Pit to be made with Nadep Model.	DDPO	Timeline for completion of action plan :- 31.10.2023 236 village by 30.04.2022 236 village by 31.10.2022 236 village by 30.04.2023 233 village by 31.10.2023
10.	Ban on non-recyclable single use polythene bags. (Directions of Hon'ble NGT in EA no. 13/2019 dated 08.01.2021)	Ban on non-recyclable single use polythene bags	Ban has been already imposed by the State Govt., on sale, purchase, manufacturing and stock of plastic carry bags. The Ministry of Environment, forest And Climate change vide its notification dated	ALL Local bodies/PPCB	The Ministry of Environment, forest And Climate change vide its notification dated 12.08.2021 has banned Single use plastic with effect from 1.07.2022. Further, the guidelines of the Centre and State Govt., regarding

			12.08.2021 has banned Single use plastic with effect from 1.07.2022. Further, the guidelines of the Centre and State Govt., regarding banning of single use plastic will be complied with.		banning of single use plastic will be complied with.
11.	Segregation, collection, storage, transportation of plastic waste and channelizing of recyclable plastic waste fraction to recycler having valid registration. (Directions of Hon'ble NGT in EA no. 13/2019 dated 08.01.2021)	Arrangement for plastic waste disposal.	<p><b>MCL:-</b> Collection and segregation of recyclable plastic waste is already done total 11 MRFs Constructed out of 18 and rest is in Progress. The agreement will be signed with the authorized agency for the recycling of the plastic waste.</p> <p><b>Department of Urban Development ( for other ULBs):-</b> Recyclable plastic waste is collected, transported and stored 37 separately by all ULBs. Currently such plastic is being stored at MRF. Contract For channelization/ processing have been done with Max Specialty Films Pvt. Ltd. By ULBs Machhiwara, Maloud, Samrala, Khanna, Mullanpur Dakha, Doraha. Rest of ULBs agreement will be done by</p>	All Local bodies & DDPO	<p><b>MCL:-</b></p> <ul style="list-style-type: none"> <li>• 31.12.2021 for signing the arrangement with authorized agency.</li> <li>• 30.06.2022 for establishment of the remaining MRF.</li> </ul> <p><b>Department of Urban Development ( for other ULBs):-</b> 31.12.2021</p>

			30.09.2021. <b>DDPO:-</b> Awareness regarding it is being done to the Gram Panchyat for segregation, Collection and Transportation will be done with Compartmentalized Rischshaw and stored in the Extra Pit to be made with Nadep Model.		<b>DDPO:-</b> 31.8.2022 For preparation of Action Plan 31.08.2027 For Implementation 130 villages by 31.8.2023 195 villages by 31.8.2024 208 villages by 31.8.2025 208 villages by 31. 8.2026 200 villages by 31.8.2027
12.	Awareness to the waste generator to take steps to minimize the plastic waste and segregate plastic waste at source. (Directions of Hon'ble NGT in EA no. 13/2019 dated 08.01.2021)	No Gap	Awareness is being carried out on regular basis. Camp will be organized of quarterly basis.	Local bodies & DDPO	Regular activity
13.	Encouragement to the education institute to take up waste management in their curriculum and create student project for waste recycling. (Directions of Hon'ble NGT in EA no. 13/2019 dated 08.01.2021)	No gap	Already being followed and seminars are being organized.	DEO primary and secondary	Regular activity



14.	Directions to Gram Panchayat to perform functions such as ensuring segregation, collection, storage, transportation, plastic waste and channelization of recyclable plastic waste fraction to recyclers having valid registration. (Directions of Hon'ble NGT in EA no. 13/2019 dated 08.01.2021)	Disposal of plastic waste in villages.	Instruction are already been given to Gram Panchayat Through BDPO's	DDPO	<b>DDPO:-</b> 31.8.2022 For preparation of Action Plan 31.08.2027 For Implementation 130 villages by 31.8.2023 195 villages by 31.8.2024 208 villages by 31.8.2025 208 villages by 31. 8.2026 200 villages by 31.8.2027
15.	Creating awareness among all stakeholders about their responsibilities, and ensuring that open burning of plastic waste does not take place. (Directions of Hon'ble NGT in EA no. 13/2019 dated 08.01.2021)	No gap	All stakeholders are being made aware regarding their responsibility. It is being ensured that open burning of plastic waste does not take place. Violators are challans.	All local bodies	Regular activity
16.	To ensure proper plastic waste management, industries may be directed to explore the possibilities of use of such wastes in construction of roads. Further industries may also be directed to collaborate with different research institutes to explore such alternatives. (Directions of Hon'ble NGT in EA no. 13/2019 dated 08.01.2021)	Plastic waste use in construction of roads	Instructions will be given to the industries to explore such activities to department of industries who through research institutes	MCL, ADC(UD) and PWD	31.12.2022

### (iii) C&D Waste Management

(a) Current status related to C&D Waste

Details of Data Requirement	Present Status
Total C & D waste generation in MT per day (As per data from Municipal Corporations / Municipalities)	120 MT
Does the District has access to C&D waste recycling facility?	No, one new recycling facility is proposed in Ludhiana and shall be completed by 31.10.2023

(b) Identification of gaps and Action plan:

S. No.	Action points for blocks / town municipalities / City corporations	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.	<p>No Gap</p> <ul style="list-style-type: none"> <li>MCL = Total 6 Separate collection sites provided against 06 required sites.</li> <li>Other 10 ULBs = Separate collection site provided in each ULB and adequate.</li> </ul>	Not required	MCL & Department of urban development	Activity Completed
2.	Whether local authority have fixed user fee on C&D waste and introduced permission system for bulk waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month?	No gap. As per Solid Waste Management Cleanliness and Sanitation Bye laws Dated 11.08.20 Notification no 5/105/2020- 2lg4/139(A) MC Ludhiana fixed user fee on C& D waste which is Rs 500 per ton and will put up the proposal regarding permission system for bulk waste generators in next	Not required	MCL	Activity Completed

		house meeting for approval.			
3.	C&D recycling Facility	Presently there is no C&D recycling Facility in the District.	MCL has proposed to install one recycling facility of 100 TPD. DPR amounting to Rs. 7.96 Crore for installation of C&D waste processing plant under smart city mission has been prepared. The tendering process has been Completed. The case has been sent for financial approval. The W/O to be issued after financial approval of the project.	MCL	30.04.2023
4.	Usage of recycled C&D waste in non- structural concrete, paving blocks, lower layers of road pavements, colony and rural roads	No. of recycling facility required = 1 No. of recycling facility provided = 0			
5.	ICE on C & D waste management	No gap	Awareness will be done through media, NGOs & Radio on quarterly basis.	MCL	Regular Activity. One camp will be organized quarterly.

**(iv) Bio medical Waste Management**

(a) Current Status related to biomedical waste

<b>Inventory of BMW in the District</b>	<b>Quantity</b>
Total no. of Bedded Healthcare Facilities	638
Total no. of non-bedded HCF	726
No. of HCFs authorized by SPCBs/PCCs	1276
Total No. of veterinary Hospitals/Dispensaries in the District Ludhiana	252
Total No. of veterinary Hospitals/Dispensaries connected with Common Biomedical treatment facility (CBWTF).	15-Hospitals directly connected with CBWTF. 222-Hospitals/Dispensaries connected via nearest block level institutions
Total no. of veterinary Hospitals/ Dispensaries obtained the authorization of Punjab pollution Control Board	237
Total No. of veterinary Hospitals/Dispensaries adopted segregation of BMW through separate colour coded collections bins.	237
Total no. of veterinary Hospitals/Dispensaries complying with BMW Rules, 2016 and Maintaining record of Biomedical waste generation and its disposal to CBWTF.	237
No of Common Biomedical Waste Treatment and Disposal Facilities (CBWTFs)	1
Capacity of CBWTFs	7100 kg/day
No. of Deep burials for BMW if any	0
Quantity of biomedical waste generated per day	5247.91 kg/day
Quantity of biomedical waste treated per day	5247.91 kg/day

(b) Identification of gaps and Action plan:

S. No.	Action points	Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
1.	Inventory and Identification of Healthcare Facilities	<ul style="list-style-type: none"> <li>Total HCFs identified (Bedded + non-bedded)= 1339</li> <li>HCFs authorized by the PPCB = 1281.</li> </ul>	Regular camps are being organized to pursue the HCFs to obtain the authorization.	PPCB	Regular activity
2.	Adequacy of facilities to treat biomedical waste	No Gap. Adequate CBWTF installed in the District.	Not required	PPCB	Activity completed
3.	Tracking of Bio-Medical Waste	No Gap. Bar code system is implemented by all HCFs and CBWTFs. No gap	Not required	PPCB	Activity completed
4.	Awareness and education of healthcare staff	No Gap Training has been organized for all stakeholders from time to time. One camp will be organized in a quarter.	Not required	PPCB and Health Department	Regular activity
5.	Adequacy of Funds	No gap	Private HCFs = Funds available Govt., HCFs = Funds Being arranged	Civil Surgeon	31.10.2022
6.	Compliance to Rules by HCFs and CBWTFs	No gap, to check the compliance regular monitoring is being done.	BMW Rules, 2016 are complied with except provisions of ETPs cum STPs	PPCB, HCFs, CBWTF and civil surgeon	Regular activity
7.	District Level Monitoring Committee	District Level Monitoring Committee has been constituted	Meetings are taken on monthly basis District Environment Committee.	District Administration and	Regular Activity

				PPCB	
8.	Wastewater Treatment	<ul style="list-style-type: none"> <li>Total HCFS Required ETP =638</li> <li>Total HCF install ETPs = 50</li> </ul>	HCFs are being pursued to install the ETP. The meetings are being held with the association members.	PPCB	<ul style="list-style-type: none"> <li>The timelines vide Board order no. 468 dated 31.08.2021 timeline has been given as 31.03.2022.</li> <li>The HCF will submit a Bank Guarantee to the Board as an assurance to submitted analysis results and installation of appropriate and adequate system to archived prescribed standards. In case sample fail to achieve the prescribed standard.</li> </ul>
9.	Disposal of radioactive materials. With the proliferation of radiotherapy, nuclear medicine, X Rays, CT Scans and other equipment's using radioactive materials. (Directions of Hon'ble NGT in OA no. 710 of 2017 dated 18.01.2021)	<p>Already Being Complied.</p> <ul style="list-style-type: none"> <li>Most of the Hospitals now have provided the digital X-Ray, hence no such waste is generated from digital X-ray.</li> <li>The Hospitals which have not provided the digital x-ray machine have made the agreement with the authorized agency for the disposal of its waste.</li> </ul>	Already Being Complied.	Health department	Activity Completed

**(v) Hazardous Waste Management**

(a) Current Status related to Hazardous Waste Management

Details of Data Requirement	Present Status
No of Industries generating HW	1484
Quantity of HW in the district (MT/Annum)	29074.43
Quantity of Incinerable HW (MT/Annum)	512.527
Quantity of land-fillable HW(MT/Annum)	12792.131
Quantity of Recyclable / utilizable HW (MT/Annum)	Recyclable = 14808.332 Utilizable = 961.44
Nos. of captive/common TSDF	One common TSDF at NIMBUA, Dera Bassi.
No of industries provided on site impervious facilities for temporary collection of hazardous waste	1484
Contaminated Sites or probable contaminated sites	0
Monitoring of ground water of common TSDF.	No common TSDF falls in the District Ludhiana.

