

DISTRICT ENVIRONMENT PLAN – PATIALA

**PATIALA
(Punjab)**



District Administration - Patiala

July, 2022

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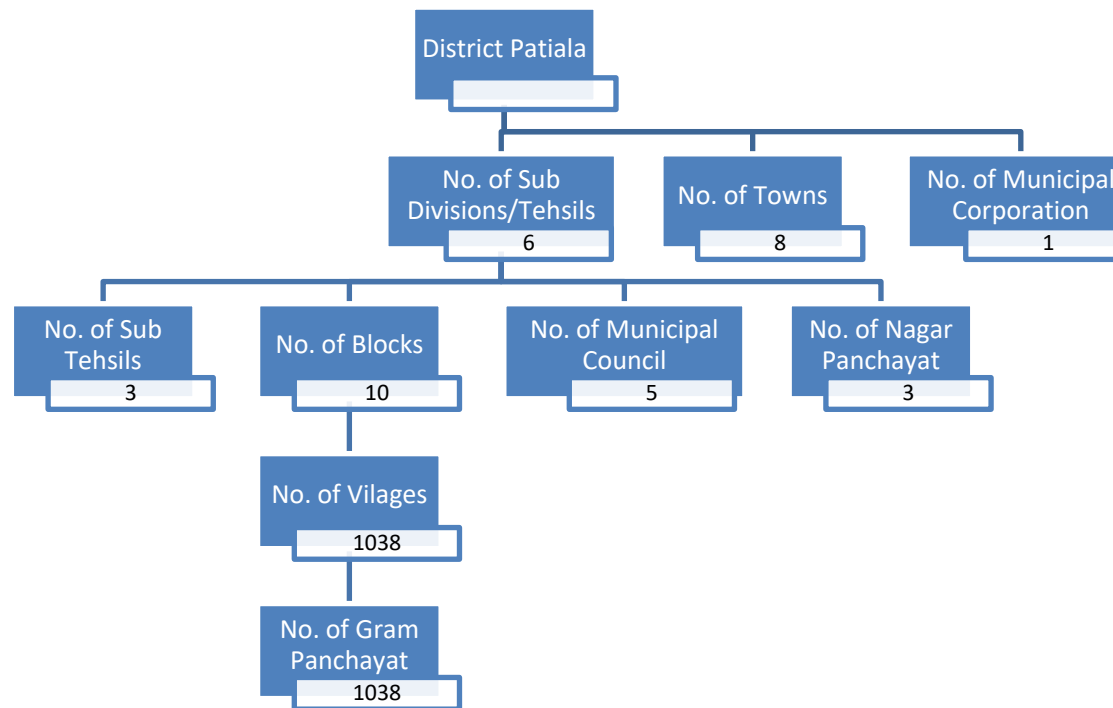
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1. DISTRICT PROFILE

Patiala district is one of the famous princely states of erstwhile Punjab. Forming the south-eastern part of the state, it lies between 29°49' and 30°47' north latitude, 75°58' and 76°54' east longitude. It is surrounded by the districts of Fatehgarh Sahib & Rupnagar and the Union Territory of Chandigarh in the north, Sangrur district in the west, Ambala and Kurukshetra districts of neighbouring state of Haryana in the east and Kaithal district of Haryana in the south. It is important city located in Malwa region of South Eastern part of Punjab. The city is well connected by roads and is located at a distance of about 75 km towards southwest from Chandigarh. It lies 25 km away from the Grand Trunk Road (i.e. National Highway-1) and is about 250 km from National Capital Delhi.

(i) District Administrative Set-up



(ii) Local Institutions

In District Patiala, there are total 6 Sub-Divisions/Tehsils, 8 towns & 01 Municipal Corporation. There are 3 Sub-Tehsil, 10 Blocks, 05 Municipal Council and 3 Nagar Panchayat. There are total 1038 Villages in the District & have 1038 Gram Panchayats.

(iii) Natural Resources

Water bodies

- **River Ghaggar**

River Ghaggar is passing through Patiala District. River Ghaggar originates from Sirmour Hills in Himachal Pradesh, flows through the Morni Hills in Haryana. Enters into the State of Punjab near Village Mubarakpur, Distt.Mohali. After passing through District Mohali, District Patiala and District Sangrur, it passes through State of Haryana and then enters into District Mansa of Punjab. The river Ghaggar and the drains, meeting with river, are non-perennial and carry surface run off from fields filling in their catchment area during rainy season. However, sewage / sullage of some of the cities, towns and village situated along the river Ghaggar and other drains is also discharged into the river directly or indirectly through drains/choe etc.

The River Ghaggar enters the District Patiala near Chatbir Zoo passing through the part of Rajpura, Shamboo, Ghanaur, Devigarh, Samana, Patran and leaves the District Patiala near Khanauri. The main drains meeting with River Ghaggar in District Patiala are Pachisdara drain near village Sarala, Mirapur Choe near Village Bhunerheri, Patiala Nadi near Village Rattanheri and Sagarpara drain near Village Sagra.

The details of the major drains passing through District Patiala and meeting with River Ghaggar are as under:-

- **Paschisdara Drain**

This drain is coming from District Mohali enters in District Patiala near Dhakansu and meets with River Ghaggar near Village Sarala Khurdat the coordinates 30.305197 and 76.627918. The outlet of STP Rajpura (7 MLD) falls into this drain at Rajpura - Ambala Road before meeting with river Ghaggar.

- **Patiala Nadi**

This nadi originates in District Fatehgarh Sahib near Balongi, Mohali, where, it is known as Patiala-Ki-Rao. The sewage/ sullage of village Bras, Cholti Kheri, Chawla Hotel, Behlolpur, Panjoli Khurd, Panjoli Kalan, Panjola, Mullanpur, Behtana, Jhinjra, Jago falls in Patiala-Ki-Rao. However, the quantity of sewage/ sullage of these villages is quite less and the Nadi is almost dry when it passes on the backside of Focal Point, Patiala. It has 2 no. outlets of Urban Estate, Patiala at the crossing of Patiala-Rajpura Road followed by outlet discharging untreated sewage of Sanaur. The Choti Nadi which carries untreated sewage of residential areas of Patiala joins Patiala Nadi behind Moti Mahal area.

- **Sirhind Choe**

This drain enters in Patiala from Distt. Fatehgarh Sahib and the Nabha drain, which carries sewage / sullage of Nabha & Bhadson Town and MES, Nabha falls in this drain in District Sangrur.

- **Sagarpara Drain**

This drain enters in District Patiala from Haryana and meets with Ghaggar near Village Sagra (29.8975741, 76.169735). No wastewater of District Patiala discharges in the said drain and the drain carries wastewater of Haryana State.

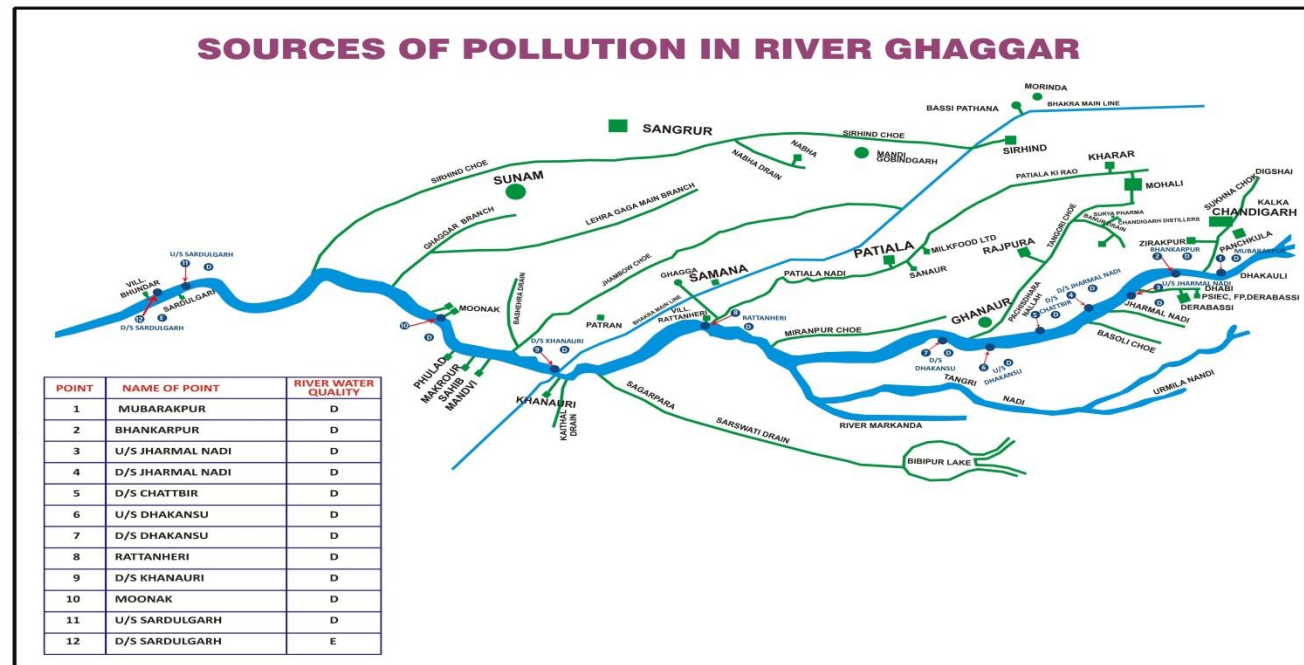
- **Other drains**

✓ A drain passing through Patiala city and carrying untreated sewage of the city passes through the Village Main area, where it is called Jacob drain. In Jacob drain, there are outlets of the sewage/ sullage of Bir Colony, village Shermajra, Khusropur Basti and treated sewage from STP of 46 MTD capacity before Village Main. In Jacob drain, the sewage/ sullage of Vill. Main, Vill. Daroula & Darouli is also being discharged. This Jacob drain joins Patiala Nadi at Village Dharouli. Patiala Nadi carrying all these effluents joins river Ghaggar near Village Rattanheri (30.078934, 76.243909).

- ✓ A drain called Model Town drain carrying sewage/ sullage of Village Hassanpur, Seona, Ranjit Nagar (Village Seona), Kabir Dass Nagar, Ranjit Nagar (Bhadson Road), Sarabha Nagar (2 no. outlets) Vill. Ablawal, Babu Singh Colony, Yadwindra Enclave, Village Dhamomajra (2 no. outlets), Mallomajra, Bhakra Enclave (Sangrur Road), Hajimajra joins jacob drain near Vill. Main.

The identification of various pollution sources of pollution including sullage/sewage of villages, sewage of towns, industrial sources and any other source and mapping of the pollution source in River Ghaggar was carried out by Punjab Pollution Control Board.

The map of River Ghaggar showing the water quality at various points. The water quality of river Ghaggar at the entry point in District Patiala at Chatbir as well as leaving District Patiala at Khanauri is D, which means the water qualifies for best use for propagation for wildlife and fisheries as per criteria prescribed by CPCB.



- **Availability of water resources**

The major source is ground water. However as per CGWA report, the ground water development in 5 blocks of the District has been categorized as over exploited and 3 blocks i.e. Patran, Sanaur & Patiala has been categorized as notified block. The net annual ground water availability of District is 137193ham.

- **Forest coverage**

The Detail of Forest area of District Patiala is as under:

Sr. no.	Category of area	Ownership	Area in Ha
1.	Protected Forest	Govt., of Punjab	2287.73
2.	Un-classed Forest	Govt., of Punjab	294.22
3.	Reserve Forests	NIL	NIL
Total Block Forest			2581.95
Strips Forest (Protected Forest)			
4.	Road Strips (P.F)	Govt., of Punjab	3864.49
5.	Railway Strips (P.F)	Govt., of Punjab	510.6
6.	Canal Strips (P.F.)	Govt. of Punjab	3286.91
7.	Drain (P.F.)	Govt. of Punjab	810.85
Total Strips Forest (Protected Forest)			8472.85
Total Forest Area			11054.8

(iv) Geography & Demography

Sr. No.	Title	District Patiala	Punjab State
1)	Area (Sq Km)	3,222	50,362
2)	Population (in Lakh)	18.96	277.04

Sr. No.	Title	District Patiala	Punjab State
3)	Rural Population (in Lakh)	10.57	173.2
4)	Urban Population (In Lakh)	7.5	103.84
5)	% Increase in Population (2001-2011) Decinneeal Growth rate	19.6	13.55
6)	Density of Population (per Sq km)	589	550
7)	Literacy %	75.3	76.7
8)	Sex Ration (Females per thousand)	891	893

The total area of District Patiala is 3222 km having population 18.96 lakhs. The rural population of District Patiala is 10.57 lakh and urban population of District Patiala is 7.75 Lakh. The literacy rate of District Patiala is 75.3.

