

Form –V
[See rule 24 (3)]

**Annual report by the Punjab Pollution Control Board to the Central
Pollution Control Board for the period 01.01.2016 to 31.12.2016**

PART A

1.	Name of the State/ Union Territory	Punjab
2.	Name & address of the State Pollution Control	Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala
3.	Number of local bodies responsible for management of solid waste in the State/ Union territory under these rules	Total Urban Local Bodies= 163-3=160 (Govt. has withdrawn the notification regarding notified area of Nagar Panchayat, Mamdot, Nagar Panchayat, Noorpur Bedi and Nagar Panchayat, Nadala)
4.	No. of authorization application Received	16 for setting up/renewal of MSW dumping site and 4 for setting up/renewal of Cluster sites.
5.	A Summary Statement on progress made by local body in respect of solid waste management	Please Attach as Annexure-I
6.	A Summary Statement on progress made by local bodies in respect of waste collection, segregation, transportation and disposal	Please attach as Annexure-II
7.	A summary statement on progress made by local bodies in respect of implementation of Schedule II	Please attach as Annexure-III
	Date..... Place.....	Sd/- Member Secretary Punjab Pollution Control Board

PART B

1.	Towns/cities	
a)	Total number of towns/cities	160
b)	Total number of ULBs	160
c)	Number of class I & II cities/ towns	Class I- 24 ClassII-44 Class-III-27 Nagar Panchayats-55 Municipal Corporation-10
2.	Authorization status (names/ number)	
a)	Number of applications received	16 for setting up/renewal of MSW dumping site and 04 for setting up/renewal of Cluster sites.
b)	Number of authorization granted	07 for setting up/renewal of MSW dumping site and 01 for setting up/renewal of Cluster sites.
c)	Authorization under scrutiny	09 for setting up/renewal of MSW dumping site and 3 for setting up/renewal of Cluster sites.
3.	Solid Waste Generation status	
a)	Solid waste generation in the state (TPD)	4544.35
b)	Collected	4520.35
c)	Treated	39.175
d)	Landfilled	3278.6
4.	Compliance to Schedule I of SW Rules (Number/names of	

	towns/capacity)				
a)	Good practices in cities/towns	51			
b)	House-to-house collection	110			
c)	Segregation	16			
d)	Storage	115			
e)	Covered transportation	131			
5.	Processing of SW (Number/names of towns/capacity) Solid Waste processing facilities setup:				
	Sr. No.	Composting	Vermi-composting	Biogas	RDF/Pelletization
		-	1/Shamchaurassi	-	2/Bathinda and Ludhiana
6.	Processing facility operational:				
	Sr. No.	Composting	Vermi-composting	Biogas	RDF/Pelletization
		-	1/Shamchaurassi	-	2/Bathinda and Ludhiana
7.	Processing facility under installation/planned :				
	Sr. No.	Composting	Vermi-composting	Biogas	RDF/Pelletization
		-	-	-	6/ GMADA, Patiala, Ferozepur, Amritsar, Jalandhar, Pathankot

8.	Waste-to-Energy Plants: (Number/names of towns/capacity)				
	Sr. No.	Plant Location	Status of operation	Power generation (MW)	Remarks
		Bathinda, Ludhiana, GMADA, Patiala, Ferozepur, Amritsar, Jalandhar, Pathankot	1 plant at Nakodar for Ludhiana Cluster is already installed but yet not in operation.	-	-
9.	Disposal of solid waste (number/names of towns/capacity):				
a)	Landfill sites identified	8			
b)	Landfill constructed	Nil			
c)	Landfill under construction	Nil			
d)	Landfill in operation	Nil			
e)	Landfill exhausted	Nil			
f)	Landfilled capped	Nil			
10.	Solid Waste Dumpsites (number/names of towns/capacity):				
a)	Total number of existing dumpsites	All the 160 ULBs have provided Municipal Solid Waste dumping sites for disposal of waste			

b)	Dumpsites reclaimed/capped	1/ Jalandhar under progress
c)	Dumpsites converted to sanitary landfill	Nil

11. Monitoring at Waste processing/ Landfill sites

Sl. No.	Name of facilities	Ambient air	Groundwater	Leachate quality	Compost quality	VOCs
1.	-	-	-	-	-	-

12. Status of Action Plan prepared by Municipalities

- a) Total number of municipalities:160
- b) Number of Action Plan submitted: Punjab State Solid waste Management Action Plan-2017 for managing Municipal Solid Waste of all Urban Local Bodies. The ULBs will be connected to the respective Cluster directly or through transfer points.