(b) Identification of gaps and action plan:

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	<ul style="list-style-type: none"> <li>Total industries identified =1421</li> <li>Authorized by the PPCB =1032.</li> </ul>	Regular camps are being organized to pursue the industries to obtain the authorization.	PPCB	30.06.2022
2.	Establishment of collection centres	Industries have agreement/linkage with TSDF for disposal of its Hazardous waste.	Collection center are being setup for domestic Hazardous waste with linkage with TSDF.	MCL & Department of urban velopment.	30.04.2022

3.	Training of workers involved in handling / recycling / disposal of HW	Industries generating HW already identified	The workers are being trained time to time. One training program will be provided in a quarter.	Department of Industries	Regular activity
4.	Availability / Linkage with common TSDf or disposal facility	The industries generating HW have access to common TSDf in the State. No. of units identified linked with CTSDf = 1050	The industries generating HW have access to common TSDf in the State.	PPCB	Activity completed
5.	Contaminated Sites	No Contaminated Site	No Contaminated Site	Local Bodies, DDPO and PPCB	No Contaminated Site

### (vi) E-Waste Management

#### (a) Current Status related to E-Waste Management

Details of Data Requirement	Present Status
Inventory of E-Waste in MT/year	70
Collection centers established by ULBs in the District	2
Collection centers established by Producers or their PROs	1
Nos. authorized E-Waste recyclers /Dismantler	02 no. dismantler/recycler already established in the District Ludhiana (M/s Stellar Recycling LLP Village Lakhawal Tehsil & District Ludhiana. & M/s Green Bird Recycling, Village Mangarh, Kohara Macchiwara Road, Ludhiana).

#### (b) 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-waste generators	Inventorization of E-Waste in the District. Inventory of bulk waste generators is under	Completion of inventory	PPCB	30.04.2022



		process.			
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	MCL, All MCs and GMDIC	30.04.2022
3.	Linkage among Stakeholders dechannelize-Waste	Linkage among stakeholders is being done.	Work under progress	MCL, All MCs and GMDIC	31.10.2022
4.	Regulation of Illegal E-Waste recycling /dismantling	Regular activity	Being prepared.	District Administration & PPCB	Regular Activity
5.	Integration of informal sector	Being done	Being prepared.	District Administration & PPCB	31.10.2022
6.	Awareness and Education	Regular activity	Quarterly Special workshops and awareness campaigns through Producers/PROs will be carried out.	District Administration & PPCB	Regular Activity
7.	Identification of Producers who have not obtained, EPR Authorization (Directions of Hon'ble NGT in OA no. 512/2018 dated 15.01.2021)	This is a continuous activity and will be followed.	This is a continuous activity and will be followed.	SPCBs/ PCCs/Custom department	Regular activity
	Verification of quantity of e-waste collected by producers(Directions of Hon'ble NGT in OA no. 512/2018 dated 15.01.2021)	This is a continuous Activity. All the EPR Authorised Producers will be verified per year	This is a continuous Activity. All the EPR Authorised Producers will be verified per year.	PPCB	Regular activity
8.	Verification of systems provided by producers for collection and channelization of e-waste. (Directions of Hon'ble NGT in OA no. 512/2018 dated 15.01.2021)	This is a continuous Activity. All the EPR Authorised Producers will be verified per year.	This is a continuous activity. All the EPR Authorised Producers will be verified per year.	PPCB	Regular activity
9.	Verification of facilities of	This is a continuous activity. All	This is a continuous	PPCB	Regular activity

	dismantlers and recyclers for their infrastructure and records. (Directions of Hon'ble NGT in OA no. 512/2018 dated 15.01.2021)	the dismantlers/recyclers will be verified per year.	activity. All the dismantlers/recyclers will be verified per year.		
10.	Checking of informal trading, dismantling, and recycling of waste. (Directions of Hon'ble NGT in OA no. 512/2018 dated 15.01.2021)	Regular activity	Quarterly drive will be carried out checking of this activity.	District Administration/ PPCB	Regular activity
11.	Facilitate collection and disposal of e-waste. (Directions of Hon'ble NGT in OA no. 512/2018 dated 15.01.2021)	Regular activity	Mechanism for collection and for incentivizing setting up of recycling facilities will be complied with.	District Administration/PPCB	Regular activity
12.	Governance frame work for monitoring compliance. (Directions of Hon'ble NGT in OA no. 512/2018 dated 15.01.2021)	Regular Monitoring will be carried out to check the compliance.	Regular Monitoring will be carried out to check the compliance.	District administration/PPCB.	Regular activity
13.	Capacity building at district level. (Directions of Hon'ble NGT in OA no. 512/2018 dated 15.01.2021)	No gap	Workshops/seminars to educate functionaries is being run on regular basis.	District Administration, PPCB & Local bodies.	Regular activity
14.	IEC plan be firmed up and executed. (Directions of Hon'ble NGT in OA no. 512/2018 dated 15.01.2021)	No gap	IEC plan has been prepared by state and being implemented in all ULBs widely.	District Administration, PPCB & Local bodies.	Regular activity
15.	Strengthen system of enforcement. (Directions of Hon'ble NGT in OA no. 512/2018 dated 15.01.2021)	No gap	Status of enforcement of Byelaws reviewed on Monthly basis by ADC(UD) and quarterly basis by Hon'ble Deputy Commissioner-cum-Chairman of District Environment Committee.	District Administration, PPCB & Local bodies	Regular activity

16.	Allocation of proper space to the existing and upcoming industrial units for e-waste dismantling and recycling. (Directions of Hon'ble NGT in OA no. 512/2018 dated 15.01.2021)	No gap	State Government has already planned the focal points for industrial units. Proper space will allocate to the existing and upcoming industrial unit for E waste dismantling and recycling facility.	PSIEC	Already done
17.	Recognition and registration of workers involved in dismantling and recycling, undertake industrial skill development activities for the workers involved in dismantling and recycling. (Directions of Hon'ble NGT in OA no. 512/2018 dated 15.01.2021)	No gap	Recognition and registration of workers involved in dismantling and recycling and industrial skill development activities for the workers involved in dismantling and recycling will be done on regular basis	Labour Department	Regular Activity
18.	Annual monitoring to ensure health and safety of workers involved in such activities. (Directions of Hon'ble NGT in OA no. 512/2018 dated 15.01.2021)	No gap	Will be Ensured on Annual basis.	Director of Factories	Regular Activity
19.	Separate waste deposition centers for domestic E-waste which helps in easy segregation of E-waste. (Directions of Hon'ble NGT in OA no. 512/2018 dated 15.01.2021)	Separate waste deposition centers for domestic E-waste	<b>MCL:-</b> Domestic hazardous waste deposition centers will be established with the each secondary collection point. <b>Department of Urban Development (for other ULBs):-</b> One E-Waste deposition center already established at each ULB.	All Local Bodies	<b>MCL:-</b> 31.12.2022 as same will be established with the secondary points and establishment of the compactor.

### 3. AIR QUALITY MANAGEMENT

#### (a) Current Status related to Air Quality Management

Details of Data Requirement	Present Status
Number of Automatic Air Quality monitoring stations in the district. - Operated by SPCB / State Govt / Central govt./ PSU agency : - Operated by Industry:	2, (At Ludhiana city & Khanna city) 0
Number of manual monitoring Stations operated by SPCBs	10
Name of towns / cities which are failing to comply with national ambient air quality stations	02 (Ludhiana city & Khanna city)
Nos. of air polluting industries	2057
No. of unit installed APCD	2057
Status of Air Consent	<ul style="list-style-type: none"> <li>Regular activity</li> <li>Total no. of industries requiring consent to operate under Air Act, 1981</li> </ul> <p>Red = 2376 Orange = 2427 Green = 1027</p> <ul style="list-style-type: none"> <li>Total no. of units having valid consent as on 31.08.2021</li> </ul> <p>Red = 1416 Orange = 1712 Green = 503</p> <ul style="list-style-type: none"> <li>Timeline for grant of consents to the balance units not having valid consent.</li> </ul> <p>Red = 31.03.2022 Orange = 30.06.2022 Green = 30.09.2022</p>
Prominent air polluting sources	Industry, Road dust, transport, Burning of biomass & Vehicular pollution.

(b) Identification of gaps and action plan:

S. No.	Action points	Gap & Indicative Action Plan	Responsible agency	Timeline for completion of action plan																												
1.	Identification of prominent air polluting sources?	<p>Following sources have been identified after carrying out source apportionment study:-</p> <table border="1"> <thead> <tr> <th>Sr. no.</th> <th>Source</th> <th>PM<sub>10</sub></th> <th>PM<sub>2.5</sub></th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Industry</td> <td>35%</td> <td>38%</td> </tr> <tr> <td>2.</td> <td>Transport</td> <td>16%</td> <td>21%</td> </tr> <tr> <td>3.</td> <td>Road Dust</td> <td>28%</td> <td>16%</td> </tr> <tr> <td>4.</td> <td>Biomass</td> <td>16%</td> <td>19%</td> </tr> <tr> <td>5.</td> <td>Others</td> <td>4%</td> <td>5%</td> </tr> <tr> <td>6.</td> <td>Power Plants</td> <td>1%</td> <td>1%</td> </tr> </tbody> </table>	Sr. no.	Source	PM <sub>10</sub>	PM <sub>2.5</sub>	1.	Industry	35%	38%	2.	Transport	16%	21%	3.	Road Dust	28%	16%	4.	Biomass	16%	19%	5.	Others	4%	5%	6.	Power Plants	1%	1%	MCL, PWD, Agriculture Department & PPCB	Activity Completed
Sr. no.	Source	PM <sub>10</sub>	PM <sub>2.5</sub>																													
1.	Industry	35%	38%																													
2.	Transport	16%	21%																													
3.	Road Dust	28%	16%																													
4.	Biomass	16%	19%																													
5.	Others	4%	5%																													
6.	Power Plants	1%	1%																													
2.	Ambient Air quality data?	<p>Ambient air quality is already being monitored. The annual average value of the year 2019 and 2020 is as under-</p> <table border="1"> <thead> <tr> <th>Sr. no.</th> <th>Year</th> <th>PM<sub>10</sub> (µg/m<sup>3</sup>)</th> <th>AQI</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>2019</td> <td>103</td> <td>111</td> </tr> <tr> <td>2.</td> <td>2020</td> <td>93</td> <td>97</td> </tr> </tbody> </table>	Sr. no.	Year	PM <sub>10</sub> (µg/m <sup>3</sup> )	AQI	1.	2019	103	111	2.	2020	93	97	PPCB	Activity completed. Stations already working.																
Sr. no.	Year	PM <sub>10</sub> (µg/m <sup>3</sup> )	AQI																													
1.	2019	103	111																													
2.	2020	93	97																													
3.	Setting up of Continuous Ambient Air Quality Monitoring Station	2 CAAQMS already installed (1no.@ldh & 1no.@Khanna)	PPCB	Activity completed																												
4.	District Level Action Plan for Air Pollution	Action plan to control air pollution already prepared and submitted to Hon'ble NGT. Link is <a href="https://ppcb.punjab.gov.in/en/action-plans">https://ppcb.punjab.gov.in/en/action-plans</a>	PPCB	Action Plan Already prepared and will be implemented.																												
5.	Hotspots of air pollution in District	Major Hotspots have been identified and given in the micro air action plan. The major hotspots are industrial areas, kanganwal, railway station, railway station NH1 towards Ambala. Bus stand, bhart nagar chowk, model town, harnam nagar, Gandhi	PPCB	Activity Completed																												