(v) Land-use pattern

Sr. No.	Title	Data of District Patiala (2020-21)
1)	Total Geographical Area (in Ha)	322299
2)	Area under Forest (in Ha)	12414
3)	Net Area Sown (In Ha)	2,57,893
4)	Gross Cropped Area (in Ha)	5,13,789
5)	Total Area irrigated (in Ha)	2,57,425
6)	% of Net Area irrigated to Total area sown	99.81%

The total Geographical Area of District Patiala is 322299 km. The Net area sown is 2,57,893 hectare & irrigated is 2,57,425 hectare. The gross cropped area is 5,13,789 of District Patiala as per financial year 2020-21. The total reserved forest area of district Patiala is Nil.

(vi) Climate

Patiala's climate is classified as warm and temperate. In winter, there is much less rainfall than in summer. This climate is considered to be Cwa according to the Köppen-Geiger climate classification. The average annual temperature is 23.7 °C | 74.6 °F in Patiala. In a year, the rainfall is 934 mm | 36.8 inch. The yearly data of climate of district Patiala is as under:-

	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature °C (°F)	12.2 °C (54) °F	15.5 °C (59.9) °F	21 °C (69.8) °F	27.8 °C (82) °F	31.8 °C (89.2) °F	32.2 °C (90) °F	29.5 °C (85) °F	28.3 °C (83) °F	27.2 °C (81) °F	24.5 °C (76.1) °F	19.5 °C (67.1) °F	14.2 °C (57.6) °F
Min. Temperature °C (°F)	7 °C (44.5) °F	9.6 °C (49.3) °F	14 °C (57.2) °F	19.6 °C (67.4) °F	23.9 °C (75) °F	26.3 °C (79.3) °F	26 °C (78.7) °F	25.3 °C (77.5) °F	23.1 °C (73.6) °F	18.1 °C (64.6) °F	13.1 °C (55.7) °F	8.4 °C (47.1) °F
Max. Temperature °C (°F)	18.3 °C (65) °F	21.8 °C (71.2) °F	28.1 °C (82.6) °F	35.5 °C (95.9) °F	39.1 °C (102.4) °F	37.9 °C (100.3) °F	33.5 °C (92.2) °F	32.1 °C (89.8) °F	31.8 °C (89.2) °F	31.3 °C (88.3) °F	26.7 °C (80) °F	21 °C (69.8) °F
Precipitation / Rainfall mm (in)	43 (1.7)	58 (2.3)	46 (1.8)	28 (1.1)	33 (1.3)	95 (3.7)	240 (9.4)	228 (9)	117 (4.6)	22 (0.9)	6 (0.2)	18 (0.7)
Humidity(%)	76%	68%	54%	32%	32%	48%	76%	82%	77%	58%	57%	68%
Rainy days (d)	3	4	4	4	6	9	17	17	9	2	1	1
avg. Sun hours (hours)	7.5	9.2	10.5	11.5	12.2	11.7	9.8	9.5	9.5	10.1	9.4	8.3

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	Patiala (M Corp)	60	97918	495146	135
2	Rajpura (MC)	31	23600	120000	26
3	Nabha (MC)	23	13624	73112	18
4	Samana (MC)	21	13016	65000	13
5	Patran (MC)	17	5857	32200	7
6	Sanaur (MC)	15	5200	30000	5
7	Ghagga (NP)	13	1908	10162	2
8	Ghanaur (NP)	11	1500	6987	0.7
9	Bhadson (NP)	11	1480	7260	1
	Total	202	164103	839867	207.7

Sr. No.	Local Bodies	No of Village Panchayats /Blocks	No of Households	Population	Solid Waste Generated per day (MT)
1	No of Villages Panchayats	1022/ 10	241661	1208308	332

(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
1	Segregation				
I.	Municipal Corporation Patiala	95 % segregation achieved	To obtain 100% waste Segregation, renewed behavioral	Hari Bhari	31.12.2022

			change / IEC activities shall be carried out intensively among these households to ensure waste segregation at source.	Recyclable Pvt Ltd Patiala	
II.	Municipal Council Rajpura	80 % segregation achieved.	Required infrastructure has put in place. Only intense door to door awareness regarding source segregation and home composting is being done to achieve target.	EO Rajpura	31.12.2022
III.	Municipal Council Nabha	72% segregation achieved	Processing facility is located far away from one major part of city, which led to non-sustaining of source segregation. MC Nabha has processed tender to purchase 6 e-tippers and 3 TATA Ace to overcome this problem. Further, a mechanical composter has already purchased to achieve the target within timelines.	EO Nabha	31.03.2023
IV.	Municipal Council Samana	70 % segregation achieved	As Main Dump site is far from some of the ward and waste collected by the Rickshaw Rehri could not reach at dumpsite properly. Though more MRF & Compost Pits are being planned in such wards. Automobile four wheelers are also required to cover the gap. Besides that Public is being sensitized to give segregated waste to the	EO Samana	31.12.2022

			collector.		
V.	Municipal Council Patran	95 % segregation achieved	Composter has been made operational, 62 Rickshaw and 4 Tata Ace are put in place. Infrastructure is available for segregation. Door to door awareness & regular follow up is going on.	EO Patran	31.08.2022
VI.	Municipal Council Sanaur	95 % segregation achieved	Planning for decentralization of wet waste management and MRF Shed is being prepared to achieve 100% target.	EO Sanour	31.10.2022
VII.	Nagar Panchayat Ghagga	95 % segregation achieved	Infrastructure available door to door awareness & regular follow up is going on.	EO Ghagga	31.08.2022
VIII.	Nagar Panchayat Ghanaur	100% segregation achieved	Activity completed	EO Ghanaur	Activity Completed
IX.	Nagar Panchayat Bhadson	100 % segregation achieved	Activity completed	EO Bhadson	Activity Completed
X.	Villages Panchayat (1022)	100 % segregation achieved in 23 panchayats. There is no segregation being done in rest 999 panchayats.	Plan has been prepared.	DDPO	Implementation By 31.12.2027 By 31.12.22 = 82 GPs By 31.12.23 = 150 GPs By 31.12.24 = 175 GPs By 31.12.25 = 185 GPs By 31.12.26 = 198 GPs By 31.12.27 = 209 GPs
2	Sweeping				
(i)	Manual Sweeping				

I.	Municipal Corporation Patiala	100% sweeping being done by 954 sweepers	Proper checking & ensuring the compliance to prevent any lapse.	MCP	Regular Activity and is being complied with.
II.	Municipal Council Rajpura	100% sweeping being done, no gap	Daily sweeping	EO Rajpura	Regular Activity and is being complied with.
III.	Municipal Council Nabha	100% sweeping being done, no gap	Daily sweeping	EO Nabha	Regular Activity and is being complied with.
IV.	Municipal Council Samana	100% sweeping being done, no gap	Daily sweeping	EO Samana	Regular Activity and is being complied with.
V.	Municipal Council Patran	100% sweeping being done, no gap	Daily sweeping	EO Patran	Regular Activity and is being complied with.
VI.	Municipal Council Sanaur	100% sweeping being done, no gap	Daily sweeping	EO Sanour	Regular Activity and is being complied with.
VII.	Nagar Panchayat Ghagga	100% sweeping being done, no gap	Daily sweeping	EO Ghagga	Regular Activity and is being complied with.
VIII.	Nagar Panchayat Ghanaur	100% sweeping being done, no gap	Daily sweeping	EO Ghanour	Regular Activity and is being complied with.
IX.	Nagar Panchayat Bhadson	100% sweeping being done, no gap	Daily sweeping	EO Bhadson	Regular Activity and is being complied with.
X.	Villages Panchayat (1022)	100% sweeping being done in all panchayats.	Sweeping On regular basis	DDPO	Regular Activity and is being complied with.
(ii)	Mechanical Road Sweeping and Collection				
(i)	MCP	2 Mechanical Sweeping Machines required.	Tender has been called likely to be finalised before 15-08-2022	MCP	15-08-2022
(ii)	M.C. Rajpura	Already operating mechanical sweeping machine. No extra machine is required. Hence, No gap.	Daily Sweeping	EO Rajpura	Activity Completed.

Rest of the ULBs in District Patiala are small in size and manual sweeping is sufficient to control dust emissions generated from the roads, hence, no mechanical sweeper is required.

3	Waste Collection				
(i)	100% collection of solid waste	<p>Waste Collection in MCP and Municipal Councils/ Nagar Panchayats is 100 % i.e. no gap.</p> <p>100 % collection of solid waste has been achieved in 23 panchayats. There is no collection of solid waste being done in rest 999 panchayats.</p>	<p>At Present Door to door collection is being done by formal & informal Sector. 100 % waste collection is being done. Efforts are being made to keep the waste collection at 100 %.</p> <p>Plan has been prepared</p>	MCP and DDPO	<p>Regular Activity and is being complied with.</p> <p>Implementation by 31.12.2027</p> <p>By 31.12.22 = 82 GPs By 31.12.23 = 150 GPs By 31.12.24 = 175 GPs By 31.12.25 = 185 GPs By 31.12.26 = 198 GPs By 31.12.27 = 209 GPs</p>
(ii)	Arrangement for door to door collection	<ul style="list-style-type: none"> • MCP:- 200 Rickshaw Rehri, 20 Motorized vehicle and 270 waste pickers. • M.C. Rajpura: -270 Rickshaw Rehris, 7 tractors trollies have been placed for Door to Door Collection. -To ensure effective Door to Door segregated collection, 15 Tata Ace are to be purchased. • Municipal Council Nabha:- Sixty four Rickshaw Rehris 	<ul style="list-style-type: none"> • MCP:- For door to door collection the agreement with Hari Bhari Recyclable Pvt Ltd Patiala has already been made. • M.C. Rajpura:-To ensure effective Door to Door segregated collection, 15 Tata Ace are to be purchased. • Municipal Council Nabha: Activity Done Municipal Council Samana:- 40 wooden body rickshaw 	<ul style="list-style-type: none"> • MCP: Hari Bhari Recyclable Pvt Ltd Patiala. • EOs of respective ULBs DDPO 	<p>Regular Activity and is being complied with.</p> <p>MC Rajpura : Purchase of Tata Ace : 31.12.2022</p> <p>MC Nabha : Activity Completed MC Samana : Purchase of Tata Ace and wooden</p>

		<p>have been purchased, Apart from One ULB owned Tractor Trolley , 5 Tractor Trolleys are arranged on outsource basis. Apart from these , 3 Tata Ace has been also purchased</p> <ul style="list-style-type: none"> • Municipal Council Samana:- Twenty Two Rickshaw Rehris and 8 tata Ace have been put for Door to Door Collection and 40 wooden body rickshaw rehri and 4 Tata Ace are required to meet present demand. • Municipal Council Patran:- Sixty Two Rickshaw Rehris and 4 tata Ace have been purchased for Door to Door Collection. • Municipal Council, Sanaur:- At present 17 Rickshaw Rehri in working condition for D2D collection, funds for 15 New Rickshaw Rehri and 2 Tata Ace demanded from PMIDC Chandigarh for 	<p>rehri and 4 Tata Ace are required to meet present demand., MC Sanaur At present 17 Rickshaw Rehri in working condition for D2D collection, funds for 15 New Rickshaw Rehri and 2 Tata Ace demanded from PMIDC Chandigarh for 100% D2D and SS</p> <ul style="list-style-type: none"> • Rest of the ULBs have made sufficient arrangements for door to door collection. • Plan has been prepared 		<p>rickshaw rehri: 31.10.2022 MC Sanaur will purchased 15 more Rickshaw Rehri and 2 Tata Ace after receiving funds from PMIDC by 31.10.2022</p>
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		<p>100% D2D and SS.</p> <ul style="list-style-type: none"> • Nagar Panchayat Ghagga:- Thirteen Rickshaw Rehris and 1 tata Ace have been purchased for Door to Door Collection. • Nagar Panchayat Ghanaur:- Twelve Rickshaw Rehris have been purchased for Door to Door Collection. • Nagar Panchayat Bhadson:- Twelve Rickshaw Rehris , Two Tata ACE, have been purchased for Door to Door Collection. Thus, no gap in door to door collection for all the ULBs. • 100 % door to door collection of solid waste has been achieved in 23 panchayats. There is no door to door collection of solid waste being done in rest 999 panchayats. 			<p>Implementation by 31.12.2027 By 31.12.22 = 82 GPs By 31.12.23 = 150 GPs By 31.12.24 = 175 GPs By 31.12.25 = 185 GPs By 31.12.26 = 198 GPs By 31.12.27 = 209 GPs</p>
(iii)	Waste Collection trolleys with separate	<ul style="list-style-type: none"> • MCP : 4 tractor trolleys available with separate 	<ul style="list-style-type: none"> • Efforts are being made to keep on 100 % waste 	<ul style="list-style-type: none"> • MCP: EOs of 	Activity Completed