Annexure –I

Summary Statement on progress made by local body in respect of solid waste management

- The Government of Punjab has formulated a Punjab Model Municipal Solid Waste Management Plan, 2014 for managing Municipal Solid Waste of all the 160 no. of Urban Local Bodies of Punjab and entire State has been divided into eight Municipal Solid Waste Clusters. Thereafter, in compliance to the orders of the Hon'ble Punjab and Haryana High Court in CWP No. 7039 of 2010, a Common Action Plan for viable alternative measures for disposal of garbage till setting up of Solid Waste Management Plants, was prepared in 2012 which was agreed by the Deptt. of Local Govt. Punjab. The Directorate of Local Government is the implementing body of the Action Plan and PPCB is monitoring the same regularly. The 10 points of the Common Action Plan are as under:
 - 1) Waste in each dumping site shall be scrapped and piled up in a corner. After compaction of the waste, it shall be covered with a layer of atleast 60 cms. of soil, inert debris or construction material and shrubs/ grass will be planted over the piles. To prevent leaching in rainy season, a clay bed of 40 cm thickness shall also be prepared before dumping the garbage at dumping sites. This has to be completed before 15 June, 2012.
 - 2) 100% collection of garbage shall be ensured in all the ULBs. Each collection point shall be fully cleared atleast twice in a day and it shall be ensured that there is no garbage left over.
 - 3) The burning of dry garbage or leaves shall not be allowed.
 - 4) The fully covered vehicles shall be used for shifting of Municipal Solid Waste to avoid foul smell and to prevent it from scattering.
 - 5) A green belt having a width of minimum 5 meters along the entire boundary / fencing of the dumping sites shall be ensured by growing of dense trees and shrubs for the purpose of greenery and healthy environment of that area. The plantation shall be done during this Monsoon season.
 - 6) To avoid stray animals, a fencing around dumping site shall be constructed and completed within two months.
 - 7) All the ULBs shall ensure that the spray of herbal sanitizer daily on regular basis shall be done at the dumping sites to prevent any environmental hazard and to retard the foul smell.
 - 8) Fogging of melathene shall also be done every week at dumping sites to kill the insects and flies.
 - 9) Wastes shall be covered immediately or at the end of each working day with minimum 10 cm of soil, inert debris or construction material till such time waste processing facilities for composting or recycling or energy recovery are set up as per Solid Waste Management (Management and Handling) Rules, 2000.

10) In all the Corporation towns and Class-1 ULBs, Piezometer shall be installed at dumping sites within two months to monitor the quality of ground water.

- The Punjab Pollution Control Board is monitoring the compliance of 10 points of Common Action Plan, of all the ULBs through its Regional Offices. Also as per Department of Local Govt. order two Committees were constituted under the Chairmanship of Commissioners of Municipal Corporations and SDM of the Sub-divisions level for monitoring compliance of Common Action Plan by Corporations and other Municipal Councils, respectively. The Environmental Engineers and Assistant Environmental Engineers of Regional Offices of the Board are also members of the Committees.
- Out of 160 ULBs, 07 ULBs are complying with all ten points of Common Action Plan (i.e. provision of green belt, boundary wall/fencing with gate entry and covering of waste with 10cm layer of soil), 100 ULBs are partially complying and remaining 53 ULBs are yet not complying.
- The Punjab Pollution Control Board, during the last one year, on the basis of reports received from the Regional Offices, has issued about 96 show-cause notices for violation of the provisions of the Solid Waste Management Rules, 2016 alongwith an opportunity of personal hearing ULBs and the Board has also initiated legal action against the responsible Officers of 15 ULBs under the provisions of E(P) Act, 1986 for non-compliance and violation of the provisions of Municipal Solid Waste (Management & Handling) Rules, 2000 now Solid Waste Management Rules, 2016.
- Out of 160 ULBs, 48 ULBs has obtained authorization from Punjab Pollution Control Board till now. Out of these 48 ULBs, 14 have valid authorization, whereas remaining have yet not applied for renewal of the same. The applications of total 16 ULBs are under process for obtaining fresh/renewal of authorization.