		colony, sashtri nagar, chaura Bazzar, Dal Bazzar, field Ganj, etc.,		
6.	Awareness on Air Quality	Awareness in this regard is being done on regular basis. The data is also given in public domain for awareness to the public at official website of the PPCB. The web link of the same is <a href="https://ppcb.punjab.gov.in/en/air-quality">https://ppcb.punjab.gov.in/en/air-quality</a>	PPCB	Regular activity
7.	Industries to be converted from coal to CNG	<ul style="list-style-type: none"> <li>• Total industries to be converted from coal to PNG = 368 (Ludhiana 275 and khanna 93)</li> <li>• Converted to PNG = Nil</li> <li>• Work of lying pipeline at Ludhiana and khanna yet to be started further after termination of contract with M/s Jai Madhok at Ludhiana, PNGRB is yet to allot fresh contract &amp; at khanna M/s Think gas Pvt. Ltd. To expedite the process of lying pipeline.</li> </ul>	PPCB/DIC	Time target: Six month after lying the pipeline
8.	Conversion of Natural Draft Brick Kilns to Induced Draft Brick Kilns	<ul style="list-style-type: none"> <li>• Total BKO required to convert to ZIG ZAG = 245</li> <li>• Converted to ZIG Zag Technology= 233</li> <li>• Yet not converted = 12</li> <li>• Direction issued u/s 31-A of Air Act, 1981 to DFSC to canceled the license of BKOs = 12</li> </ul>	PPCB/DFSC	30.09.2019
9.	Maintain pothole free roads / timely patchwork on roads	<p><b>MCL</b> The patch work is a regular process. 17.5 Km out of 93 km of roads has been made pothole free up to 30-04-2021. Further work is in progress</p> <p><b>GLADA/PWD</b> Patchwork of roads is continuous process. As and when potholes develop on roads the same are got repaired as soon as possible.</p>	MCL, PWD, GLADA	Regular activity
10.	Procurement of Mechanical sweeping machines	<ul style="list-style-type: none"> <li>• Work order number 94 dated 12-11-2020 has been issued for procurement of a sweeping machine. The fabrication work of sweeping machine is in process.</li> <li>• Tenders has been invited to procure 4 ( Four) more number of sweeping machines which are to</li> </ul>	MCL	Time Target: 31.12.2021

		be opened on date 02-06-2021.GPS system will be installed on sweeping machines after procurement of machines.		
11.	Plantation of trees along highways, drains, Nallahs in colonies and canals etc.,	<ul style="list-style-type: none"> <li>Plantation has been done already in various urban estates and the further plantation will be done accordingly when new land will be acquired.</li> <li>The new target for plantation of 15000 more plants has been fixed by MCL, and plantation of 12000 trees has been proposed in remaining ULBs of District. The same will be started as per suitable weather conditions for plantation.</li> </ul>	MCL, DDLG, GLADA,	Regular activity
12.	Greening of parks, open areas, community places, schools and housing societies	<p><b>Drainage department</b> 3500 plants planted along bassian drain, 14500 Plants planted along budha nallah &amp; 4000 more plant proposed in coming season.</p> <p><b>Forest department</b> 433149plants will be planted in the year 2021-22</p> <p><b>MCL</b> The new target for plantation of 15000 more plants upto 31-12-2021 has been fixed. 2300 number of plants has been planted upto 30-04-2021. The work of digging pits for plants is in progress. The plantation work will started as per suitable weather conditions (rainy season) for plantation.</p> <p><b>GLADA</b> Plantation has been done already in various urban estates and the further plantation will be done accordingly when new land will be acquired. and approximately 3000 plantation will be done in various urban estates of.</p> <p><b>DDLG</b> One park in each ULB is being developed and planation is also being carried out.</p>	Drainage department, MCL,DDLG, GLADA, and Forest department	Regular activity

13.	Kaccha/Brick Paved Roads to be made Pucca roads	<p><b>MCL</b> The 13.45 km (57%) out of 23.7 km (as per new targets) road work already completed upto 30-04-2021. Further work is in progress. DDLG The Paved roads/kaccha roads are also converted into pakka road in each ULBs.</p>	MCL	30.06.2022
14.	Existing roads requiring recarpeting	<p><b>PSIEC</b> Maintenance of Industrial Focal Point already handed over to Municipal Corporation Ludhiana by PSIEC. <b>PWD</b> The PWD has also submitted its report regarding re-carpeting of Road total 6.62 km, around 70 % work completed and remaining under process. <b>GLADA</b> Target achieved - 5.24 km roads re-carpeted <b>MCL</b> The Re-carpeting work of 57.55 km (43.82%) out of 131.32 km (as per new target) within MC area has already been completed upto 30-04-2021.The balance work of re-carpeting of roads in progress <b>DDLG</b> The roads of ULBs presently are in good condition. The re-carpeting will be done as and when required.</p>	MCL, DDLG, PWD, GLADA, PSIEC	Regular activity
15.	Public awareness campaign for control of vehicular emissions	The camps are being organized regular basis. Facebook, Twitter & Instagram) is also being used to spread traffic awareness. Quarterly camp will be organized for awareness.	Traffic Police, Transport	Regular activity
16.	Extensive drive against polluting vehicles	The extensive drive against polluting vehicles already initiated by the Police department.	Traffic Police	Regular activity
17.	Prevention parking of vehicles in non-designated	The extensive drive already initiated by the Police department to prevent parking of vehicles in non-	Traffic Police	Regular activity



	areas by enforcement actions	designated areas and issuing challans to the violators.		
18.	Phasing out commercial diesel vehicles more than 15 years old	Scheme under consideration.	Transport	Time Target: 31.12.2022
19.	Promotion of E-Vehicles	The is being done on regular basis. From 01.07.2020 to 31.12.2020 total 43 E-Rickshaw has been registered.	Transport	Regular activity
20.	Infrastructure development for additional of CNG based autos/taxis	<ul style="list-style-type: none"> <li>Total 10 CNG station has been commissioned out of total 14 station and 4 are under process.</li> </ul>	DFSC	31.03.2022
21.	Control of open burning of bio-mass.	<p><b>MCL</b> 563 Number of pits constructed in Parks and green belts of Ludhiana out of 922 Number of total Parks to control of open burning of bio mass in the city.</p> <p><b>DDLG</b> Regular monitoring is being done in each ULB. Further, no. of pits are constructed in each ULB to control the burning of bio mass.</p> <p><b>GLADA</b> Presently, there is no burning of bio mass, biodegradable material is collected from park and put in the pits built at nursery.</p>	MCL and DDLG and GLADA	Regular activity
22.	Dissemination of Air Quality Index by installing CAAQMS	Activity Completed. The web link of the same is as under:- <a href="https://ppcb.punjab.gov.in/en/air-quality">https://ppcb.punjab.gov.in/en/air-quality</a> <a href="http://cpcb.nic.in/automatic-monitoring-data/">http://cpcb.nic.in/automatic-monitoring-data/</a>	PPCB	Two no. already installed, in Ludhiana and Khanna city. Activity completed
23.	Dissemination of Air Quality Index by installing display boards in the city	Activity Completed. The web link of the same is as under:- <a href="https://ppcb.punjab.gov.in/en/air-quality">https://ppcb.punjab.gov.in/en/air-quality</a> <a href="http://cpcb.nic.in/automatic-monitoring-data/">http://cpcb.nic.in/automatic-monitoring-data/</a>	PPCB	Two no. already installed, in Ludhiana and Khanna city. Activity completed
24.	Quality Management Division(AQMD) at PPCB (HQ)Establishment of an Air	Work is under progress.	PPCB,	31.12.2021

25.	Establishment helpline in each city as well as SPCB HQ	Head Office level Helpline number is 1800 120 3667 for whole of the state.	PPCB, Lab	Completed
26.	Scope for public participation on remedial measures like plantations. (Directions of Hon'ble NGT in OA no. 360/2018 dated 05.07.2021)	Ludhiana Forest division has 69 registered village forest Committees. Plantation and maintenance is being done by public participation mode.	Department of forest	Regular Activity
27.	Carrying capacity and source apportionment study of non-attainment Cites.	Source apportionment study has been already carried out through 3 <sup>rd</sup> party.	PPCB	Source Apportionment Study = Completed Carrying Capacity = 30.04.2023
28.	For development of plantation along the highways.	The area alongside highways where plantation can be done is declared forest area. During suitable season for plantation PWD will coordinate with department of forest for plantation.	PWD	Time target: 31.12.2021
29.	Steps to be taken for management of agriculture waste/residue	<ul style="list-style-type: none"> <li>• During 2020-21 Total 873 machines for crop residue management have been given to the farmer, 169 to custom hiring centre and 140 machines to cooperative societies at subsidies rates under In-situ Management of Crop residue Scheme.</li> <li>• During 2021-22, till 14.09.2021, 489 crop residue management machines sanctioned viz 335 to registered farmer groups, 105 to cooperative societies, 30 to gram panchayats and 19 to individual farmers.</li> <li>• Beside above, IEC activities like farmer training camps, Hoarding and field demonstrations are also being carried out to spread the awareness among farmers through the years.</li> </ul>	Agriculture department	Seasonal Activity.