	Compartments	<p>compartments. No Gap</p> <ul style="list-style-type: none"> • MC Rajpura : Required 07 Available 07 • MC Nabha Required 06 Available 01 • NP Bhadson : Required 01 Available 01 • NP Ghagga : Required 01 Available 01 • NP Ghanaur : Required 0 Available 0 • MC Patran : Required 03 Available 03 • MC Samana : Required 05 Available 05 • MC Sanaur : Trolley- Required 02 Available 02 • Tata Ace- Required-02 Available-0 • Waste Collection trolleys with separate Compartments are available in 23 panchayats. There is no Waste Collection trolleys with separate Compartments in rest 999 panchayats 	<p>collection.</p> <ul style="list-style-type: none"> • MC Sanaur- Micro plan is being prepared as per ADC (UD) Directions. To achieve 100% D2D and SS MC Sanaur planed for decentralization of wet waste management and MRF Shed. • Plan has been prepared 	<p>respective ULBs</p> <ul style="list-style-type: none"> • DDPO 	<p>Implementation by 31.12.2027</p> <p>By 31.12.22 = 82 GPs</p> <p>By 31.12.23 = 150 GPs</p> <p>By 31.12.24 = 175 GPs</p> <p>By 31.12.25 = 185 GPs</p> <p>By 31.12.26 = 198 GPs</p> <p>By 31.12.27 = 209 GPs</p>
(iv)	Mini Collection Trucks with separate compartments	<ul style="list-style-type: none"> • MCP : 5 Mini collection trucks available i.e. 3 for wet waste and 2 for dry 	<ul style="list-style-type: none"> • Mini Trucks are regularly being used for transportation of solid waste. 	<ul style="list-style-type: none"> • MCP: Zonta Infrate 	Activity completed

		<p>waste.</p> <ul style="list-style-type: none"> • MC Samana Required 12 Available 08 • Patran: Required 04 Available 04 • Ghagga Required 01 Available 01 • Bhadson: Required 02 Available 02 • MC/NP Rajpura, Ghanaur, and Nabha do not require Mini Trucks. • MC Sanaur required 2 Tata Ace • Not Required in any panchayat out of 1022 as all villages are small units 	<ul style="list-style-type: none"> • not Applicable 	<p>ch Pvt Ltd Patiala.</p> <ul style="list-style-type: none"> • EOs of respective ULBs • DDPO 	Activity Completed
(v)	Waste Deposition centers (WDC) (for domestic hazardous wastes)				
I.	Municipal Corporation Patiala	Required = 7 Installed = 7	At Present 7 centers are installed to collect domestic hazardous waste at 7 MRF centers. Proper checking & ensuring to prevent any lapse.	Hari Bhari Recyclable Pvt Ltd Patiala	Activity Completed
II.	Municipal Council Rajpura	Required = 1 Installed = 1	Waste deposition centre is operated efficiently.	EO Rajpura	Activity Completed
III.	Municipal Council Nabha	Required = 1 Installed = 1	Waste deposition centre is operated efficiently.	EO Nabha	Activity Completed
IV.	Municipal Council Samana	Required = 1 Installed = 1	Waste deposition centre is operated efficiently.	EO Samana	Activity Completed

V.	Municipal Council Patran	Required = 1 Installed = 1	Waste deposition centre is operated efficiently.	EO Patran	Activity Completed
VI.	Municipal Council Sanaur	Required = 1 Installed = 1	Waste deposition centre is operated efficiently.	EO Sanour	Activity Completed
VII.	Nagar Panchayat Ghagga	Required = 1 Installed = 1	Waste deposition centre is operated efficiently.	EO Ghagga	Activity Completed
VIII.	Nagar Panchayat Ghanaur	Required = 1 Installed = 1	There is Nominal Generation of Domestic Hazardus Waste at N.P Ghanaur. Approx upto 1.0 kg per month. A meeting between ULB and Nimbua was held at ADC office Patiala all ULBs requested the Nimbua authority to wave off the registration fee. At Present ULB Ghanaur on his own level select a site at Remedation site for disposal of Domestic Hazardus waste.	EO Ghanour	Activity Completed
IX.	Nagar Panchayat Bhadson	Required = 1 Installed = 1	Waste deposition centre is operated efficiently.	EO Bhadson	Activity Completed
X.	Villages Panchayat (1022)	Required=998 Installed=24	Action plan is yet to be prepared along-with solid Waste Management.	DDPO& XEN Panchaya ti Raj	Villages Panchayats (998) = Preparation of action plan 31.03.2023 Implementation by 31.03.2028 By 31.03.23 = 92 GPs By 31.03.24 = 145 GPs By 31.03.25 = 169 GPs By 31.03.26 =185 GPs By 31.03.27 =198 GPs

						By 31.03.28 = 209 GPs
4	Waste Transport					
(i)	Review existing infrastructure	<ul style="list-style-type: none"> • MCP- 3 tippers, 2 hook loaders= 5 , 200 rickshaw rehri, 20 tempus are available for transport and these vehicles are sufficient as per requirement. Hence there is no gap between requirement and availability. • Bhadson Required Vehicles: 15 Available vehicles: 15. • Rajpura: Required Vehicles: 150 Available 150. • Nabha Required Vehicles: 79 Available 79. • Samana : Required Vehicles: 62 Available vehicles: 22. • Patran: Required Vehicles: 47 Available vehicles: 47. • Sanaur: Required Vehicles: 37 Available vehicles: 20. 	<ul style="list-style-type: none"> • MC Rajpura: To ensure effective Door to Door segregated/collection, 150 Rickshaw Rehri to be purchased. • MC Nabha:- Activity Completed • MC Samana:- Many of the existing Rehri have wear and teared as become very old. • MC Sanaur At present 17 Rikshaw Rehri and 2 Tractor Trolley in working condition for D2D collection, funds for 15 New Rikshaw Rehri and 2 Tata Ace demanded from PMIDC Chandigarh for 100% D2D and SS 	<ul style="list-style-type: none"> • MCP – Zonta Infratech Private Limited Patiala • EOs of respective ULBs • DDPO 	<ul style="list-style-type: none"> • MC Rajpura – 31.10.2022 • MC Nabha – Activity Done • MC Samana- 31.10.2022 MC Sanaur will purchased 15 more Rikshaw Rehri and 2 Tata Ace after receiving funds from PMIDC by 31.10.2022 	

		<ul style="list-style-type: none"> • Ghagga: Required Vehicles: 15 Available vehicles: 15. • Ghanaur: Required Vehicles: 12 Available vehicles: 12. • At present there are manual trollyes in 23 panchayats out of 1022 panchayats. 			
(ii)	Bulk Waste Trucks	<p>MCP:- 3 tippers, 2 hook loaders= 5 available for transport.</p> <p>No Gap</p> <p>All the other ULBs do not require bulk waste truck</p> <p>Not required as all 1022 panchayats are small units</p>	<p>To ensure optimum utilization of bulk waste trucks.</p> <p>NA</p>	<ul style="list-style-type: none"> • MCP – Zonta Infratech Private Limited Patiala • EOs of respective ULBs • DDPO 	Activity Completed
(iii)	Waste Transfer points	<ul style="list-style-type: none"> • MCP: 37 semi underground bin sites used as waste transfer points. 	<ul style="list-style-type: none"> • MCP: 40 Bins to be Procured for 12 more sites, which are being identified. • Efforts are being made at 	<ul style="list-style-type: none"> • MCP 	<p>MCP:- 31.10.2022</p>

		<ul style="list-style-type: none"> • 5 are compactor sites • 12 semi underground sites are being identified for 40 more bins. Walls around them will also not be required since they will be underground sites. ✓ MC Rajpura: 0 ✓ MC Nabha: 7 ✓ MC Patran: 01 ✓ MC Samana: 0 ✓ MC Sanaur: 2 ✓ MC Ghagga:0 ✓ MC Bhadson:0 ✓ NP Ghanaur: 0 	Nabha, Patran, Samana & 2 GVP exist at Sanour to transfer the waste directly to the MRF/Wet Waste site and bio-remediation sites.	<ul style="list-style-type: none"> • EOs of respective ULBs. 	<p>MC Nabha: 31.12.2022 MC Sanaur will remove 2 GPVs by 31.10.2022.</p>
5	Waste Treatment and Disposal				
(i)	Wet-waste Management: On-site composting by bulk waste generators (Authority may decide on requirement as per Rules).	<ul style="list-style-type: none"> • MCP: 15 BWG are identified and all are doing on site composting. • MC Rajpura BWGs identified 12 & onsite composting 12 • Bhadson: identified 01 & onsite composting 01 • Patran: : identified 01 & onsite composting 01 • Samana: : identified 09 & onsite composting 09 • Sanaur: : identified 07 & 	• MC Nabha is pursuing the generators for compliance.	<ul style="list-style-type: none"> • MCP • EOs of respective ULBs • DDPO 	<ul style="list-style-type: none"> • MC Patiala and Other ULBs :- Regular Activity

		<p>onsite composting 07 Nabha : identified 05 & onsite composting 05</p> <ul style="list-style-type: none"> • Ghanaur identified 01 & onsite composting 01 • No BWG identified at Ghagga • wet waste is deposited in composts pits and dry waste like plastic, polythenes etc are sold to local vendors in 23 panchayats. 	action plan has been prepared		<p>Implementation by 31.03.2028</p> <p>By 31.03.23 = 82 GPs By 31.03.24 = 150 GPs By 31.03.25 = 175 GPs By 31.03.26 = 185 GPs By 31.03.27 = 198 GPs By 31.03.28 = 209 GPs</p>
(ii)	Wet-waste Management: Facilities for central Bio-methanation/ Composting of wets waste.				
I.	Municipal Corporation Patiala	510 Compost pits constructed. functional and adequate.	Efficient operation of the compost pits is being ensured.	MCP	Activity completed
II.	Municipal Council Rajpura	150 Compost pits provided. functional and adequate	Efficient operation of the compost pits is being ensured.	EO Rajpura	Activity Completed
III.	Municipal Council Nabha	78 Compost Pits Provided functional and One mechanical composter is placed .	Efficient operation of the compost pits and Mechanical Composter is being ensured.	EO Nabha	Activity Completed
IV.	Municipal Council Samana	65 Compost pits Constructed but about 10 pits has been destroyed which shall be constructed on other suitable places already traced, So,	Efficient operation of the compost pits is being ensured.	EO Samana	Activity Completed

		now 52 pits are functional and nearly adequate.			
V.	Municipal Council Patran	10 Compost pits provided and One mechanical composter is placed.	Efficient operation of the compost pits and Mechanical Composter is being ensured.	EO Patran	Activity Completed
VI.	Municipal Council, Sanaur	25 Compost pits are constructed and are adequate and functional as per norms. 20 Compost pits more required for decentralization of wet waste management	Efficient operation of the compost pits is being ensured.	EO Sanour	Activity Completed
VII.	Nagar Panchayat Ghagga	15 Compost pits Constructed functional and are adequate	Efficient operation of the compost pits is being ensured.	EO Ghagga	Activity Completed
VIII.	Nagar Panchayat Ghanaur	12 Compost pits Constructed and Pits requirement 10 more	Efficient operation of the compost pits is being ensured.	EO Ghanour	Activity Completed
IX.	Nagar Panchayat Bhadson	24 Compost pits provided. functional and are adequate	Efficient operation of the compost pits is being ensured.	EO Bhadson	Activity Completed
X.	Villages Panchayat (1022)	Compost pits have been provided in 23 GPs. There is no compost pit in rest 999 GPs.	Plan has been prepared	DDPO	Implementation by 31.12.2027 By 31.12.22 = 82 GPs By 31.12.23 = 150 GPs By 31.12.24 = 175 GPs By 31.12.25 = 185 GPs By 31.12.26 = 198 GPs By 31.12.27 = 209 GPs
(iii)	Dry-Waste Management: Material Recovery for dry-waste fraction	<ul style="list-style-type: none"> MCP: 15 BWG are identified and having agreement with M/s Hari Bhari for disposal of dry-waste. Therefore, no gap. 	MC Nabha is pursuing the generators for compliance.	<ul style="list-style-type: none"> MCP EOs of respective 	Activity completed for MCP and other remaining ULBs except Nabha

		<ul style="list-style-type: none"> • Rajpura : BWGs identified 12 & all are having agreement with MC, Rajpura • Bhadson : identified 01 BWG & having agreement with authorized recycler for dry waste • Patran: : identified 01 BWG & having agreement with authorized recycler for dry waste • Samana: : BWGs identified 9 & out of which 7 are complained. Sanaur: : 2 MRF Functional at Sanaur 1 more required at Bosar Road for Decentralization of Dry waste management also BWGs identified 7 & all are having agreement with MC, Sanaur • Nabha: : identified 05 & yet to make agreement with the MC/ authorized recycler • Ghanaur:- BWGs identified 01 & having agreement with 		ULBs	MC Nabha – 31.12.2022
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		<p>authorities recycler for dry waste.</p> <ul style="list-style-type: none"> No BWG identified at Ghagga 			
		<p>MCP:- 7 MRF Centers are available for dry waste management in MCP. MRFs are sufficient as per the requirement there is no gap between requirement and availability.</p> <p>The details of the MRF Units provided by MCs/NPs Rajpura=07 Samana=01 Patran=01 Sanour=02 Nabha=02 Ghagga=01 Ghanour=01:- One Small MRF already established and One New big MRF shed under construction. Bhadson=02 Room</p> <p>All the MCs/NPs have constructed adequate no. of MRF centers except MC Nabha and NP Ghanaur having a Gap of 01 MRF each.</p>	<p>MC Nabha, and NP Ghanour - The matter is being pursued with the competent authority.</p>	<ul style="list-style-type: none"> MCP EOs of respective ULBs 	<p>MC Nabha and NP Ghanour – 31.12.2022.</p>

		Villages Panchayat (1022) - dry waste like plastic, polythenes are collected and stored at the solid waste management project and then the same are sold to local vendors in 23 panchayats.	Plan has been prepared	DDPO	Implementation by 31.12.2027 By 31.12.22 = 82 GPs By 31.12.23 = 150 GPs By 31.12.24 = 175 GPs By 31.12.25 = 185 GPs By 31.12.26 = 198 GPs By 31.12.27 = 209 GPs
(iv)	Disposal of inert and non-recyclable wastes: Sanitary Landfill	<ul style="list-style-type: none"> • MCP = Construction ongoing will be complete by 31-08-2022 • MCs Samana, Rajpura, Ghagga, Ghanaur, Patran and Sanaur SLF Constructed and functional • SLF Under Construction at MC/NP Bhadson • Land is being Identified at MC Nabha 	Efforts are being made by remaining MCs / NPs to complete the construction of the SLF at the earliest.	<ul style="list-style-type: none"> • MCP • EOs of respective ULBs 	<ul style="list-style-type: none"> • MCP:- 31-08-2022 • MC, Nabha : 31.12.2022 and remaining MCs / NPs 31.12.2022
(v)	Remediation of historic / legacy dumpsite				
i.	Municipal Corporation Patiala	140000 ton waste is being remediated out of 176000 ton.	Trommels machines are installed for remediation of legacy waste and work is under process.	MCP	The time limit was extended upto 31-08-2022 but in the present circumstances the rain continues and the work is badly hamper after the complete stoppage of rains atleast 15 days time will be required to escalate the work so

					new timeline 30.11.2022.
ii.	Municipal Council Rajpura	<ul style="list-style-type: none"> Total legacy waste = 64000 MT Waste Remediated = 49000 MT Gap = 15000 MT 	Efforts are being made to complete the remediation work at the earliest.	EO, Rajpura	31.12.2022
iii.	Municipal Council Nabha	<ul style="list-style-type: none"> The ULB has started remediation work for its legacy waste. Total legacy waste = 40,000 MT Remediate 50% Till Date 28.07.2022 Gap = 20,000 MT 	MC Nabha already installed machinery at dump site for remediation and work is in progress..	EO, Nabha	31.03.2023
iv.	Municipal Council Samana	<ul style="list-style-type: none"> Total legacy waste = 4200 MT Waste Remediated = 1680 MT Gap = 2520 MT Remediation is under progress	Efforts are being made to complete the remediation work at the earliest.	EO, Samana	31.12.2022
v.	Municipal Council Patran	<ul style="list-style-type: none"> Total legacy waste = 6000 Ton Waste Remediated = 2400 Ton Gap = 3600 Ton Remediation is under progress	Efforts are being made to complete the remediation work at the earliest.	EO, Patran	31.12.2022
vi.	Municipal Council, Sanaur	<ul style="list-style-type: none"> Total legacy waste= 468 MT 	MC Sanaur has already installed machinery at dump site for	EO, Sanour	30.09.2022

		<ul style="list-style-type: none"> Waste Remediated= 428 MT Gap = 40 MT Remediation is under progress 	remediation and work is in progress.		
vii.	Nagar Panchayat Ghagga	<ul style="list-style-type: none"> Total=35278 Ton Remediated=12347 Ton Gap= 22931Ton 	Efforts are being made to complete the remediation work at the earliest.	EO, Ghagga	31.12.2022
viii.	Nagar Panchayat Ghanaur	Total legacy waste = 0	Remediation completed	EO, Ghanour	
ix.	Nagar Panchayat Bhadson	Total legacy waste = 0	Remediation completed	EO, Bhadson	Activity Completed
vi.	Involvement of NGOs	<p>MCP and remaining ULBs - No Gap</p> <p>Villages Panchayat - 23 solid waste management projects are functional with the help and cooperation of Roundglass Foundation Mohali an NGO. Other NGOs will be roped in by panchayats</p>	<p>MCP:- Power House Youth Club is motivating farmers to take away compost produced by Bio Remediation process for agriculture purpose.</p> <p>More NGOs will be identified for the purpose.</p>	<p>MCP EOs of respective ULBs</p> <p>DDPO</p>	Regular Activity
vii.	EPR of Producers: Linkage with Producers / Brand Owners	MCP – No Gap Linkage with producer's/ brand owners is pending.	Efforts are being made to complete the linkage at the earliest	MCP EOs of	Regular Activity

		Gap = 100 %		respective ULBs	31.08.2022
viii.	Authorization of Waste Pickers	<p>MCP - Total 270 waste picker is authorized by HariBhari Recyclable PvtLtd & MC patiala. (No Gap)</p> <p>MC Rajpura (119), Nabha (7 Waste Picker and 15 Rag Picker), Samana (5), Sanaur (8) Ghagga (5) Patran (7) Ghanaur (1) Bhadson (2) have identified and authorized informal waste collectors. (No Gap).</p> <p>Villages Panchayat - dry waste like plastic, polythenes are collected and stored at the solid waste management project and then the same are sold to local vendors in 23 panchayats. Authorization of Waste Pickers has not been done in any panchayats out of total 1022 panchayats.</p>	<p>As per requirement, authorization of waste pickers will be carried out.</p> <p>Plan has been prepared</p>	<p>MCP – Hari Bhari Recyclable Pvt Ltd Patiala</p> <p>EOs of respective ULBs</p> <p>DDPO</p>	<p>Regular Activity</p> <p>Implementation by 31.12.2027</p> <p>By 31.12.22 = 105 GPs</p> <p>By 31.12.23 = 150 GPs</p> <p>By 31.12.24 = 175 GPs</p> <p>By 31.12.25 = 185 GPs</p> <p>By 31.12.26 = 198 GPs</p> <p>By 31.12.27 = 209 GPs</p>
ix.	Preparation of own by-laws to comply with SWM Rules 2016	MCP and All MCs/NPs prepared. (Adopted the Model SWM by-laws received from PMIDIC).	MCP - Bye Laws are Notified vide notification no 5/105/2020-2 LG 4/1391(A) Dated 11-08-2020.	MCP EOs of respective ULBs	Activity Completed.

		Villages Panchayat (1038)	yet to be prepared	DDPO	31.12.2022
x.	Removal of garbage vulnerable points(GVPs)	2 GVPs exist at Sanaur to transfer Waste directly to the MRF/Wet waste site	MCP:- Transformed with smart semi underground bins Remaining 8 Municipal Council All the identified (GVPs) have been removed by the all MCs/NPs.	MCP EOs of respective ULBs	MC Sanaur will remove 2 GVPs by 31.10.2022
xi.	Provision of greenbelt and boundary wall around solid waste dumping site.	MCP:- 300 ft long wall with iron sheets also constructed around dump site and green belt provided. No Gap. Remaining 08 MCs/NPs:- Boundary wall Completed= In 7Mcs (Bhadson, Ghagga, Ghanaur, Nabha, Patran, Rajpura and Samana) provided Green belt and Boundary wall. Boundary wall at MC Sanaur shall be constructed in consultation with Govt being site on lease).	No Action required. Remaining 8 MCs/NPs Boundary wall at MC Sanaur shall be constructed in consultation with Govt being site on lease.	MCP EOs of respective ULBs	Activity Completed MC Sanaur 31.12.2022
xii.	Providing compartments and GPS tracking in garbage carrying vehicles	MCP: - 20 Garbage collecting Vehicles Compartmentalized and 5 trucks has been provided GPS Tracking system. Remaining 08 MCs/NPs:-All	Regular vigil is being kept through GPS Tracking.	MCP EOs of respective ULBs	Activity completed

		the 44 mechanical Vehicles have been provided compartments with GPS. No Gap.			
xiii.	Stopping solid waste/ garbage being thrown in Ghaggar and Drains passing through Patiala city	No Gap	Awareness is being carried out in the public to stop the dumping of solid waste in river/Nallah. Notices are also issued to the violators by the MCP. Further, team of comprising Deptt. of Rural Development and Panchayat, PWSSB and Drainage is regularly keep check on the drains for dumping of any solid waste.	MCP, Drainage, Rural Development and Panchayat and PWSSB	Regular activity.
xiv.	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)	MCP:- Effluent treatment plant installed at legacy waste dumpsite. MCs/NPs: No such arrangement has been provided so far.	MCP: (No Gap) Remaining 08 MCs/NPs:- Leachate management will be done along with Bio- remediation of legacy waste.	MCP EOs of respective ULBs	MCP:- Activity Completed Department of Urban Development (for other ULBs):- · Treatment of leachate waste by 31.12.2022.
xv.	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.	No Gap	Swachhata app, M-sewa app pgrs portal etc 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

	(Directions of Hon'ble NGT in OA no. 606 of 2018 dated 22.07.2019, 28.02.2019, 14.12.2020)				
xvi.	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)	No Gap	MCP:- CCTV installed at dumping site. Department of Urban Development (for other ULBs):- Proposal is under consideration.	All Local bodies	Department of Urban Development (for other ULBs):- 31.10.2022
xvii.	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)	MCP : No Gap Remaining 8 MCs/NPs:- No Gap	MCP:- Installed at dumpsite Department of Urban Development (for other ULBs):- Installed by all the ULBs	MCP EOs of respective ULBs	Activity Completed
xviii.	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)	MCP= The detailed DPR for installation of carcass plant is being framed and will be sent to head office for approval and allocation of funds. Other 08 MCs = All 08 ULBs are planning to make a cluster for scientific disposal of animal carcasses.	MCP:The detailed DPR for installation of carcass plant is being framed and will be sent to head office for approval and allocation of funds. Other 08 MCs :-Process of tie-up or project planning will be achieved by 31.03.2022	MCP ADC(UD)	MCP :- 31-03-2023 Other 08 MCs :- Process of project planning will be achieved by 31.03.2023
xix.	Carcass disposal to be done under the supervision Veterinary/Animal Husbandry Department of the State and the Local Bodies. (Directions of	No gap	Carcass disposal is being ensured under the supervision of veterinary doctors.	MCP	Regular activity

	Hon'ble NGT in OA no. 465/2019 dated 15.04.2021				
xx.	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.	<p>Waste Water:- All the colonies either authorized or unauthorized area connected with the MCP sewer lines and all the sewer system connected with STPs.</p> <p>Solid Waste:- 100% door to door collection in the entire city either authorized or unauthorized</p>	MCP&PD A	<p>MCP (Within Municipal Limit) · NO GAP</p> <p>PDA/DDPO (Outside MC limit) · Identification by = 30.09.2022 · Management of solid waste collection = 30.09.2023 Segregation & treatment = 31.03.2024 Arrangement/ Agreement for dry waste = 31.03.2024 · Provision of STPs= 31.12.2025</p>
xxi.	To prepare proposal / scheme for management of solid waste in the villages either in cluster form or independently in individual villages	At present in 23 panchayats out of 1022 panchayats, solid waste management projects are functional.	Action plan has been prepared	DDPO	<p>Implementation by 31.12.2027</p> <p>By 31.12.22 = 82 GPs By 31.12.23 = 150 GPs By 31.12.24 = 175 GPs By 31.12.25 = 185 GPs By 31.12.26 = 198 GPs By 31.12.27 = 209 GPs</p>
xxii.	Information Education and Communication (IEC) activities in respect of solid	No gap	<ul style="list-style-type: none"> The IEC activities in this regard are already being done by the concerned 	All ULBs (Municipal)	Regular Activity

	waste.		<p>departments.</p> <ul style="list-style-type: none"> 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. 	Corporation, MC and Nagar panchayat) of the district & PDA	
xxiii.	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
xxiv.	Management of carcass in rural area (1022 Gps)	No. of carcasses existing = 676 Carcasses with Boundary wall = 285 Carcasses without boundary wall/ barbed wire = 401	Action Plan has been prepared and will be implemented accordingly.	DDPO	Implementation by 31.12.2027 By 31.12.22 = 56 GPs By 31.12.23 = 61 GPs By 31.12.24 = 62 GPs By 31.12.25 = 64 GPs By 31.12.26 = 77 GPs By 31.12.27 = 81 GPs
xxv.	Dry-Waste Management: Material Recovery for dry-waste fraction (RDF)	MCP : No Gap	MCP : HariBhari Recyclable Pvt Ltd collects categorised dry waste which is being taken to 7 MRF Centers where it is being sent for recycling to scrap dealers.	MCP:- HariBhari Recyclable Pvt Ltd Patiala	Regular Activity
xxvi.	Solid waste management by MCP	7 MRF center and 510 compost pits are functional for the treatment of solid	Adequate arrangement provided	MCP	Regular Activity

		waste management.			
xxvii.	Management of Horticulture Waste in MCs.	<ul style="list-style-type: none"> • MCP: Total 112 parks and Compost pits constructed in 43 parks. Centralized composting machine is installed at model town park for processing of horticulture waste of 69 parks. • MC Rajpura 52 parks: Compost Pits 10 (Connecting all parks or temporary arrangements at small parks) • MC Nabha: 3 parks: Compost pits 3, • NP Ghagga 1 park : one compost pit, • MC Samana 2 parks : 2 Compost pits, • MC Sanaur 3 parks 3 compost pit, • MC/NP Ghanaur, Bhadson and patran - there is no park. 	Adequate arrangement provided	MCP&AD C(UD)	Regular Activity
xxviii.	Management of solid waste generated from poultry farms	Identification of Poultry farms, their capacity, quantity of solid waste generated.	1. Inspection of poultry farms & persuasion shall be carried out for making agreements with the farmers for proper disposal of bird droppings.	PPCB	31.03.2023