#### 4. WATER QUALITY MANAGEMENT

(a) Water Quality Monitoring

- Current Status related to Water Quality Management

Details of Data Requirement	Present Status
Rivers	River Sutlej
Length of Coastline (if any)	Nil
Nalas/ Drains/Creeks meeting Rivers	3
Lakes / Ponds	1345
Total Quantity of sewage from towns and cities in District	682.5 MLD
Quantity of industrial wastewater	120 MLD
Percentage of untreated sewage	35 %
Details of bore wells and number of permissions given for extraction of groundwater	6350
Groundwater polluted areas if any	Dump site of Municipal Corporation, Ludhiana.
Polluted river stretches if any	River Sutlej, 20 km

- 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	The monitoring of rivers, drains are already being carried out and data is being maintained.	PPCB	Regular activity
2.	Quality of water bodies in the district	The monitoring of rivers, drains are already being carried out and data is being maintained and also discussed in monthly meeting of District Environment Committee. The information of water quality will be also	District Administration and PPCB	Regular activity

		uploaded on the official websites of SPCB & District Administration. The web link is <a href="https://ppcb.punjab.gov.in/en/water-quality">https://ppcb.punjab.gov.in/en/water-quality</a>		
3.	Hotspots of water contamination	Identified and given in the Sutlej Action Plan web link is <a href="https://ppcb.punjab.gov.in/en/action-plans">https://ppcb.punjab.gov.in/en/action-plans</a>	PPCB, MCL, all MCs and DDPO	Regular activity
4.	Protection of river / lake water front	Awareness is being carried out in the public to stop the dumping of solid waste in river/Nallah. Challans are also issued to the violators	MCL & D Department of urban development.	Regular activity
5.	Inventory of sources of water pollution	The sources are already identified and detail of the same is given in Sutlej Action Plan. The Web link of the same is <a href="https://ppcb.punjab.gov.in/en/action-plans">https://ppcb.punjab.gov.in/en/action-plans</a>	MCL, DDPO & Department of urban development	Activity Completed
6.	Oil spill disaster management (for coastal districts)	Not applicable	Not applicable	Not applicable
7.	Protection of flood plains	Plan Prepared.	Drainage Department	Plan Prepared. The concerned department regularly observes and protects the flood plains by constructing river training works.
8.	Rejuvenation of groundwater	As per Master Plan to Artificial Recharge to Ground Water in India-2020, 2698 Recharge shaft, 33830 farm Pond and 71683 Rooftop Rain water harvesting structures have been suggested for Ludhiana district. The link for the Master Plan is <a href="http://cgwb.gov.in/Master%20Plan%20to%20GW%20Recharge%202020.pdf">http://cgwb.gov.in/Master%20Plan%20to%20GW%20Recharge%202020.pdf</a>	CGWA/PWRDA	Regular Activity
9.	Complaints redressal system	Mobile App/Online Complaint redressal system already developed. The web link is <a href="https://connect.punjab.gov.in/grievance/save">https://connect.punjab.gov.in/grievance/save</a>	PPCB	Activity Completed

(b) Domestic Sewage

- Identification of gaps and action plan for treatment of domestic sewage

Details of Data Requirement	Present Status
No of Class-II towns	5
No of Class-I towns	3
No of Towns STPs installed	06
No of Towns needing STPs	02 i.e. Samrala and Raikot. Also two additional STPs are required for Ludhiana town
No of ULBs having partial underground sewerage network	08
No of towns not having sewerage network	0
Total Quantity of Sewage generated in District from Class II cities and above	678 MLD
Quantity of treated sewage flowing into Rivers (directly or indirectly)	652.4 MLD
Quantity of untreated or partially treated sewage (directly or indirectly)	286 MLD
Quantity of sewage flowing into lakes	0
Total available Treatment Capacity	496.75 MLD in District Ludhiana

- 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)	<ul style="list-style-type: none"> <li>• Existing capacity of STPs = 496.75 MLD</li> <li>• Additional capacity required = 296 MLD.</li> </ul> Installation of new STP of 225 MLD at Jamalpur and new STP of 60 MLD at Balloke re-habilitation of existing STP's of	MCL, ADC(UD) and PWSSB	<ul style="list-style-type: none"> <li>• <b>MCL:-</b> STP Jamalpur, STP Balloke and rehabilitation of existing STP's of Ludhiana city Timeline = 01.12.2022</li> </ul>

		<p>Ludhiana city. The tender for the Construction of Sewage Treatment Plants (STPs), Pumping Stations, Rehabilitation of existing STPs &amp; Main Pumping Stations for abatement of pollution in Buddha Nallah, Ludhiana including Operation &amp; Maintenance for a period of 10 years (on DBOT basis) under AMRUT scheme has been allotted to M/s Khilari Infrastructure Pvt. Ltd. vide letter no. 4778 dated 02.12.2020.</p> <ul style="list-style-type: none"> <li>• Raikot = Installation of new STP of 7 MLD (SBR technology)</li> <li>• Samrala = Installation of new STP of 4 MLD (SBR technology)</li> </ul>		<ul style="list-style-type: none"> <li>• <b>MC Raikot:-</b> STP 7 MLD (SBR technology) =31.03.2022</li> <li>• <b>MC STP Samrala:-</b> STP 4 MLD (SBR technology) =31.12.2021</li> </ul>
2.	Underground sewerage network	<p>Sewerage network is already being laid out in major town and cities. The percentage of sewerage laid is as under;-</p> <ul style="list-style-type: none"> <li>(i) Ludhiana city = 95%</li> <li>(ii) Khanna = 80%</li> <li>(iii) Sahnewal = 95%</li> <li>(iv) Jagraun = 95%</li> <li>(v) Doraha = 100 %</li> <li>(vi) Raikot = 40%</li> <li>(vii) Mulanpur Dhakha = 95%</li> <li>(viii) Maulodh = 95%</li> <li>(ix) Payal = 80%</li> <li>(x) Machiwara = 97%</li> <li>(xi) Samrala = 35%</li> </ul>	MCL, ADC (UD) & PWSSB	<ul style="list-style-type: none"> <li>• MCL = 31.12.2022</li> <li>• Other 9 MCs (Except Doraha)= 31.12.2022</li> </ul>
3.	Setting up of real time water quality monitoring system to monitor the quality of water	Activity completed	PPCB	<p>All the three RTWQMS have been installed and working. Activity completed</p> <p>Satluj = 1</p> <ul style="list-style-type: none"> <li>• Budha Nallah = 2</li> </ul>

4.	<p>Operation and Maintenance of STPs  (i)Arranging funds for operation and maintenance of STPs to ensuring regular operation and maintenance of STPs in a professional manner</p>	Completed, no gap	MCL, GLADA, PWSSB	GLADA, MCL & PWSSB has informed that Funds have been tied up.
	(ii)Providing proper in-house laboratory facilities at each STP for maintaining record of characteristics of analysis of untreated as well as treated waste water	Completed	MCL, GLADA, PWSSB	<ul style="list-style-type: none"> <li>• STP Balloke (105 MLD &amp; 152 MLD): Common Lab Provided</li> <li>• STP Bhattian (111 &amp; 50 MLD): Common Lab Provided</li> <li>• STP Machhiwara (4 MLD): Provided</li> <li>• STP Sahnewal (7 MLD): Provided</li> <li>• STP Jagraon (16 MLD &amp; 12 MLD): Common Lab Provided</li> <li>• STP Mullanpur (3 MLD): Not Provided</li> <li>• STP Khanna (29 MLD): Provided</li> <li>• STP Araicha, Doraha (2.75 MLD): Not Provided</li> <li>• STP Rajgarh, Doraha (1 MLD): Not Provided</li> <li>• STP Payal (1.5 MLD): Not Provided</li> <li>• STP Maloudh (1.5 MLD): Not Provided</li> <li>• STP Begowal, Doraha (1 MLD): Not Provided</li> </ul> <p>The GLADA has informed that the</p>

				<p>capacities of STP's are small so there is no provision of in-house laboratory but OCEMS are installed and monthly testing is done from NABL approved lab.</p> <ul style="list-style-type: none"> <li>• Total STP =15</li> <li>• Lab Provided = 9</li> <li>• Lab not provided = 6 as small STPs.</li> </ul>
5.	<p>Provision of necessary treatment facilities in village ponds so that no untreated or polluted water enters river directly or indirectly through various drains or creeks.</p> <p>(i)Finalization of appropriate technology</p>	<p>A. No. of village ponds for which work has been completed:- 3</p> <p>B. No. of villages where work is under progress= 13</p> <p>C. No. of villages where work is yet to be started = 22</p>	DDPO	<p>A. Total no. of villages where appropriate technology is required = 38</p> <p>B. No. of village ponds for which appropriate technology finalized: 31</p> <p>C. Time target for finalizing the appropriate technology for remaining 7 village ponds: 31.12.2021</p>
	<p>(ii)Arrangement of Funds for treatment technology in various villages identified in the Action Plan</p>	<p>A. No. of village ponds for which funds treatment technology arranged: 20</p> <p>B. The work for arrangements of funds for the remaining village is under process.</p>	DDPO	<p>A. No. of village ponds for which funds treatment technology arranged:-20</p> <p>B. Number of villages where funds are yet to be arranged=15</p> <p>C. Time target for the remaining village ponds: 31.03.2022</p>
	<p>(iii)Reuse of water for agriculture purpose in villages.</p>	<p>A. No. of village ponds for which irrigation scheme has been implemented: 46</p> <p>B. Progress for the remaining villages: work is under progress under the MGNREGA Scheme.</p>	DDPO, Soil conservation department.	<p>A. Number of village ponds identified: 1345</p> <p>B. No. of village ponds for which irrigation scheme has been implemented: 46</p> <p>C. Time target for the remaining villages: 31.07.2023</p>



	(iv) Proper operation and maintenance of treatment facilities installed in village ponds	A. No. of village ponds for which operation and maintenance of treatment facilities installed: 46 B. Progress for the remaining villages for remaining villages work is under progress under the MGNREGA Scheme	DDPO	A. Target Number of villages identified for installation treatment facility : 650 B. No. of village ponds for which operation and maintenance of treatment facilities installed: 46 C. Time target for the remaining villages: 31.07.2023
6.	(i) Checking of health indices of the inhabitants & maintaining database. (ii) Holding awareness camps in the catchment area of River Sutlej to make the public aware regarding water borne diseases	Camps are organized on monthly basis	The Department of Health and Family Welfare	Regular activity
7.	(i) Measurement of flow at different locations of River Sutlej & drains. (ii) To stop unauthorized discharge in the drains.	The flow is being monitored on monthly basis by the drainage department.  <ul style="list-style-type: none"> <li>The regular survey is being done by the concerned departments to stop unauthorized discharge in the drains.</li> <li>The MCL has prepared the comprehensive plan of Rejuvenation of BudhaNallah and closure of various outlet. The work has already been allotted and has been started on 02-12-2020.</li> <li>The directions has been issued to the drainage department and PSPCL to close and disconnect the electric connection of unauthorized dairies operating outside MC, limit and discharging its waste water into BudhaNallah.</li> </ul>	Department of water resources,  Department of water resources, MC Land DDPO.	Regular activity  Time Target: <ul style="list-style-type: none"> <li>Drainage Department (Outside MC limit) = 31.12.2021</li> <li>MCL (Within MC limit) = 01.12.2022</li> </ul>

8.	Shifting of scattered dairies from the City	Latest status: new site for the is under finalization	MCL	Time target : 31.03.2022
9.	Release of fresh water @200 cusec in Buddha Nallah from Sirhind Canal.	Activity Completed	Department of Water Resources.	Activity Completed
10.	Setting up of additional water bodies/water harvesting structures	<p><b>MCL:-</b></p> <ul style="list-style-type: none"> <li>Total no. of water harvesting structure proposed = 13</li> <li>Total no. of water harvesting structure installed = 3</li> </ul> <p><b>Other 10 ULBs :-</b></p> <ul style="list-style-type: none"> <li>Total no. of water harvesting structure proposed = 36</li> <li>Total no. of water harvesting structure installed = 16</li> </ul>	MCL and ADC(UD)	<p><b>MCL:-</b> Time target to installed balance rain harvesting structures = 31.03.2022</p> <p><b>ADC(UD) :-</b> Time target to installed balance rain harvesting structures = 31.03.2022</p>
11.	Guidelines for control of pollution and enforcement of Environmental Norms in marriage halls, banquet halls, party venues etc. along with consent management system. (Directions of Hon'ble NGT in OA no. 400/2017 dated 04.02.2021)	Already being followed as per guidelines framed by CPCB	PPCB	31.12.2022
12.	Installation of ETP in all big units (marriage halls, banquet halls, party venues etc ) which are not connected with the sewer lines.	Already being followed as per guidelines framed by CPCB	PPCB	31.12.2022

	(Directions of Hon'ble NGT in OA no. 400/2017 dated 04.02.2021)			
13.	All the units having kitchen should have proper ducting arrangement. The units using DG sets must have the proper stack height. (Directions of Hon'ble NGT in OA no. 400/2017 dated 04.02.2021)	Already being followed as per guidelines framed by CPCB	PPCB	31.12.2022
14.	The local authorities/corporations should carry out inventory of the dairy farms and gaushalas. (Directions of Hon'ble NGT in OA no. 400/2017 dated 04.02.2021)	All ULBs have inventory of Gaushala and Dairy farms available with them.	All Local Bodies	30.06.2022
15.	The local bodies/municipal corporations shall publish a public notice in newspapers and on their website for registration of dairy farms and gaushalas as per municipal law. (Directions of Hon'ble NGT in OA no. 400/2017 dated	The Public notice will be given in the Newspaper and on the website of local body for registration of dairy farms and gaushalas	All Local Bodies	Timeline for registration= 31.12.2022

	04.02.2021)			
16.	The District Collectors of all the Districts are directed to constitute monitoring committees to monitor the Extraction of Ground Water by the individuals for commercial purposes. (Directions of Hon'ble NGT in OA no. 176/2015 dated 20.07.2020)	Such Committees will be constituted	District Administration	31.12.2021
17.	There must be no general permission for withdrawal of ground water, particularly to any commercial entity, without environment impact assessment of such activity on individual Assessment units in cumulative terms covering carrying capacity aspects by an expert committee. (Directions of Hon'ble NGT in OA no. 176/2015 dated 20.07.2020)	Noted for compliance and will be assured.	All local bodies & DDPO	Regular activity
18.	All Overexploited, Critical & Sensitive	Water mapping of all the OCS assessment units has been done as per the guidelines of GOI as per	Water Resources (Ground water cum	Activity Completed

	(OCS) assessment units must undergo water mapping. (Directions of Hon'ble NGT in OA no. 176/2015 dated 20.07.2020)	GEC-2015 Methodology by taking Block as a Unit of Assessment. The data of years 2015-19 has been taken for assessing the same recently. As per this study out of total 150 Blocks taken for study, 117 Blocks (78%) are "Over-Exploited", 6 Blocks (4%) are "Critical", 10 Blocks (7%) are "Semi-Critical" and 17 Blocks (11%) are in "Safe" category. The water level trends have been computed for last 10 years from 2009-2019 data	NHP wing) and PWRDA	
19.	Water Management Plans need to be prepared for all OCS assessment units in the country based on the mapping data, starting with Overexploited blocks. (Directions of Hon'ble NGT in OA no. 176/2015 dated 20.07.2020)	Punjab Government has engaged M/s Mekorot, National Water Company of Israel to formulate the Water Conservation and Management Master Plan for the State of Punjab and their final recommendations is likely to be submitted by December 2021.	Water Resources (Ground water cum NHP wing) and PWRDA	31.03.2022
20.	The Water Management Plans, data on water availability or scarcity and policy of CGWA must be uploaded on its website for transparency and public involvement. (Directions of Hon'ble NGT in OA no. 176/2015 dated 20.07.2020)	Noted for compliance and will be assured.	PWRDA	31.03.2022
21.	The District Magistrates have	A) Till date 600 ponds have been rejuvenated/restored	DDPO	31.08.2022

	been directed to take up one pond per village for its rejuvenation, this year. (Directions of Hon'ble NGT in OA no. 325/2015 dated 18.11.2020)	B) Rest 341 will be restored upto 31.08.2022 The ponds contains both wastewater and rain water.		
22.	Active efforts be made in close coordination with technical bodies to tap excess runoff of rivers/canals during rainfall season to recharge old water bodies and retain water in new ponds to be constructed specifically for the purpose (Directions of Hon'ble NGT in OA no. 325/2015 dated 18.11.2020)	The excess run of water final reaches rivers, whether it comes through nallah or drain. This water ultimately is controllable at head quarter where certain pond level is maintained for regulation of canals. Efforts will be also done to find out the alternate way to tap the excess rain fall in ponds.	Drainage	31.10.2026
23.	Development of Bio Diversity Parks in the vicinity of rivers lead to continuous recharge of aquifers. (Directions of Hon'ble NGT in OA no. 325/2015 dated 18.11.2020)	<b>MCL:-</b> There is no bio diversity parks in MC limits yet However, Municipal Corporation Ludhiana developed 11 number of micro forests along vacant spaces of Buddah Nallah. 01 Bio-diversity Park will be develop in Ludhiana City.	MCL, Forest Department & Drainage Department	31.03.2022  -
24.	Maintenance of E Flow of the rivers. (Directions of Hon'ble	Already Being Maintained	Drainage Department	Completed

	NGT in OA no. 325/2015 dated 18.11.2020)			
25.	Land owning agencies must ensure that every water body has unique ID for its identification. There should be retagging of the water bodies to prevent encroachment. (Directions of Hon'ble NGT in OA no. 496/2016 dated 22.01.2021)	L-section of all water bodies like drains concerned with Drainage Department has been approved and with name of drains and the Mapping of the Drainage System has been done on google Sheet.	Drainage Department	Completed
26.	Awareness among public to set up Rainwater Harvesting System and about its utility should be enhanced. (Directions of Hon'ble NGT in OA no. 496/2016 dated 22.01.2021)	Public announcements done regarding rain water harvesting time to time by all ULBs.	Local Bodies	Regular Activity
27.	Installation of STP will be mandatory for all residential apartments/group housing societies where groundwater requirement is more than 20 m <sup>3</sup> /day for getting NOCs. (Directions of Hon'ble NGT in OA no.	Directions being already followed.	GLADA/MCL/Department of urban development	Regular Activity

	496/2016 dated 22.01.2021)			
28.	Comprehensive plan to install flow meters at various locations to carry out daily real time monitoring of the city's water supply network. (Directions of Hon'ble NGT in OA no. 496/2016 dated 22.01.2021)	Directions will be followed. Time line for Preparation of plan = 31.03.2022.	MCL, ADC (UD) & PWSSB	<b>MCL</b> Time line for Preparation of plan = 31.03.2022. Time line for implementation of plan = 31.03.2025. <b>ADC(UD) &amp; PWSSB</b> Time line for Preparation of plan = 31.03.2022. Time line for implementation of plan = 30.09.2022.
29.	Control of illegal extraction of groundwater. (Directions of Hon'ble NGT in OA no. 496/2016 dated 22.01.2021)	Efforts are being made to control illegal extraction of ground water. No authorization is given to public for extracting ground water illegally. Inspection regarding same is being done time to time by ULBs	All Local Bodies	Regular Activity
30.	Review of District Environmental Plan activities at different levels of District Heads and District Magistrate. (Directions of Hon'ble NGT in OA no. 360/2018 dated 05.07.2021)	The Activities of District Environmental Plan will be reviewed on monthly basis by the District Heads and at the level of District Magistrate Ludhiana.	District Heads of concerned departments and District Administration.	<ul style="list-style-type: none"> <li>Monthly Meetings shall be taken by District Head of concerned department for the review of activities of this plan and nodal officer of concerned department will submit the reports to the District Environment Committee and PPCB on monthly basis.</li> <li>Monthly Meetings shall be taken by the District Administration along-with District Environment Committee.</li> </ul>
31.	Appointment of Nodal officer with contact number	All the departments have appointment the Nodal officer and list is attached as <b>Annexure-X</b>	All concerned departments	Completed



32.	Preparation of operational manual of STPs for the effective and efficient operation of the STPs of the state.	It is under preparation.	PPCB	Time target: 31.10.2021
33.	Enhancement of capacity of existing ponds/ water bodies and creating of new water harvesting structures.	A. Existing Ponds(Total) = 1345 B. No. of Ponds whose Capacity has been enhanced = 335 C. New ponds = Nil Source of Funds above activities: Gram Panchayat Fund, Finance Commission, MGNrega. The ponds contains both wastewater and rain water.	DDPO	Timeline: 31.10.2023
34.	Usage of treated sewage for sprinkling purposes for sweeping of roads to control dust pollution.	Progress achieved: • MCL: scheme under consideration • DDLG: Being used for sprinkling purposes. GLADA: Already being used for sweeping of roads in various urban estates.	MCL, DDLG and GLADA.	Regular activity
35.	Mapping of the rivers and flood plain zones in the catchment area of rivers of the State.	The mapping has been done by the Drainage Department in an electronic file. The same can be retrieved from Goggle Earth link <a href="https://earth.google.com/web/@31.05081388,75.93504687,-27664.5935166a,181476.44066099d,35y,0.03480517h,45.47133225t,0.0813r?utm_source=earth7&amp;utm_campaign=vine&amp;hl=en">https://earth.google.com/web/@31.05081388,75.93504687,-27664.5935166a,181476.44066099d,35y,0.03480517h,45.47133225t,0.0813r?utm_source=earth7&amp;utm_campaign=vine&amp;hl=en</a>	Drainage Department	Completed
36.	Utilization of STPs sludge	STP sludge is used by the farmers as manure.	MCL, DDLG, and GLADA	Regular activity
37.	Framing policy for the management of highly contaminated Feecal sludge generated from the rural areas.	Progress achieved: State level policy matter and time target for framing of policy will be informed after taking up matter at higher level.	DDPO	Policy will be framed by 30.04.2022. Implementation = 30.04.2025
38.	The projects being developed for supply	Site has been identified; and yet to be acquired. Construction of WTP transmission lines up to OSHR	MCL	31.10.2025 DPR and RFP prepared and approved.