			<ol style="list-style-type: none">2. To make agreement with CBWTF for incineration of dead birds.3. Installation of scrappers to collect the bird droppings regularly.4. Compliance of guidelines framed by CPCB vide letter No. B-4032/PCI-SSI/Poultry/2015/13165 dated 20.10.2015.		
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(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 Patiala	10
2	Municipal Council Rajpura	0.65
3	Municipal Council Nabha	1.5
4	Municipal Council Samana	1.1
5	Municipal Council Patran	0.5
6	Municipal Council, Sanaur	0.4
7	Nagar Panchayat Ghagga	0.12
8	Nagar Panchayat Ghanaur	0.06
9	Nagar Panchayat Bhadson	0.07
	Total	15.75

Sr. no.	Local Bodies	Estimated quantity of Plastic Waste Generated (in MTD)/ per day
1	Villages Panchayats (1022)	0.73

(b) Identification of gaps and Action plan:

S. No.	Action points For village panchayats/blocks/municipalities/corporations	Identification of gap	Action plan	Agencies Responsible	Target time for Compliance
1	Door to Door collection of dry waste including PW	MCP - HariBhari is collecting segregated waste including plastic waste (No Gap). Remaining 8 MCs/NPs : There is No Gap in Door to Door Collection of waste including plastic waste. Although there is a gap of 20% in collection of waste in segregated form in all the MCs/ NPs.	MCP – Proper checking is being carried out to prevent any lapse Remaining 8 MCs/NPs:- To achieve the target of 100% source segregation	MCP - HariBhari Recyclable Pvt Ltd Patiala EOs of respective ULBs	MCP - Regular Activity. Remaining 8 MCs/NPs:- 31.10.2022
		Villages Panchayats (1022) DDPO:- infrastructure for segregation, collection, storage, transportation, Processing, and disposal of Plastic Waste is available in 23 GPs	Plan has been prepared and will be implemented as per the timelines.	DDPO and BDPOs	Implementation by 31.12.2027 By 31.12.22 = 82 GPs By 31.12.23 = 150 GPs By 31.12.24 = 175 GPs By 31.12.25 = 185 GPs By 31.12.26 = 198 GPs By 31.12.27 = 209 GPs
2	Facilitate organized collection of plastic Waste at Waste transfer point or Material Recovery Facility	Adequate through Door to Door garbage Collection Rickshaw Rehri etc. • MCP : 200 Rickshaw Rehri, 20 Motorized vehicle and 270 waste pickers. No gap	<ul style="list-style-type: none"> • MCP:- for organized collection the agreement with Hari Bhari Recyclable Pvt Ltd Patiala has already been made. • M.C. Rajpura: 15 Tata Ace are to be purchased. • MC Nabha: Being processing 	• MCP : Hari Bhari Recyclable Pvt Ltd.	Activity completed • MC Rajpura : Purchase of Tata Ace : 31.12.2022 (

		<ul style="list-style-type: none"> • M.C. Rajpura :- 119 Rickshaw Rehris, 7 tractors trollies. • MC, Nabha:- 64 Rickshaw Rehris. • MC, Samana:- 50 Rickshaw Rehris and 8 tata Ace. • MC, Patran:-62 Rickshaw Rehris and 4 tata Ace. • MC, Sanaur:- 17 Rickshaw Rehris • NP Ghagga:- 13 Rickshaw Rehris and 1 tata Ace. • NP Ghanaur:- 12 Rickshaw Rehris. • NP Bhadson:- 12 Rickshaw Rehris , 2 Tata Ace <p>Villages Panchayats - In 23 panchayats door to door collecton is being done by Rikshaw Rehris.</p>	<p>facility is located far away from one major part of city, which led to non-sustaining of source segregation. MC Nabha has processed tender on to purchase 6 e rickshaws and 3 TATA Ace to overcome this problem.</p> <ul style="list-style-type: none"> • Rest of the ULBs have made sufficient arrangements for organized collection of plastic waste. <p>Plan has been prepared and implemented as per the timelines.</p>	<ul style="list-style-type: none"> • EOs of respective ULBs - DDPO 	<p>purchased)</p> <ul style="list-style-type: none"> • MC Nabha : Purchase of 3 Tata Ace and 6 e.rickshaw : 31.12.2022 • MC Sanaur required 15 more Rikshaw Rehri and 2 Tata Ace, funds demand raise to PMIDC, it will be purchased by 30.11.2022 • Implementation by 31.12.2027 By 31.12.22 = 82 GPs By 31.12.23 = 150 GPs By 31.12.24 = 175 GPs By 31.12.25 = 185 GPs By 31.12.26 = 198 GPs By 31.12.27 = 209 GPs
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3	Plastic Waste collection Centres	<ul style="list-style-type: none"> • MCP – 7 Material recovery facility center are available in MCP jurisdiction for Plastic waste Management. MRFs are sufficient as per the requirement and there is no gap between requirement and availability. • Remaining 8 MCs/NPs : The details of the MRF Units provided by MCs/NPs Rajpura=07 Samana=01 Patran=02 Sanour=02 Nabha=02 Ghagga=01 Ghanour=02 Bhadson=02 • All the MCs/NPs have constructed adequate no. of MRF centers except MC Nabha and NP Ghanaur having a Gap of 01 MRF each. • Villages Panchayats (1038). dry waste like plastic, polythenes are collected and stored at the solid 	<ul style="list-style-type: none"> • MCP - Proper checking being carrying out to prevent any lapse. • MC Nabha:- The matter is being pursued with the competent authority. • NP Ghanaur:- 1 MRF under construction at NP Ghanaur and Grant is already sanctioned by PMIDC <p>Plan has been prepared</p>	<ul style="list-style-type: none"> • MCP - HariBhari Recyclable Pvt Ltd Patiala • EO of respective ULBs • DDPO 	<p>MCP - Regular Activity.</p> <p>MC Nabha & NP Ghanour 31.03.2023</p> <p>Implementation by 31.12.2027 By 31.12.22 = 82 GPs By 31.12.23 = 150 GPs By 31.12.24 = 175 GPs</p>
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		waste management project and then the same are sold to local vendors in 23 panchayats.			By 31.12.25 = 185 GPs By 31.12.26 = 198 GPs By 31.12.27 = 209 GPs
4	Awareness and education programs implementation	Regular Activities are done, Community facilitators and Motivators are deputed in all ULBs for door to door awareness.	Regular awareness, workshops and enforcement in markets, educational institutes and BWGs carried out by MCP and other MCs / NPs	MCP EOs of respective ULBs	Regular Activity
5	Access to Plastic Waste Disposal Facilities	No Gap	PMIDC has executed a contract with M/s MAX specialty Films regarding purchase/ collection of any kind of plastic garbage from the ULBs. PMIDC has also coordinated with PWD and Mandi Board to utilize plastic waste in construction of Roads.	MCP EOs of respective ULBs	Activity Completed
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)	<ul style="list-style-type: none"> • Total no. of plastic unit required registration = 58 • Total no. of plastic unit obtained registration = 58 	Activity Completed	PPCB	Activity Completed
7	Development and setting up of infrastructure for segregation, collection, storage, transportation,	MCP and Other remaining 8 ULBs : No gap	MCP: IPCA has been engaged for collection of Plastic Waste. Separate chamber has also available in 7 MRF Centers	MCP EOs of respective ULBs	MCP: Activity Completed

	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)		Department of Urban Development (for other ULBs):- Recyclable Plastic waste is collected, transported and stored separately by all ULBs. Currently such plastic is being stored at MRF. Contract For channelization/ processing of both recyclable and non-recyclable plastic have been done with Max Specialty Films Pvt. Ltd. by all remaining ULBs.		Department of Urban Development (for other 08 ULBs):- Capacity of MRFs at MC Nabha will be enhanced by 31.03.2023. Capacity of MRFs at NP Ghagga, Bhadson and Ghanaur shall be enhance by 30.09.2022
		Village Panchayats - Infrastructure for segregation, collection, storage, transportation, Processing, and disposal of Plastic Waste is available in 23 GPs	Plan has been prepared and implemented as per the timelines.	DDPO and BDPOs	Implementation by 31.12.2027 By 31.12.22 = 82 GPs By 31.12.23 = 150 GPs By 31.12.24 = 175 GPs By 31.12.25 = 185 GPs By 31.12.26 = 198 GPs By 31.12.27 = 209 GPs
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 areas.	MCP& All MCs/NPs= Already framed. Rural Panchayats - plan is being prepared	MCP, ADC(UD) & DDPO	DDPO = 31.03.2023
9	Set up, operationalize and co-ordinate for Plastic Waste management in Rural	Villages Panchayats (1022) DDPO:- infrastructure for	Plan has been prepared and implemented as per the timelines.	DDPO	Preparation of action plan 31.03.2022 Implementation by

	area. (Directions of Hon'ble NGT in EA no. 13/2019 dated 08.01.2021)	segregation, collection, storage, transportation, Processing, and disposal of Plastic Waste is available in 23 GPs			31.12.2027 By 31.12.22 = 105 GPs By 31.12.23 = 150 GPs By 31.12.24 = 175 GPs By 31.12.25 = 185 GPs By 31.12.26 = 198 GPs By 31.12.27 = 209 GPs
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 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.	ALL Local bodies/PP CB	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 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.	MCP: IPCA has been engaged for collection of Plastic Waste. Separate chamber has also available in 7 MRF Centers. Department of Urban Development (for other 8 ULBs):- Recyclable plastic waste is collected, transported and stored separately by all ULBs. Currently such plastic is being stored at	MCP : IPCA / HariBhari Recyclable Private Ltd Company All Local bodies	Regular activity Department of Urban Development (for other 08 ULBs):- Capacity of MRFs at MC Nabha will be enhanced by 31.03.2023. Capacity

		Villages Panchayats (1022) : infrastructure for segregation, collection, storage, transportation, Processing, and disposal of Plastic Waste is available in 23 GPs. Recyclable plastic waste is being sold to local non registered vendors.	MRF. Contract For channelization/ processing have been done with Max Specialty Films Pvt. Ltd. All the ULBs have made agreement with the agency Plan has been prepared.	DDPO	of MRFs at NP Ghagga, Bhadson and Ghanaur shall be enhance by 30.09.2022 Preparation of action plan 31.03.2022 Implementation by 31.12.2027 By 31.12.22 = 105 GPs By 31.12.23 = 150 GPs By 31.12.24 = 175 GPs By 31.12.25 = 185 GPs By 31.12.26 = 198 GPs By 31.12.27 = 209 GPs
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 by engaging community facilitators and motivators and Roundtable foundation mohali NGO	MCP& EOs of respective ULBs and 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. Regular meetings are being held at block level with panchayats and field and official staff with help of rondglass foundation mohlai NGO	DDPO	Regular Activity
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.	Plastic waste material is presently being used for construction of rural link roads in the state of Punjab. Approx 10% of the rural link roads length being constructed with this technology. In this plastic waste material is being replaced with the bitumen in the range from 6% to 8%. In District Patiala 88.56 Km	Instructions will be given to the industries to explore such activities.	MCP, ADC(UD) and PWD	31.12.2022

	13/2019 dated 08.01.2021)	length of roads has been constructed with this technology. The quantity of Plastic waste used is approx 32.41 MT.			
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(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)	MCP – 10 MT Remaining 8 MCs/NPs - 9 MTD
Does the District has access to C&D waste recycling facility?	Yes