	of canal water to the inhabitants of the cities/villages may be completed in a time bound manner.	will be completed in Phase 1 up to 2025. <b>Budgetary Provision</b> (i) Capital Cost is to be funded by World Bank and Punjab Govt. (ii) Operation & Maintenance Cost shall be borne by MC Ludhiana.		(i) Floating of RFP – 31.12.2021 (ii) Construction of WTP, Laying of Transmission lines up to OSHRs and Construction of OHSRs will be completed in Phase 1 up to 2025.
39.	Reuse of treated effluent through existing STPs (OA no. 496/2016 dated 22.01.2021)	<ul style="list-style-type: none"> <li>• STPs where Irrigation schemes have been completed and working = 6 Doraha (Rajgarh), Arainchan, Begowal, Payal, Maloud and Machhiwara.</li> <li>• Irrigation schemes are yet to provided/work under process = 6 <ol style="list-style-type: none"> <li>1. <b>STP Khanna (29 MLD):</b> - work is in progress</li> <li>2. <b>STP Jagraon (16 MLD):</b> Work is in Progress.</li> <li>3. <b>STP Jagraon (12 MLD):</b> Feasibility report has been sent and the estimate will be prepared after the availability of funds.</li> <li>4. <b>STP Mullanpur (5 MLD):</b> Survey and planning of this project is in progress. There is an issue of quality of water and availability of nearby agricultural lands. The estimate</li> </ol> </li> </ul>	Department of Soil conservation, ULBs/PWSSB	<p><b>STP Khanna (29 MLD):</b> -Project will complete by 30.04.2023.</p> <p><b>STP Jagraon (16 MLD):</b> Treated water of this STP will be made available to the farmers for irrigation by 31.12.2021</p> <p><b>STP Jagraon (12 MLD):</b></p> <ul style="list-style-type: none"> <li>• To make necessary amendments in STP by ULBs/PWSSB to treat the sewage fit for irrigation purpose = 31.12.2022</li> <li>• Preparation of scheme = 30.04.2022</li> <li>• Arrangements of funds = 31.12.2022</li> <li>• Implementation of scheme = 30.04.2024</li> </ul> <p><b>STP Mullanpur (5 MLD):</b></p> <ul style="list-style-type: none"> <li>• To make necessary amendments in STP by ULBs/PWSSB to treat the sewage fit for irrigation</li> </ul>

		<p>will be prepared after resolving the above issues and the availability of funds.</p> <p>5. <b>STP Balloke-</b> Tentative estimate of STP Balloke (152+105=257 MLD) amounting Rs. 141 crores have been already sent to the Department of Science and Technology by the Head of the Department in 2019 and it is proposed to be covered under second phase of AMRUT. As discharge of STP is very large, therefore it has to be segregated into phases of 25 MLD. Tentative cost of 25 MLD STP is approx. 16.7 crores, thus tentative cost of 257 MLD will be approx. 167 crores and that of 60 MLD (to be constructed) will be approx. 40 crores.</p>		<p>purpose = 31.12.2022</p> <ul style="list-style-type: none"> <li>• Preparation of scheme = 30.04.2022</li> <li>• Arrangements of funds = 31.12.2022</li> <li>• Implementation of scheme = 30.04.2024</li> </ul> <p><b>STP Balloke (152+105=257 MLD)</b> is lying defunct.</p> <ul style="list-style-type: none"> <li>• To make necessary amendments in STP by ULBs/PWSSB to treat the sewage fit for irrigation purpose = 31.12.2022</li> <li>• Preparation of scheme = 30.04.2022</li> <li>• Arrangements of funds = 31.12.2022</li> <li>• Implementation of scheme = 30.04.2024</li> </ul> <p><b>Note:</b> -. Discharge of STP (257 MLD) is very large, and it requires an area of 8224 ha, 60 MLD requires an area of 1920 ha of agricultural land.</p> <ul style="list-style-type: none"> <li>• Total agricultural land required- 8224+1920= 10144 ha. Thus area required is very large and it is not possible to utilize whole of the water as farmers are willing to use the treated water (1 or 2 irrigation) alternately with tubewell water. In the period of no demand, it will be difficult to handle such huge flow and</li> </ul>
--	--	--	--	--

		<p>6. <b>STP Bhattian-</b> The farmers are reluctant to use the treated water of STP. Meetings are being held with farmers to convince them to use this water for irrigation.</p> <ul style="list-style-type: none"> <li>• Irrigation schemes which are not feasible = 1</li> </ul> <p>1. <b>STP Sahnewal (7 MLD):</b> Preliminary Survey of the STP was done and it was observed that STP is surrounded by industrial and residential area, it is very difficult to lay down the Underground Pipeline through that area.</p>		<p>ultimately it has to be discharged into Budha nallah .</p> <p><b>STP Bhattian:-</b></p> <ul style="list-style-type: none"> <li>• To make necessary amendments in STP by ULBs/PWSSB to treat the sewage fit for irrigation purpose = 31.12.2022</li> <li>• Preparation of scheme = 30.04.2022</li> <li>• Arrangements of funds = 31.12.2022</li> <li>• Implementation of scheme = 30.04.2024</li> </ul> <p><b>STP Sahnewal (7 MLD):</b> STP is Not-Feasible due to following factors:</p> <ol style="list-style-type: none"> <li>1. STP is surrounded by industrial and residential area, it is very difficult to lay down the Underground Pipeline through that area.</li> <li>2. Agriculture land is not available nearby the STP. So, blind pipeline will be laid for 6-8 Kms to take the treated water to reach the agriculture land and sump well or reservoir is also required for the storage of treated water, then, treated water will be lifted from the sump well for irrigation.</li> </ol>
--	--	---	--	---

				<p>3.Land acquisition will be required for creating Sump well/ reservoir which will increase the project cost.</p> <p>4. Required area for this project will be approximately 400 Ha and due to urbanization of nearby villages may lead to decrease in cultivated land and use of treated water in future will also be affected and hence, cost will be high according to the benefitted area.</p> <p>5.Farmers will also not use this treated water on daily basis, they will irrigate their fields one or two times only and hence, treated waste water generated on daily basis shall flow into Buddha Nallah again.</p> <p>6. So, the overall Expenditure of lying the pipeline project will not be the productive as the treated water will again flow to the Buddha Nallah through-out the year. So, this project seems to be not feasible.</p> <p><b>Note:-</b></p> <ul style="list-style-type: none"> <li>• These schemes are possible farmer's consent for using this water for irrigation and concerned department will assure quality of treated water.</li> <li>• Funds will be demanded from state Govt., under various schemes.</li> </ul>
40.	Reuse of treated effluent through <b>proposed STPs (New STPs)</b> (OA no. 496/2016 dated	<b>1. STP BALLOKE (60 MLD):</b> Preliminary Survey will be done and farmer will be made aware to use the treated water for irrigation. Pipeline will be laid subject to the quality of water, consent of the farmer to use the treated water, availability	Department of Soil Conservation	<b>STP BALLOKE (60 MLD):</b> As discussed above along with STP Balloke 257 MLD ) at S.No. 14

	22.01.2021)	<p>of agriculture lands, availability of funds and feasibility of project at that time.</p> <p><b>2. STP RAIKOT (7 MLD):</b> Preliminary Survey will be done and farmer will be made aware to use the treated water for irrigation. Pipeline will be laid subject to the quality of water, consent of the farmer to use the treated water, availability of agriculture lands, availability of funds and feasibility of project at that time.</p> <p><b>3. STP SAMRALA (4 MLD):</b> Preliminary Survey will be done and farmer will be made aware to use the treated water for irrigation. Pipeline will be laid subject to the quality of water, consent of the farmer to use the treated water, availability of agriculture lands, availability of funds and feasibility of project at that time.</p> <p><b>4. STP JAMAPUR (225 MLD):</b> STP Jamalpur 225 MLD is being made with SBR technology with disc filter technology after the tertiary treatment. This STP is replacement of old STP of 48 MLD of UASB technology. Preliminary Survey of the STP was done and it was observed that STP is surrounded by industrial and residential area, it is very difficult to lay down the Underground Pipeline through that area.</p>		<p><b>STP RAIKOT (7 MLD):</b> 28.02.24 ( Project will be completed after 1 year of availability of funds)</p> <p><b>STP SAMRALA (4 MLD):</b> 31.05.23 (Project will be completed after 1 year of availability of funds)</p> <p><b>STP JAMAPUR (225 MLD Irrigation Project from STP is Not-Feasible due to following factors:</b></p> <ol style="list-style-type: none"> <li>1. The industries and residential areas are constructed in such a manner that it is not possible to lay underground pipeline from STP. The agriculture land is available around 6 km away from STP Jamalpur.</li> <li>2. Blind Pipeline of 6 Km will have to be laid to reach near the agriculture land. After that around 25 villages will be covered by this pipeline (command area approx.</li> </ol>
--	-------------	---	--	--

				<p>around 6428 Ha).</p> <p>3. To utilize the treated water optimally it is required to go against the natural gradient to cover the command area. There is need to construct minimum 2 numbers of sump well or reservoir from where the water is lifted for irrigation. For creation of sump well, land acquisition will be required, which will again affect the cost of the project.</p> <p>Keeping in the view all the above factors the tentative cost of the project of lying underground pipeline, operational &amp; maintenance cost will be very high.</p> <p>4. While taking the view point of usage of treated water by farmers that they will use this treated water only once or twice per crop in their fields. Hence, treated waste water generated on daily basis shall flow into Buddha Nallah again, so, this project seems to be not feasible if cost of project and its benefits are compared.</p>
41.	Provision of ETPs for 2 dairy complexes located at Tajpur Road and Haibowal, Ludhiana.	Work yet to Start	MCL & PWSSB	Time target : 31.03.2022