(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.	MCP and other MCs / NPs have provided separate collection sites and are adequate. · No Gaps	Not Required	ALL EOs of ULBs, MCP	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.	MCP – No Gap MCs / NPs has not fixed user fee and permission system is yet to be introduced.	MCP – Patiala has fixed user fee on C& D waste which is Rs 500/- per ton Bye laws to be notified and fee to be fixed.	MCP & EOs of respective MCs/NPs	MCP – Activity Completed Remaining 8 MCs/NPs = 31.10.2022
3	C&D recycling Facility	MCP : 2 C&D crushing Machine are installed at Bishan Nagar and Focal Point.	MCP : Efforts are being made to keep on complete utilization of the recycled C & D waste.	MCP & EOs of respective	Activity Completed.
4	Usage of recycled C&D waste in non-structural				

	concrete, paving blocks, lower layers of road pavements, colony and rural roads	<p>It is also being used for landfilling at low lying areas, to make footpaths etc</p> <p>MCP - recycled C & D waste is being used in lower layers of road pavements, in low lying areas for leveling.</p> <p>Remaining 8 MCs/NPs : Grinders purchased by all MCs / NPs</p>	<p>Remaining 8 MCs/NPs : To efficiently operate Grinders for recycling of C & D waste.</p>	e MCs/NPs	
5	IEC on C&D waste management	No Gap.	Awareness is being carried out through media/ NGOs/ FM on regular basis.	MCP & EOs of respective MCs/NPs	Regular Activity

(iv) Bio medical Waste Management

(a) Current Status related to biomedical waste

Inventory of BMW in the District	Quantity
Total no. of Bedded Health care Facilities	329
Total no. of non-bedded HCF	353
No. of HCFs authorized by SPCBs/PCCs	677
Total No. of veterinary Hospitals/Dispensaries in the District Patiala	167
Total No. of veterinary Hospitals/Dispensaries connected with Common Biomedical treatment facility (CBWTF).	9-Hospitals directly connected with CBWTF. 146-Hospitals/Dispensaries connected via nearest block level institutions
Total no. of veterinary Hospitals/ Dispensaries obtained the authorization of Punjab pollution Control Board	155
Total No. of veterinary Hospitals/Dispensaries adopted segregation of BMW through separate colour coded collections bins.	155
Total no. of veterinary Hospitals/Dispensaries complying with BMW Rules, 2016 and Maintaining record of Biomedical waste generation and its disposal to CBWTF.	155
No of Common Biomedical Waste Treatment and Disposal Facilities(CBWTFs)	0
Capacity of CBWTFs	0
No. of Deep burials for BMW if any	0
Quantity of bio medical waste generated per day	1019.97 kg/day
Quantity of bio medical waste treated per day	1019.97 kg/day

(b) Identification of gaps and Action plan:

Sr. 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"> Total HCFs identified(Bedded + non-bedded)= 682 HCFs authorized by the PPCB=677. 	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. The CBWTF M/s Medicare Environments Pvt. Ltd at Ludhiana has been given responsibility for disposal of bio-medical waste generated in District Patiala.	Not required	PPCB	Activity completed
3	Tracking of Bio-Medical Waste	No Gap. Bar code system is implemented by all HCFs.	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 available	Civil Surgeon	Not Applicable
6	Compliance to Rules by HCFs and CBWTFs	No gap, to check the compliance regular	BMW Rules, 2016 are complied with except provisions of ETPs	PPCB, HCFs and	Regular activity

		monitoring is being done.	cum STPs	civil surgeon	
7	District Level Monitoring Committee	District Level Monitoring Committee has been constituted	Meetings are taken on monthly basis District Environment Committee.	District Administration and PPCB	Regular Activity
8	Wastewater Treatment	<ul style="list-style-type: none"> Total HCFS Required ETP=326 Total HCF install ETPs=12 	HCFs are being pursued to install the ETP. The meetings are being held with the association members.	PPCB	The timelines vide Board order no. 468 dated 31.08.2021 timeline has been given as 31.03.2022. Action is being initiated against the violators.
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"> Most of the Hospitals now have provided the digital X-Ray, hence no such waste is generated from digital X-ray. 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. 	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	126
Quantity of HW in the district (MT/Annum)	13285.405
Quantity of Incinerable HW (MT/Annum)	126.2
Quantity of land-fillable HW(MT/Annum)	543.955
Quantity of Recyclable/utilizable HW(MT/Annum)	Recyclable=5102.25 Utilizable=7513
Nos. of captive/common TSDF	One common TSDF at NIMBUA, DeraBassi.
No of industries provided on site impervious facilities for temporary collection of hazardous waste	126
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"> Total industries identified =126 Authorized by the PPCB=126. No Gap 	Regular camps are being organized to pursue the industries to obtain the authorization. Also, new hazardous waste generating industries are being identified after making field visits.	PPCB	Regular activity

2	Establishment of collection centres	No gap.	The industries generating hazardous waste have already provided individual impervious storage / collection facility in their premises for temporary storage of hazardous waste and have executed an agreement with TSDF and authorized recyclers for disposal of the same. However, a continuous follow up will be made to rule out unscientific disposal of hazardous waste by the industrial unit	PPCB	Regular activity
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	<ul style="list-style-type: none"> The industries generating HW have access to common TSDF in the State No. of units identified linked with CTSDF = 126 	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	1404
Collection centers established by ULBs in the District	8
Collection centers established by Producers or their PROs	2
Nos. authorized E-Waste recyclers /Dismantler	01 no. dismantler already established in the District Patiala (M/s Kumar Enterprises, Malerkotla Road, VIII. Dulladi, Teh. Nabha, Distt. Patiala).

(b) Identification of gaps and action plan:

Sr. 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 process.	Completion of inventory	PPCB	31.12.2022
2	E-Waste collection points	Availability of E-Waste collection points / call centres / kiosks in villages –Blocks/towns/ cities is not adequate	Identification /registering E-Waste collection centres in association with Producers – their PROs or Recyclers	MCP, All MCs /NPs and GMDIC	31.12.2022
3	Linkage among Stakeholders dechannelize-Waste	Linkage among stakeholders is being done.	Work under progress	MCP, All MCs / NPs & GMDIC	31.12.2022
4	Regulation of Illegal E-Waste	Yet to be initiated	Surprise visits will be made to	District	31.12.2022

	recycling / dismantling		identify illegal e-waste recyclers / dismantlers	Administration & PPCB	
5	Integration of informal sector	Being done	Being prepared.	District Administration & PPCB	31.03.2023
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
8	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
9	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
10	Verification of facilities of dismantlers and recyclers for their infrastructure and records. (Directions of Hon'ble NGT in OA no. 512/2018 dated 15.01.2021)	This is a continuous activity. All the dismantlers/ recyclers will be verified per year.	This is a continuous activity. All the dismantlers/recyclers will be verified per year.	PPCB	Regular activity

11	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
12	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
13	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
14	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
15	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
16	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 periodically Hon'ble Deputy Commissioner-cum-Chairman of District Environment Committee.	District Administration, PPCB & Local bodies	Regular activity
17	Allocation of proper space to the existing and upcoming industrial units for e-waste dismantling and recycling.	No gap	State Govt. has already planned the focal points for industrial units. Proper space will allocate to the existing and upcoming	PSIEC	Already done

	(Directions of Hon'ble NGT in OA no. 512/2018 dated 15.01.2021)		industrial unit for E waste dismantling and recycling facility.		
18	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
19	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
20	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	MCP:- Domestic E waste deposition center is being established with the 21 No. Phatak MRF Center and more sites to be establish. Deptt. of Urban Development (for other ULBs):- E-Waste deposition center is yet to be established at each ULB.	All Local Bodies	MCP:- 31-12-2022 For other ULBs :- 30.06.2023

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:	1, (At Patiala city) 0
Number of manual monitoring Stations operated by SPCBs	5
Name of towns/cities which are failing to comply with national ambient air quality stations	01 (Patiala city)
Nos. of air polluting industries	954
No. of unit installed APCD	954
Status of Air Consent	Regular activity Total no. of industries requiring consent to operate under Air Act, 1981 Red = 154 Orange =1143 Green=184 Total no. of units having valid consent as on 30.06.2022 Red =148 Orange =1139 Green=177 Timeline for grant of consents to the balance units not having valid consent. Red =31.08.2022 Orange = 31.12.2022 Green = 31.12.2022
Prominent air polluting sources	Vehicular pollution, Road dust, burning of garbage and biomass, construction and demolition activities, industrial emissions.

(b) Identification of gaps and action plan:

Sr. No.	Action Points	Gap & Indicative Action Plan	Responsible Agency	Timeline for completion of Action Plan												
1	Identification of prominent air polluting sources?	Source Apportionment Study has already been carried out by IIT Delhi.	MCP,PWD, Deptt. of Agriculture & PPCB	Activity Completed												
2	Ambient Air quality data?	Ambient air quality is already being monitored. The annual average value of the year 2019 and 2020 is as under: <table border="1" data-bbox="763 587 1285 699"> <thead> <tr> <th>Sr. no.</th> <th>Year</th> <th>PM10 µg/m3)</th> <th>AQI</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>2019</td> <td>113</td> <td>110</td> </tr> <tr> <td>2.</td> <td>2020</td> <td>93</td> <td>92</td> </tr> </tbody> </table> The data of said stations is being uploaded on official website of PPCB on regular basis. Web link: ppcb.gov.in/en/air-quality	Sr. no.	Year	PM10 µg/m3)	AQI	1.	2019	113	110	2.	2020	93	92	PPCB	Activity completed. Stations already working.
Sr. no.	Year	PM10 µg/m3)	AQI													
1.	2019	113	110													
2.	2020	93	92													
3	Setting up of Continuous Ambient Air Quality Monitoring Station	1 CAAQMS already installed	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. Online link is https://ppcb.punjab.gov.in/en/action-plans	PPCB	Action Plan Already prepared and will be implemented.												
5	Hotspots of air pollution in District	Major Hotspots has been identified as per Source Apportionment Study carried out by IIT Delhi.	PPCB	Activity Completed												
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 https://ppcb.punjab.gov.in/en/air-quality	PPCB	Regular activity												

7	Industries to be converted from coal to CNG	No such industry to be converted from Coal to CNG. Thus, no gap.	PPCB/DIC	Not Applicable
8	Conversion of Natural Draft Brick Kilns to Induced Draft Brick Kilns	<ul style="list-style-type: none"> ▪ Total BKO required to convert to ZIG ZAG = 119 ▪ Converted to ZIG Zag Technology= 119 	PPCB/DFSC	Activity Completed
9	Maintain pothole free roads / timely patchwork on roads	<p>MCP The patch work is a regular process. 0.9 Km out of 1.15 km of roads has been made pothole free up to 31-08-2021. Further work is in progress.</p> <p>PDA/PWD 20.58 km of road length made porthole free. Further, Patchwork of roads is continuous process. As and when potholes develop on roads the same are got repaired as soon as possible.</p>	MCP, PDA/PWD	Regular activity
10	Procurement of Mechanical sweeping machines	MCP has planned to outsource the mechanical sweeping of the City and tendering process in this regard is under process.	MCP	Time Target: 31.12.2022
11	Plantation of trees along highways, drains, Nallahs in colonies and canals etc.,	Plantation has already been done along the road sides in areas available as per the jurisdiction of respective authorities.	MCP, ADC (UD), PPCB	Regular activity
12	Greening of parks, open areas, community places, schools and housing societies	Plantation is regularly being done in the parks, open areas, community places, schools and housing societies as per the jurisdiction of respective authorities.	Deptt. of Drainage, MCP, ADC (UD) PDA & Deptt. of Forest	Regular activity
13	Kaccha/Brick Paved Roads to be made Pucca roads	<p>MCP The 3.72 km out of 5 km (as per new targets) road work already completed upto31.08-2021. Further work is in progress.</p> <p>ADC (UD) The Paved roads/kaccha roads are also converted into pakka road in each ULBs.</p>	MCP/ ADC (UD)	Activity Completed

14	Existing roads requiring re-carpeting	Re-carpeting of the roads is continuous process. The roads are presently in good condition. The re-carpeting will be done as and when required.	MCP, ADC(UD), PWD, PDA, 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.	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 areas by enforcement actions	The extensive drive already initiated by the Police department to prevent parking of vehicles in non-designated areas and issuing challans to the violators.	Traffic Police	Regular activity
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	This is being done on regular basis.	Transport	Regular activity
20	Infrastructure development for additional of CNG based autos/ taxis	Total 12CNG station has been commissioned out of total 15 station and 3 are under process.	DFSC	31.03.2023
21	Control of open burning of bio-mass.	<p>MCP Regular monitoring is being done by MCP. Further, adequate no. of pits are constructed in MCP to control the burning of bio mass.</p> <p>ADC(UD) Regular monitoring is being done in each ULB. Further, adequate no. of pits are constructed in each ULB to control the burning of bio mass.</p> <p>PDA Presently, 23 pits are provided to ensure proper disposal of bio mass, biodegradable material from parks.</p>	MCP and ADC(UD) and PDA	Regular activity

22	Dissemination of Air Quality Index by installing CAAQMS	Activity Completed. The web link of the same is as under:- https://ppcb.punjab.gov.in/en/air-quality http://cpcb.nic.in/automatic-monitoring-data/	PPCB	One no. already installed in Patiala. 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:- https://ppcb.punjab.gov.in/en/air-quality http://cpcb.nic.in/automatic-monitoring-data/	PPCB	One no. already installed, in Patiala city. Activity completed
24	Quality Management Division(AQMD) at PPCB (HQ)Establishment of an Air	Air Quality Division already exist at Head Office, Patiala.	PPCB,	Activity Completed
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)	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.	Carrying capacity and Source apportionment study has been already carried out through 3rd party (IIT Delhi).	PPCB	Activity Completed
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 is being coordinating with department of forest for plantation.	PWD & Deptt. of Forest	Time target: 31.12.2022
29	Steps to be taken for management of agriculture	<ul style="list-style-type: none"> • Village / Block/ Distt. Level Farmer awareness camps will be organized. 	Agriculture department	Seasonal / regular Activity.

	waste/residue	<ul style="list-style-type: none"> • Mobile Van in each block will be launched for promoting in-situ management of Paddy stubble. • In-situ and Ex-situ machinery have been provided to the farmers at subsidy as per scheme norms. • Awareness through print media and social media will done by sharing success stories of farmers which are not burning the paddy straw for last 3 years. • Coordination with various NGOs will be established to aware more and more farmers for not burning paddy straw. • Painting of walls in the villages with slogans against Paddy burning • School campaigns to aware students for not burning of paddy straw will be done. 		
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4. WATER QUALITY MANAGEMENT

(a) Water Quality Monitoring

➤ Current Status related to Water Quality Management

Details of Data Requirement	Present Status
Rivers	River Ghaggar
Length of Coastline (if any)	Coastline of River Ghaggar In District Patiala : 136.16 km (Vill. Tepla to U/s of Khanouri syphon)
Nalas/Drains/Creeks meeting Rivers	4[Pachisdara, Patiala Nadi, Sagarpara (coming from Haryana) and Meerapur Choe]
Lakes/Ponds	Nil
Total Quantity of sewage from towns and cities in District	137MLD
Quantity of industrial wastewater	11.47MLD
Percentage of untreated sewage	16.66%
Details of bore wells and number of permissions given for extraction of groundwater	80034 and number of permissions = 61 (DAC = 18 CGWA= 43)
Ground water polluted are as if any	Nil
Polluted river stretches if any	River Ghaggar

➤ Identification of gaps and action plan for water quality monitoring:

Sr. 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.	Deptt. of Water Resources / Deptt. of Rural Development & Panchayats	Regular activity
2	Quality of water bodies in the district	<u>The monitoring of rivers, drains are already being carried out and data is being maintained and also discussed in periodic meeting of District Environment Committee. The information</u>	District Administration and PPCB	Regular activity

		<u>of water quality is being uploaded on the official websites of SPCB & District Administration. The web link is https://ppcb.punjab.gov.in/en/water-quality</u>		
3	Hotspots of water contamination	Identified and given in the Ghaggar Action Plan web link is https://ppcb.punjab.gov.in/en/action-plans	PPCB, MCP, 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. Notice are also issued to the violators	MCP & 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 Ghaggar Action Plan. The Web link of the same is https://ppcb.punjab.gov.in/en/action-plans	MCP,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 draining works.
8	Rejuvenation of ground water	Master Plan to Artificial Recharge to Ground Water in India-2020 has already been prepared vide which it has been suggested number of recharge shafts, farm Ponds and Rooftop Rain water harvesting structures in different District and the link for the Master Plan is http://cgwb.gov.in/Master%20Plan%20to%20GW%20Recharge%202020.pdf	CGWA/PWRDA	Regular Activity
9	Complaints redressal system	Mobile App/Online Complaint redressal system already developed. The web link is https://connect.punjab.gov.in/grievance/save	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	8
No of Towns needing STPs	5
No of ULBs having partial underground sewerage network	5
No of towns not having sewerage network	0
Total Quantity of Sewage generated in District from Class II cities and above	137 MLD
Quantity of treated sewage flowing into Rivers(directly or indirectly)	100MLD
Quantity of untreated or partially treated sewage(directly or indirectly)	22MLD
Total available Treatment Capacity	115MLD in District Patiala

➤ Identification of gaps and action plan for treatment of domestic sewage:

Sr. No.	Action Points	Gaps and Action Plan	Responsible Agency	Timeline for completion of Action plan
1	Sewage Treatment Plants(STPs)	Patiala-I (Shermajra) STP of capacity 46 MLD has already installed and in operation.	MC, Patiala	Activity Completed
		Patiala-II (Ablowal) STP of capacity 10 MLD has already installed and in operation.	MC, Patiala	Activity Completed
		Patiala-III (PUDA) STP of capacity 13 MLD has already installed and in operation.	PUDA	Activity Completed
		Patiala (Shermajra) STP of capacity 15 MLD has already installed and in operation.	MC, Patiala	Activity Completed
		MES, Patiala STP of capacity 6 MLD has installed and in operation.	MES	Activity Completed

		Rajpura STP of capacity 7 MLD & 10 MLD have already installed and in operation.	PWSSB	Activity Completed
		Samana STP of capacity 10 MLD has already installed and in operation.	PWSSB	Activity Completed
		Patran STP of capacity 4 MLD has already installed and in operation.	PWSSB	Activity Completed
		Nabha STP of capacity 12 MLD is under construction.	PWSSB	31.12.2022
		Sanour STP of capacity 4 MLD is in progress covered under rejuvenation of chotti & baddi nadi project.	PWSSB	30.06.2023
		Bhadson STP of capacity 2 MLD is yet to start. However, DPR has been prepared and funds are yet to be tied up.	PWSSB	31.12.2023
		Ghagga STP of capacity 3 MLD is yet to be constructed. DPR prepared and funds yet to be tied up.	PWSSB	31.12.2023
		Ghanour STP of capacity 2 MLD is under progress.	PWSSB	31.12.2023
		PSIEC, Focal Point, Nabha STP of capacity 2.5 MLD has already installed and in operation.	PSIEC	Activity Completed
		MES Nabha STP of capacity 1 MLD is to be installed. The project is at tendering stage.	MES	31.10.2022
2	Underground sewerage network	<ul style="list-style-type: none"> MCP : Sewerage Network is already being laid out in major town and cities. The percentage of sewerage laid is as under:- 95 % rest for 5% sewerage will be laid under the AMRUT 2.0 the process will be initiated by PMIDC. After collecting 	MCP & PWSSB	MCP - 31.12.2022

		<p>the field data the DPR will be prepared and got sanctioned from govt. of India, then tender documents will be prepared.</p> <ul style="list-style-type: none"> • All above mentioned step will be taken by the PMIDC. • All other MCs : Sewerage Network is already being laid out in major town and cities. The percentage of sewerage laid is as under:- MCP = 95 % Nabha = 35% Bhadson = 0% Ghanaur = 95% Sanour = 0% Samana= 71% Patran=80% Ghagga=0 % Rajpura=92 % The DPR for remaining work has been prepared to complete pending work. 		<p>ULBs/PWSSB – 31.12.2023</p>
3	Setting up of real time water quality monitoring system to monitor the quality of water	One RTWQMS for River Ghaggar has already been installed and working.	PPCB	Activity completed
4	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	Completed, No Gap	MCP, PDA& PWSSB	MCP, PDA & PWSSB has informed that funds have been tied up.
	(ii)Providing proper in-house laboratory facilities	Completed	MCP, PDA & PWSSB	STP Patiala-I (Shermajra) (46

	at each STP for maintaining record of characteristics of analysis of untreated as well as treated waste water			MLD & 15 MLD) – Provided STP Patiala-II (Ablowal) (10 MLD) –Common Lab Provided with Shermajra STP Patiala-III (PUDA) (13 MLD) –Provided STP Rajpura (7 MLD & 10 MLD) – Common Lab Provided STP Samana (10 MLD) – Provided STP Patran (4 MLD) –Provided STP PSIEC, Focal Point, Nabha (2.5 MLD) – Not Provided Total STPs = 8 Lab Provided = 7 Lab Not provided = 1 as small STP
5	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.	<ul style="list-style-type: none"> • Total No of NGT Villages Ponds = 134 • No. of NGT village ponds for which work has been completed:- 43 • No. of NGT villages where work is under progress= 05 (to be completed by 30/09/2022) • No. of NGT villages where work is yet to be started = 86 • NGT Villages Ponds to be completed = 43 (by 31/03/2023) 	DDPO & Xen Panchayati Raj	As per the timeline defined.

	(i)Finalization of appropriate technology	<ul style="list-style-type: none"> • NGT Villages Ponds to be completed = 43 (by 31/03/2024) • Non NGT Ponds:- 888 • No of Work is completed= 60 • Timelines for the pending ponds:- • 168 (to be completed by 31/03/2023) • 164 (to be completed by 31/03/2024) • 162 (to be completed by 31/03/2025) • 166 (to be completed by 31/03/2026) • 168 (to be completed by 31/03/2027) 		
	(ii)Arrangement of Funds for treatment technology in various villages identified in the Action Plan	<ul style="list-style-type: none"> • No. of village ponds for which funds for treatment technology arranged: 137 • No. of village ponds whose arrangement of funds under process-139 	DDPO & Xen Panchayati Raj	Within Six month from the Date of receipt of Funds
	(iii)Reuse of water for agriculture purpose in villages.	<ul style="list-style-type: none"> • No. of village ponds for which irrigation scheme has been implemented: - NIL • Progress for the remaining villages: work is under progress under the MGNREGA Scheme. 	DDPO, Department of Soil & Water Conservation & Xen Panchayati Raj.	Within Six month from the Date of receipt of Funds
	(iv)Proper operation and maintenance of treatment facilities installed in village ponds	<ul style="list-style-type: none"> • No. of village ponds for which operation and maintenance of treatment facilities installed:43 • Progress for the remaining villages for remaining villages work is under progress under the MGNREGA Scheme 	DDPO	Within Six month from the Date of receipt of Funds
6	(i)Checking of health indices of the in-habitants & maintaining database.	Camps are organized on monthly basis	The Department of Health and Family Welfare	Regular activity
	(ii)Holding awareness camps in the catchment area of River Sutlej to make the public aware regarding water borne diseases			

7	(i) Measurement of flow at different locations of River Ghaggar & drains.	The flow is being monitored on monthly basis by the drainage department.	Department of water resources,	Regular activity
	(ii) To stop unauthorized discharge in the drains.	Regular survey is being done by the concerned departments to stop unauthorized discharge in the drains.	Deptt. of water resources, MCP and DDPO	Regular activity
8	Setting up of additional water bodies/water harvesting structures	MCP:- Estimate prepared for Action plan of setting up water harvesting structure .	MCP and EOs of respective MCs/NPs NP Ghanaur:- STP under construction by Dept of PWSSB	MCP:- 31.12.2022
9	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)	Being implemented as per guidelines framed by CPCB	PPCB	31.03.2023
10	Installation of ETP in all big units (marriage halls, banquet halls, party venues etc) which are not connected with the sewer lines. (Directions of Hon'ble NGT in OA no. 400/2017 dated 04.02.2021)	<ul style="list-style-type: none"> • Total marriage palace (outside city limits) : 82 • ETP / STP installed : 3 • ETP / STP yet to be installed : 79 • The directions regarding installation of ETPs / STPs are being implemented as per guidelines framed by CPCB 	PPCB	31.03.2023

11	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)	Being implemented as per guidelines framed by CPCB	PPCB	31.03.2023
12	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)	Being prepared.	All Local Bodies	31.12.2022
13	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 04.02.2021)	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= 31.12.2023
14	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.	Such Committees has been constituted	District Administration	Activity Completed.