42.	Provision of Biogas Plant for 2 dairy complexes located at Tajpur Road and Haibowal, Ludhiana.	<ul style="list-style-type: none"> <li>The Biogas plant for Haibowal Dairy Complex already installed and in operation.</li> <li>The work for Tajpur Dairy Complex will be started after demarcation/signing of land lease agreement.</li> </ul>	PEDA	<p>Timeline :- Demarcation/signing of land lease agreement-31.12.2021</p> <p>Implementation : 30.06.2024</p>
43.	Installation, operation & maintenance of online continuous effluent monitoring system with flow meter as well as CCTV cameras for the existing STPs as well as new STPs to be installed.	<ul style="list-style-type: none"> <li>Total STP = 5</li> </ul> <p>OCEMS Provided = 10</p>	MCL, GLADA, PWSSB	<ul style="list-style-type: none"> <li>STP Balloke (105 MLD &amp; 152 MLD): Provided</li> <li>STP Bhattian (111 &amp; 50 MLD): Provided</li> <li>STP Machhiwara (4 MLD): 31.10.2021.</li> <li>STP Payal (1.5 MLD): Provided</li> <li>STP Maloudh (1.5 MLD): Provided</li> <li>STP Sahnewal (7 MLD): 31.10.2021</li> <li>STP Begowal, Doraha (1 MLD): Provided</li> <li>STP Jagraon (16 MLD &amp; 12 MLD): 31.10.2021</li> <li>STP Mullanpur (3 MLD): Provided</li> <li>STP Khanna (29 MLD): 31.10.2021</li> <li>STP Araicha, Doraha (2.75 MLD): Provided</li> <li>STP Rajgarh, Doraha (1 MLD): Provided.</li> </ul>
44.	Activity w.r.t. In-situ remediation technology to be provided in the drains	<p><b>MCL:-</b></p> <p>The work of rehabilitation of STPs under Project Rejuvenation of Budha Nalla of Ludhiana city has already started and is in progress so there is no need</p>	MCL, ADC(UD) and DDPO	<p><b>MCL</b></p> <p>STP Jamalpur, STP Balloke and rehabilitation of existing STP's of Ludhiana city Timeline = 01.12.2022</p>



	<p>carrying untreated sewage.</p>	<p>of installation of in-situ Bio- remediation technology and moreover it is not possible even as the discharge of Budha Nalla is very large.</p> <p><b>MC Raikot:-</b> Yet to prepared. Will be completed by 28.02.2022</p> <p><b>MC Samrala:-</b> STP Installation is under process and will be installed by 31.12.2021</p> <p><b>DDPO:-</b> The Ponds are being constructed in the villages to stop the untreated sewage in the drain. Total 38 villages have been identified out of which work has been completed in 03 villages, work is under process in 13 and work yet to be start in 22 villages.</p>		<p><b>MC Raikot:-</b> Yet to prepared. Will be completed by 28.02.2022</p> <p><b>MC Samrala:-</b> STP Installation is under process and will be installed by 31.12.2021</p> <p><b>DDPO</b></p> <ul style="list-style-type: none"> <li>• Funds have been received in 17 more villages and work in these villages will be completed by 31.03.2022.</li> <li>• Funds in the remaining 18 villages are yet to be allotted. Work will be completed within one year after the release of the funds.</li> </ul>
--	-----------------------------------	--	--	--

## 5. INDUSTRIAL WASTE WATER MANAGEMENT

### (a) Current Status related to Industrial Waste water Management

Number of Red, Orange, Green and White industries in the District	Red Category unit = 2396, Orange Category unit = 2026, Green Category unit = 706 and White Category unit = 21
No. of Industries discharging wastewater (generating trade effluent)	2269 i. No. of industries installed captive ETP = 616, ii. No. of industries joined CETP = 1228 iii. No. of industries joined Re-processor = 425
Status of Water Consent	<ul style="list-style-type: none"> <li>Regular activity</li> <li>Total no. of industries requiring consent to operate under Water Act, 1974 Red = 2376 Orange = 2427 Green = 1027</li> <li>Total no. of units having valid consent as on 31.08.2021 Red = 1791 Orange = 1592 Green = 496</li> <li>Timeline for grant of consents to the balance units not having valid consent. Red = 31.03.2022 Orange = 30.06.2022 Green = 30.09.2022</li> </ul>
Total Quantity of industrial wastewater generated	120 MLD
Quantity of treated industrial wastewater discharged into Nalas / Rivers	75 MLD
Common Effluent Treatment Facilities	Installed = 2 (CETP, Bhadurke road = 15 MLD & M/s JBR Technology, Focal point = 0.5 MLD) Under installation = 2 (CETP, Tajpur Road, Module = 50 MLD & CETP, Focal Point, Module = 40 MLD)
No. of Industries meeting Standards	It is a regular activity and PPCB is monitoring the industries including

	inspections and samplings. Around 10% units are randomly inspected per month.
No. of Industries not meeting discharge Standards	It is a regular activity and PPCB is monitoring the industries including inspections and samplings.

(b) 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	Necessary action is being taken against the industries not meeting the standards.	PPCB	Regular activity
2.	Complaint redressal system	Online compliant system already developed and web link is <a href="https://connect.punjab.gov.in/grievance/save">https://connect.punjab.gov.in/grievance/save</a>	PPCB	Activity complied
3.	CETP for cluster of Dyeing Industries of Ludhiana	Completed. 100 % work completed. 100 % work completed.	PPCB	<ul style="list-style-type: none"> <li>• CETP 15 MLD = Commissioned.</li> <li>• CETP 40 MLD = Installed</li> <li>• CETP 50 MLD = Installed</li> </ul>
4.	Shifting of small scale scattered dyeing units in Ludhiana	<ul style="list-style-type: none"> <li>• Various Industrial plots from time to time are put up on e-auction by PSIEC for shifting of Industry to 15 acre pocket Tajpur Road Ludhiana.</li> <li>• The small scale scattered dyeing units are being directed either to shift to CETP compatible area or to upgrade its ETP as per the ZLD technology. Further action is under process.</li> </ul>	PSIEC	Time Target: 31.10.2023 (Except the unit adopted the ZLD)

5.	Construction of Slaughter house and Caracass plant a. Modernization of existing slaughter house located at Ludhiana	<ul style="list-style-type: none"> <li>The work of slaughter house has been completed and is working.</li> </ul>	Municipal Corporation, Ludhiana	Work completed
	b. Rendering Plant	<ul style="list-style-type: none"> <li>Tenders already floated.</li> </ul>	MCL	Time Target: 31.12.2021
	c. Installation of Caracass utilization plant.	<ul style="list-style-type: none"> <li>The work has been completed.</li> </ul>	MCL	Time Target: 30.07.2021
6.	Installation of Online Continuous Monitoring System by		PPCB	
	1. CETP for electroplating units	Already installed and in operation.		Already installed
	2. CETP 50 MLD for dyeing cluster at Tajpur Road, Ludhiana	CETP under stabilization.	PPCB	31.03.2022
	3. CETP 40 MLD for dyeing cluster at Focal Point, Ludhiana	CETP under stabilization.	PPCB	31.03.2022
	4. CETP 15 MLD for dyeing cluster at Bahadurke Road, Ludhiana	Installed and in operation	PPCB	OCEMS installed
	5. 17 categories of industries.	OCEMS already installed.	PPCB	OCEMS installed
6.	6. Industries with discharge more than 50 KLD and not connected with any CETP.	<ul style="list-style-type: none"> <li>Total units required OCEMS =58</li> <li>OCEMS Installed =55</li> <li>OCEMS Not Installed =03</li> <li>Action taken=3.</li> </ul>	PPCB	31.03.2022
	<ul style="list-style-type: none"> <li>Sealing of closed boxes of OCEMS</li> </ul>	The sealing of the closed boxes of OCEMS has been started.		30.06.2022
7.	Installation of Electromagnetic flow meters at inlet and outlet of ETP.	The most of the industry have already installed the EMF meters. The rest of the unit will be directed to provide the same within this period.	PPCB	30.04.2022
8.	Inspection of units to check compliance	Inspection already being made	PPCB	Regular activity

## 6. MINING ACTIVITY MANAGEMENT PLAN

### (a) Current Status related to Mining Activity Management

Details of Data Requirement	Existing Mining operations
Type of Mining Activity	Sand Mining
No of licenced Mining operations in the District	12
% Area covered under mining in the District	0.024
Area of Sand Mining	0.9349 Sq Km
Area of sand Mining	River bed= 0.7425 Sq km Non –river deposit = 0.3867 Sq km

### (b) Identification of gaps and action plan:

S. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1.	Monitoring of Mining activity	A district level task team Already Constituted	Department of water resources	Regular activity
2.	Inventory of illegal mining if any mining	Regular surveillance, patrolling is being carried out to check the illegal mining.	Department of water resources	Regular activity
3.	Environment compliance by Mining industry	Regular surveillance, patrolling is being carried out to check the compliance.	Department of water resources	Regular activity
4.	Demarcation of boundaries for regulating grant of sand mining lease. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)	Demarcation of Mining lease has been carried out before granting the final approval to the contractor/leasee and the same has been checked on regular basis by concerned Revenue Department in presence of Mining Department by DGPS	Drainage Department	Regular Activity

		System.		
5.	Mining in all blocks is undertaken as per provisions of EIA Notification, 2006; MOEF Notification dated 15.1.2016 and the Sustainable Sand Mining Management Guidelines, 2016. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)	i. As per the guidelines, there is provision for obtaining E.C before commencement of mining. ii. According to the SSMMG, 2016 issued by MOEF&CC, mining work is restricted from riverbed during the monsoon season. (Thus in the month of July, August and September in the State.)	Drainage Department	Regular activity
6.	No sand mining is permitted without due compliance of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 as well as regulations governing clearances by the Central Ground Water Authority. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)	The conditions mentioned in the Environmental Cleanliness Certificate issued by the State Level Environment Impact Authority (SEIAA), are being followed. No Mining operations in the leveled riverbed shall be carried out beyond the depth of 3 meters or water level whichever is less/lower.	Drainage Department	Regular activity
7.	District authorities shall seize all sump pumps, other machinery, tools, vehicles, etc. used for carrying out illegal sand mining. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)	Machinery/vehicles/tools/sumps-pumps found on illegal mining spot is being seized by the Concerned Authorities and handed over to the Police Administration.	Drainage Department	Regular activity
8.	Any penalty imposed or not by concerned Department to cover the restoration cost of environment and to compensate the victims. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)	While examine the illegal mining spot penalty imposed by the concern department by following the proper guidelines laid by Govt./Hon'ble NGT from the land owners and the Machinery owners.	Drainage Department	Regular activity
9.	Status of a detailed restoration plan for the concerned river and its river beds. (Directions of Hon'ble NGT in OA no.	Mining work is being done on basis of approved mining scheme by including the restoration plan in the mining plan which is	Drainage Department	Regular Activity

	360/2015 dated 26.02.2021)	recommended by Concerned Mining Officer & approved by State Geologist, Pb.		
10.	Status of CCTV Cameras installation at mining points to verify the amount of sand extracted. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)	CCTV cameras has been installed at mining points and integrated with Govt. Web-Portal.	Drainage Department	Installed
11.	Status of regular patrolling by the police to inspect the mining operations. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)	Police patrolling is being done on regular basis.	Police Department	Regular activity
12.	Status of daily reports regarding mining to be filed by SHO/ Mining officer to be sent to District Magistrate. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)	Regular checking's and inspections are conducting for prevention of illegal mining activity in District by the Special Flying squads time to time and when required & for daily patrolling/checking and regular checking's the report has been sent to DC/DM/DMO.	Police Department & Drainage Department	Being followed.
13.	Status of vehicles confiscation. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)	In Compliance of the Rules and Guidelines laid down by State Govt. & Hon'ble NGT Total 451 FIR's has been lodged under the jurisdiction of District Ludhiana and total 655 No's Vehicles has been impounded by the Concerned Officials during the period of 01/2018 to 06/2021	Police Department & Drainage Department	Regular activity.
14.	Status of setting up of dedicated institutional mechanism for monitoring of conditions of Environmental Clearance as granted under EIA Notification, 2006 in respect of sand and gravel mining. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)	The process for establishment of Monitoring System in the State by the Head Office, Water Resources Department, Pb. Chandigarh is under process, Publication for tender has been done the Head Office.	Drainage Department	Tender has been done, time of completion 31.10.2023.

15.	Necessary steps to be taken by District Administration for the effective monitoring mechanisms for preventive and remedial measures including surveillance system for recovery of compensation. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)	District Administration has constituted Flying Squad Teams for regular checking's and inspections for proper monitoring the illegal mining activity in District & Night Duty Roaster of Diff. Department Official's has been prepared for Night time Inspection has been prepared on monthly basis by District Administration (Ludhiana) Moreover, The process for establishment of Monitoring System in the State by the Head Office, Water Resources Department, Pb. Chandigarh.	Drainage Department	Regular activity
16.	Electronic surveillance through UAVs/Remote Sensing is a good surveillance option especially in areas where sand mafias are active. Night vision drones could be used for checking mining activity at night. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)	The process for establishment of Monitoring System (Electronic Surveillance through UAVs/Remote Sensing) in the State by the Head Office, Water Resources Department, Pb. Chandigarh is under process, Publication for tender has been done the Head Office.	Drainage Department	Tender has been done, time of completion 31.10.2023.
17.	Sensitive spots need to be identified and police presence- both static presence and dynamic patrolling needs to be beefed up there. DMs / SSPs be made directly responsible for checking illegal mining. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)	Police presence- both static presence and dynamic patrolling is being done on sensitive spots.	Police Department	Regular Activity
18.	Storage Godowns should be at least 5 kms away from the river bank. Otherwise, illegal mining can be carried on under the garb of storage by the leaseholder himself. (Directions of Hon'ble NGT in OA no. 360/2015 dated	The storage godowns/ stock yards established outside the river bank and maximum storage godowns more than 5kms from the pit site, after proper demarcation and assessment of the minor mineral with the help of revenue	Drainage Department	Regular Activity



	26.02.2021)	department, pillaring/ fencing of the storage/stock yard is done on site and enteries of that storage/stock is entered in Govt. Portal. However, during the upcoming moonsoon season more effective measures will be taken up for compliance of this guideline.		
19.	Geo-fencing of sites, their physical demarcation, allotment of geo-coordinates to all the pillars and their constant physical inspection and electronic surveillance is a must to ensure that the mining activity is as per the approved mining plan and no illegal mining, detrimental to environment, is going on. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)	Demarcation of Mining lease has been carried out before granting the final approval to the contractor/leasee and the same has been checked on regular basis by concerned Revenue Department in presence of Mining and pillaring is carried out on siteto ensure that mining activity is as per the approved mine plan.	Drainage Department	Completed
20.	There has to be a mechanism to ensure that the actual mining activity conforms to the approved Mining Plan and the approved Environment Management Plan (EMP). Besides the statutory system of Departmental inspections, there has to be a system of annual mandatory Environmental Audit by experts. Environment Department can empanel some experts/expert institutions with standard TORs and Remuneration terms which could be utilized by the Mines Department on a regular basis. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)	In state of Punjab, a Govt. Web Portal has been introduced for the transparent function of extraction/ transportation/ sale of minor mineral. In which the record of extraction is maintained and a team of experts audits this system annually. To bring the transparency in system, each weightment slip provided to the transportor, contains a QR Code & can be scanned by any smartphone available in market, to get the desired information of the minor mineral.	Drainage Department	Regular Activity
21.	There has to be an effective	At present stage no such problem or	Drainage Department	31.12.2021

	<p>mechanism for restoration of environment in case of its degradation due to mining. A portion of the royalty could be reserved for it as Environment Restoration Fund. The Environment Department can empanel some reputed institutions with standard terms for preparing environmental restoration plans which could be used directly by the Mining Department without the arduous formalities. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)</p>	<p>situation occurs in District Ludhiana &amp; during the mining activity in Agricultural/non riverbed mine area, the plantation is being carried out in the land under the mine lease if it belong to the state/central Govt., &amp; where-ever the land belongs to the private land owners the crops/farming is being done by the owners, so that the land with sandy strata is converted into the fertile land by removing the sand in such land.</p>		
22.	<p>States/UTs to strictly follow the SSMG-2016 read with EMGSM-2020 reinforced by mechanism for preparation of DSRs. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)</p>	<p>The DSR of District Ludhiana is approved by the DC, Ludhiana vide letter no. 4949/DRA dated 15.10.2020 after preparing the revised DSR by the Mining Department and uploading the same on the website of District Ludhiana. During the action against illegal mining activity, if any type of vehicle (Tractor Trolley/Truck/Tipper/JCB/Poclaim/other vehicle) got impounded/seized during the action, after the proper legal procedure taken by the concerned department the such vehicle is released.</p>	Drainage Department	Regular Activity
23.	<p>Annual reports on the subject and such annual reports may be furnished to MoEF &amp; CC by 30th April every year giving status till 31st March. First such report as on 31.03.2022 may be filed with the MoEF&amp;CC by all the States/UTs on or before 30.04.2022. (Directions of Hon'ble NGT in OA no. 360/2015 dated 26.02.2021)</p>	<p>Needful will be done.</p>	Drainage Department	30.04.2022

## 7. NOISE POLLUTION MANAGEMENT PLAN

### (a) Current Status related to Noise Pollution Management

Details of Data Requirement	Measurable Outcome
No. of noise measuring devices available with various agencies in district	Name of agency = Police and PPCB Nos. of analyzers required = 122 Nos. of analyzers available = 05 Timeline to arrange balance noise analyzers = 117 (By Police Department i.e. one meter to each SHO)

### (b) Identification of gaps and action plan:

S. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1.	Availability of Sound/Noise Level Meters.	<ul style="list-style-type: none"> <li>Nos. of analyzers required = 122</li> <li>Nos. of analyzers available = 05</li> <li>Timeline to arrange balance noise analyzers = 117 (By Police Department i.e. one meter to each SHO)</li> </ul>	PPCB and Police Department	30.06.2022
2.	Ambient Noise Level monitoring	4 nos. ambient noise level monitoring stations are to be installed	PPCB	31.12.2022
3.	Signboards in Noise zones	Sign boards are installed at sensitive zones. More sign board will be installed	ULBs	30.04.2022
4.	Complaint redressing system	Public complaint redressal system already established in the district and web link is <a href="https://connect.punjab.gov.in/grievance/save">https://connect.punjab.gov.in/grievance/save</a>	District Administration, Police Department and PPCB	30.04.2022
5.	Checking of pressure horn of vehicles	Regular checking of vehicle is being done by the police department and same activity will be continued.	Police Department.	Regular activity. The checking will be done twice in a month.

## List of Nodal Officers (Annexure-X)

### List of the Nodal Officers of the stakeholder Departments

Sr no.	Name of the Department	Nodel Officer Name	Designation	Mobile no.	Email Id
1.	Municipal Corporation, Ludhiana	Sh. Aaditya Dachalwal, IAS	Additional Commissioner Municipal Corporation, Ludhiana	82871-48034	commissionermcl@gmail.com
2.	GLADA, Ludhiana	Sh. Sandeep Kumar	Executive Engineer	88728-46668	gladaldh@yahoo.com
3.	The Additional Commissioner (Urban Development), Ludhiana	Sh. Radesh Kalra	Joint Deputy Director	97800-21226	adcudldh@gmail.com
4.	Punjab Pollution Control Board	Sh. G.S Gill	SEE,ZO-2	98789-50533	seezo2ppcbldh@yahoo.com
5.	Regional Transport Authority, Ludhiana	Sh. Mohamad Arif	Section officer	99887-14115	dtoludhiana10@gmail.com
6.	Police Deptt.	Sh. Raj Kumar,PPS	ACP BI/NDPS	98158-00458	cp.ldh.police@punjab.gov.in
7.	Punjab Energy Development Agency (PEDA)	Sh. Suresh Kumar Goyel	Joint Director	94174-94900	dm.ludhiana@peda.gov.in
8.	Distt. Development and Panchayat Officer, Ludhiana(DDPO)	Sh. Avtar Singh	Xen(PR)	98140-56538	ddpoludhiana@gmail.com
9.	District Soil Conservation	Shmt. Nidhi Batta	SDSCO	9855729486	dsc0.dswc.ludhiana@punjab.gov.in

	Officer, Department of Soil & Water Conservation, Ludhiana				
10.	Superintending Engineer, Punjab Water Supply & Sewerage Board, Ludhiana	Sh. Gurpreet Singh, Talwandi	SDO	82830-11782	eepwssdivn2ldh@gmail.com
11.	PWD (B&R), Ludhiana	Sh. Adesh Gupta	Executive Engineer	98784-91700	se.cc.pwdldh@gmail.com
12.	Department of Water Resources & Drainage, Ludhiana	Sh. Harjot Singh Walia Sh. Jagpreet Singh	Exen SDO	97800-92500 76961-81682	xensidhwancanal@gmail.com
13.	Agriculture Department, Ludhiana	Sh. Amanpreet Ghai	Assistant Agriculture, Engineer	9876800780	caoludhiana2016@gmail.com
14.	Forest Department, Ludhiana	Sh. Kamalpreet Singh	Deputy Ranger	94630-75052	ludhianadfo@gmail.com
15.	PSIEC, Ludhiana	Sh. Amanpreet Singh,	SDO	95019-00672	psiec_chd@yahoo.com
16.	District Food & Civil Supply Officer, DFSC, Ludhiana	Sh. Navneet Kaur	AFSO(S),	78890-58297	supplyldh1@gmail.com
17.	Education Department	DR. Charanjit Singh	DEO(Sr.)	88722-00166	generalseludhiana@punjabeducation.gov.in
18.	Health Department	Dr. Raj Kumar	DIO	98556-87786	dmc.ludhiana@yahoo.in
19.	Animal Husbandry,	Dr. Gobinder Singh	Veterinary Officer, C.V.H. Kotli	9888286845	ddahludhiana@gmail.com

20.	Labour Department Ldh	Sh. Gurpreet Singh,	Labour Cum Conciliation Officer	9592341100	<a href="mailto:alc4ludhiana@gmail.com">alc4ludhiana@gmail.com</a>
21.	Director of Factories Ldh	Er.Duarka Dass	Deputy Director of Factories, Ludhiana	8283000249	<a href="mailto:ddfldh2@gmail.com">ddfldh2@gmail.com</a>