	(Directions of Hon'ble NGT in OA no. 176/2015 dated 20.07.2020)			
15	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
16	All Overexploited, Critical & Sensitive (OCS) assessment units must undergo water mapping. (Directions of Hon'ble NGT in OA no. 176/2015 dated 20.07.2020)	Water mapping of all the OCS assessment units has been carried out as per the guidelines of GOI as per 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.	Water Resources	Activity Completed
17	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	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.	Water Resources (Ground water cum NHP wing) and PWRDA	31.12.2022

	in OA no. 176/2015 dated 20.07.2020)			
18	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	31.12.2022
19	The District Magistrates have 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)	<ul style="list-style-type: none"> • Total No of NGT Villages Ponds = 134 • No. of NGT village ponds for which work has been completed:- 43 • No. of NGT villages where work is under progress= 05 (to be completed by 30/09/2022) • No. of NGT villages where work is yet to be started = 86 • NGT Villages Ponds to be completed = 43 (by 31/03/2023) • NGT Villages Ponds to be completed = 43 (by 31/03/2024) • Non NGT Ponds:- 888 • No of Work is completed= 60 • Timelines for the pending ponds:- • 168 (to be completed by 31/03/2023) • 164 (to be completed by 31/03/2024) • 162 (to be completed by 31/03/2025) • 166 (to be completed by 31/03/2026) • 168 (to be completed by 31/03/2027) 	DDPO	Timeline as defined.
20	Active efforts be made in close coordination with technical bodies to tap excess runoff of	A proposal will be prepared in coordination with technical bodies to tap excess run of rivers / canals to rainfall season to recharge old water bodies and to retain water in new ponds.	Irrigation / Drainage department	31.12.2026

	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)			
21	Maintenance of E Flow of the rivers. (Directions of Hon'ble NGT in OA no. 325/2015 dated 18.11.2020)	Already Maintained	Drainage Department	Completed
22	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)	Already implemented	Drainage Department	Activity Completed
23	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

24	Installation of STP will be mandatory for all residential apartments/group housing societies where groundwater requirement is more than 20 m3/day for getting NOCs. (Directions of Hon'ble NGT in OA no. 496/2016 dated 22.01.2021)	Directions being followed.	PDA/MCP/Department of urban development	Regular Activity
25	Comprehensive Plan to install flow meter at various location 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 = 31.12.2022.	PWSSB	Time line for Preparation of plan = 31.12.2022. Time line for implementation of plan = 31.12.2023.
26	Control of illegal extraction of groundwater. (Directions of Hon'ble NGT in OA no. 496/2016 dated 22.01.2021)	Inspections are being made to control illegal extraction of ground water.	All Local Bodies	Regular Activity
27	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 Patiala.	District Heads of concerned departments and District Administration	• Monthly Meetings shall be taken by District Head of concerned department for the review of activities of this

				<p>plan and nodal officer of concerned department will submit the reports to the District Environment Committee and PPCB on monthly basis.</p> <ul style="list-style-type: none"> • Monthly Meetings shall be taken by the District Administration along-with District Environment Committee.
28	Appointment of Nodal officer with contact number	All the departments have appointment the Nodal officer and list is attached as Annexure-X	All concerned departments	Completed
29	Preparation of operational manual of STPs for the effective and efficient operation of the STPs of the state.	The manual has already been prepared.	PPCB	Activity Completed
30	Enhancement of capacity of existing ponds/ water bodies and creating of new water harvesting structures.	<p>A. Existing Ponds(Total) = 1345 B. No. of Ponds whose Capacity has been enhanced = 335 C. New ponds = 2 Source of Funds above activities: Gram Panchayat Fund, 14th & 15th Finance Commission, MGNrega, MPLAD Scheme</p>	DDPO & Xen Panchayati Raj	Timeline: 31.10.2023

		RDO(S) 28 The ponds contains both wastewater and rain water.		
31	Usage of treated sewage for sprinkling purposes for sweeping of roads to control dust pollution.	Being used for sprinkling purposes and also used for sweeping of roads in various areas by MCP and other MCs/NPs & PDA.	MCP and EOs of respective MCs/ NPs and PDA	Regular activity
32	Mapping of the rivers and flood plain zones in the catchment area of rivers of the State.	The mapping has already been done by the Drainage Department in an electronic file.	Drainage Department	Completed
33	Utilization of STPs sludge	STP sludge is used by the farmers as manure.	MCP and EOs of respective MCs/ NPs and PDA	Regular activity
34	Framing policy for the management of highly contaminated Feacal 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 31.10.2022. Implementation = 30.04.2025
35	The projects being developed for supply of canal water to the inhabitants of the cities/villages may be completed in a time bound manner.	<ul style="list-style-type: none"> • The project for supply of the canal water to 316 villages has been taken up and for the same, two no. Water Treatment Plants (Mandouli, Pabra, Distt. Patiala) will be constructed and 491 Km D.I transmission line will be laid in this project. • Work of both Water Treatment Plants in progress and 263 Km. D.I transmission line have been laid in both clusters. Overall 45% works have been completed. The Design Build work will be completed upto 26-01-2023. • Budgetary Provision (i) Capex Cost is to be funded by World Bank & Jal Jeevan Mission on 50:50 basis. (ii) Project will be operated by the Contractor for 10 years.pi 	Department of Water Supply and Sanitation	Project completion by 26.01.2023
36	Reuse of treated effluent	<ul style="list-style-type: none"> • STPs where Irrigation schemes have been completed and 	Department of	STP Shermajra (46

	through existing STPs (OA no. 496/2016 dated 22.01.2021)	<p>working = 3 Samana (10 MLD), Patran (4MLD) & Rajpura (10 MLD).</p> <ul style="list-style-type: none"> • Irrigation schemes are yet to provided/work under process = 5 ✓ STP Shermajra (46 MLD& 15 MLD): - Estimates are being prepared. Final Estimate will be submitted after allocation of funds. ✓ STP Ablowal (10 MLD): Project feasibility report has been submitted and estimate will be prepared after allocation of funds. ✓ STP PUDA (13 MLD): The PDA is utilizing the entire treated water for construction/ sprinkling and sweeping of roads in the Urban Estate area. ✓ STP Rajpura (10 MLD): Project feasibility report has been submitted and estimate will be prepared after allocation of funds. 	Soil & Water Conservation, PWSSB	<p>MLD& 15 MLD): - Project will be completed by 31.12.2025 (Subject to Availability of Funds)</p> <p>STP Ablowal (10 MLD): -Project will be completed by 30.09.2024 (Subject to Availability of Funds)</p> <p>STP Rajpura (10 MLD): Project will be completed by 30.09.2024 (Subject to Availability of Funds)</p>
37	Reuse of treated effluent through proposed STPs (New STPs) (OA no. 496/2016 dated 22.01.2021)	<ol style="list-style-type: none"> 1. STP Bhadson (3 MLD): Preliminary Survey has been done and STP is yet to constructed. 2. STP Nabha (12 MLD): Preliminary Survey has been done and STP is yet to constructed. 3. STP Ghanour (2 MLD): Preliminary Survey has been done and STP is yet to constructed. 	Department of Soil & Water Conservation/ PDA	<p>STP Bhadson (3 MLD): 31.12.2025 (Subject to Availability of Funds)</p> <p>STP Nabha (12 MLD): 31.12.2025 (Subject to Availability of Funds)</p>

				STP Ghanour (2 MLD): 31.12.2024 (Subject to Availability of Funds)
38	Installation, operation & maintenance of online continuous effluent monitoring system with flow meter as well as CCTV cameras for the existing STPs.	Total STPs=8 CCTV Provided = 8 OCEMS Provided=6	MCP, PDA, PWSSB	MCP:- Activity Completed STP Samana 10 MLD and STP Patran 4 MLD installed and working. PDA has already installed OCEMS & CCTV camera at 13 MLD STP at Urban Estate, Patiala.
39	Activity w.r.t. In-situ remediation technology to be provided in the drains carrying untreated sewage.	MCP has installed STP plant having capacity 46 MLD, 10 MLD and 15 MLD in the different area and All the sewerage water being treated by these STPs. Other MCs / NPs : Proposal Yet to prepare	MCP, EOs of respective MCs/NPs	MCP:- Activity Completed MCs/MPs: 31.12.2022

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=154,Orange Category unit =1143,GreenCategory unit=184 and White Category unit = 17
No. of Industries discharging wastewater (generating trade effluent)	104 i. No. of industries installed captive ETP = 85, ii. No. of industries joined CETP =19
Status of Water Consent	Regular activity <ul style="list-style-type: none"> • Total no. of industries requiring consent to operate under Water Act, 1974 <ul style="list-style-type: none"> ✓ Red = 154 ✓ Orange =1143 ✓ Green=184 • Total no. of units having valid consent as on 30.06.2022 <ul style="list-style-type: none"> ✓ Red = 153 ✓ Orange =1029 ✓ Green=156 • Timeline for grant of consents to the balance units not having valid consent. <ul style="list-style-type: none"> ✓ Red = 31.08.2022 ✓ Orange = 31.12.2022 ✓ Green= 31.12.2022
Total Quantity of industrial wastewater generated	11.85MLD
Quantity of treated industrial wastewater discharged into Nallahs/ Rivers	Nil
Common Effluent Treatment Facilities	Nil
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

Sr. 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 portal already developed. Web link: publicgrievancepcb.gov.in	PPCB	Activity completed
3	Installation of Online Continuous Monitoring System by 17 categories highly polluting industries.	OCEMS already installed.	PPCB	Activity completed
4	Installation of Electromagnetic flow meters at inlet and outlet of ETP.	The water polluting industrial units have already installed the EMF meters. However, regular inspections are being made to check its functioning and records being maintained by the industries.	PPCB	Regular activity
5	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	No mining activity is carried out in the jurisdiction of District Patiala
Type of Mining Activity	NA
No of licensed Mining operations in the District	NA
% Area covered under mining in the District	NA
Area of Sand Mining	NA
Area of sand Mining	No mining activity is carried out in the jurisdiction of district Patiala

(b) Identification of gaps and action plan:

Sr. No.	Action Points	Gaps and Action Plan	Responsible Agency	Timeline for completion of Action Plan
1	Monitoring of Mining activity	No mining activity is carried out in the jurisdiction of District Patiala	Department of water resources	-
2	Inventory of illegal mining if any mining	No mining activity is carried out in the jurisdiction of District Patiala	Department of water resources	-
3	Environment compliance by Mining industry	No mining activity is carried out in the jurisdiction of District Patiala	Department of water resources	-

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	No of analyzer available = 1 (With PPCB)

(b) Identification of gaps and action plan:

Sr. 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"> Total No. of analyzers required : 27 Total Nos. of analyzers available = 01 Balance noise analyzers are required by Police Department: 26 i.e. one meter to each SHO. 	PPCB and Police Department	31.12.2022
2	Ambient Noise Level monitoring	Yet to install	PPCB	31.03.2023
3	Sign boards in Noise zones	Sign boards are installed at sensitive zones. However, sign boards in other areas are yet to install	ULBs	31.12.2022
4	Complaint redressing system	Public complaint redressal system already established in the district.	District Administration, Police Department and PPCB	Activity Completed.
5	Checking of pressure horn of vehicles	Regular checking of vehicle is being done by the police department and PPCB.	Police Department & PPCB	Regular activity.

List of Nodal Officers (Annexure-X)

List of the Nodal Officers of the stakeholder Departments

Sr. No.	Name of the Department	Nodal Officer Name	Designation	Mobile No.	Email ID
1.	Municipal Corporation, Patiala	Ms. Vineet Kumar, IAS	Commissioner Municipal Corporation, Patiala	84277-74331	cmc_patiala@yahoo.com
2.	PDA	Sh. Anuj Sehgal	Executive Engineer	94631-89488	de_civilpda@rediffmail.com
3.	Local Government, Department.	Sh. Gautam Jain, IAS	Additional Deputy Commissioner (UD) Patiala	99581-22047	adcupatiala@yahoo.com
4.	Punjab Pollution Control Board	Er. Navtesh Singla	Environmental Engineer, Regional Office Patiala	81466-62528	eero_patiala@yahoo.com
5.	Regional Transport Authority, Patiala	Sh. Sham Lal	Assistant Transport Officer	99142-23294	rtapatiala4@gmail.com
6.	Police Deptt. Patiala	Sh. Rajesh Sanehi	DSP, Traffic Patiala	79862-52918	dsptrafficptl@gmail.com
7.	Distt. Development and Panchayat Officer, Patiala (DDPO)	Sh. SurinderDhillon	DDPO	98142-61000	ddpopatiala@gmail.com
8.	District Soil Conservation Officer, Department of Soil & Water Conservation, Patiala	Sh. Ravinder Singh Gill	DSCO	99149-01999	Dsco.dswc.patiala@punjab.gov.in
9.	Superintending Engineer,	Sh. Rajeev Kapoor,	Executive Engineer	98153-06344,	eep1.pwssb@punjab.gov.in

	Punjab Water Supply & Sewerage Board, Patiala	Sh. Sabjit Singh	(Divison-1), Executive Engineer (Divison-2)	97792-28223	eepwssd2pta@gmail.com
10.	PWD (B&R), Patiala	Er. Tarsem Raj	Executive Engineer	98554-41451	eecwd1ptlpwdpb@gmail.com
11.	Department of Water Resources & Drainage, Patiala	Sh. Ramandeep Bains	Executive Engineer	98880-08800	eedrainage@gmail.com
12.	Agriculture Department, Patiala	Sh. Jaswinder Singh Grewal	CAO	97792-13097	caopatjala@gmail.com
13.	Forest Department, Patiala	Ms. Vidya Sagari R.U	DFO Patiala	94129-27063	patialadfo@gmail.com
14.	PSIEC, Patiala	Sh. Harmanjot Singh	SDE	75082-54766	harmansidhu08@gmail.com
15.	District Food & Civil Supply Officer, DFSC, Patiala	Sh. Roopreet Sidhu	DFS0 Patiala	98760-72078	dfsopatjala@gmail.com
16.	Education Department	Ms. Harinder Kaur	DEO Secondary	97810-51502	deose.patiala@punjabeducation.gov.in
17.	Health Department	Dr. Parveen Puri	Assistant Civil Surgeon	92161-24254	cmo.patiala@gmail.com
18.	Animal Husbandry,	Dr. Gurcharan Singh	DDAH	97811-13137	ddahpatjala@gmail.com
19.	Labour Department Patiala	Sh. Jagpreet Singh,	Assistant Labour Commissioner	98155-15255	jpscheema87@gmail.com
20.	Director of Factories Patiala	Sh. Narinderpal Singh,	Director of Factories	97812-70230	adfopatjala82@gmail.com