Annexure –II

Summary Statement on progress made by local bodies in respect of waste collection, segregation, transportation and disposal

Sr. No.	Parameters	Status of 160 ULBs operating in the State of Punjab
1	Collection of Municipal Solid Waste	Yes, collection is being done on daily basis from all secondary points.
2	Segregation of municipal Solid Wastes	16 ULBS are segregating their waste fully/partially.
3	Transportation of municipal solid wastes	131 ULBs are transporting their waste using covered vehicles
4	Disposal of municipal solid wastes	Open land dumping

- The Department of Local Government, Govt. of Punjab vide notification no. 5/95/2016-4LG-4/863914/1 dated 24.10.2016, has constituted the Punjab State Advisory Board for Solid waste, under the Chairmanship of Additional Chief Secretary/ Principal Secretary/ Secretary, Local Government, Department Punjab. One representative of Punjab Pollution Control Board has also been included as a member in this Board.
- The Chief Executive Officer of Punjab Municipal Infrastructure Development Company will act as Convener of the Advisory Board. Further, the abovesaid Board shall meet at least once in every six months to review the matters relating to implementation of the Rules, State Policy and strategy on Solid Waste management and give advice for taking measures that are necessary for expeditious and appropriate implementation. Copies of the review reports shall be forward to the State Pollution Control Board from time to time.

• **Annexure III**

Summary statement on progress made by local bodies in respect of implementation of Schedule II

- The Board has collected the groundwater samples from MC, Mohali.
- The Committee constituted for the effective implementation of the provisions in Solid Waste Management Rules, 2016 during its meeting on 21.03.2017, decided to outsource the work of groundwater analysis to expert agencies and quotation has also been called for this purpose.

Latest status of the Clusters

There are 160 no. of Urban Local Bodies in the State of Punjab. As per estimates, these Urban Local Bodies in the State of Punjab generates Municipal Solid Waste to the tune of 4400 Ton per day. The Government of Punjab has formulated a Punjab Model Solid Waste Management Plan, 2017 for managing Solid Waste of all Urban Local Bodies of Punjab (India) on Public Private Partnership (PPP) mode for a concession period of 25 years. Under this Plan, a State Level Municipal Solid Waste Master Plan has been prepared and entire State of Punjab has been divided into eight Municipal Solid Waste Clusters viz. i) Jalandhar Cluster, ii) Ludhiana Cluster, iii) Bathinda Cluster, iv) Ferozepur Cluster v) Patiala Cluster, vi) Amritsar Cluster vii) Pathankot Cluster and viii) GMADA Cluster.

1. Ludhiana Cluster

A comprehensive Solid Waste Management of Municipal Corporation Ludhiana is required to improve the existing condition of waste management in the city, in compliance with MSW rule 2000. This has necessitated the formulation of these projects. The Project has been appraised by the CPHEEO. The appraisal Committee noted the submission of the State that matching share of ULB/State for this project has been made. The Following 13 Towns are part of the Ludhiana MSW Cluster:

“Municipal Corporation Ludhiana, Doraha, Jagraon, Khamanon, Khanna Machiwarra, Malaudh, Dakha, Payal, Raikot, Sahnewal, Samrala, Phillaur.”

- **Project Capacity:** 1125 TPD (including C&D Waste) which is to be enhanced to 2238 by the year 2035.
- **Components:** Door to Door Collection, Primary and Secondary Collection, Transportation for 1325 TPD (including C&D Waste), Compost Facility, Sanitary Landfill Facility (SLF).
- **Projects Site (s):** 1. About 49.5 Acres Land at Jamalpur, 2. Approximate 33 Acres of land at Jainpur.
- **The Project Cost** is Rs. 97.85 Crores.

- **Present Status:** The RDF plant at Ludhiana has now been commissioned and at present 1000 TPD MSW is being received at the dumping site. The present installed capacity of the RDF plant is 45 TPH and the plant has now been fully commissioned. Permanent electric connection is now available with the plant.

The RDF produced is being transported through trucks to the existing Bio-mass based Waste to Energy plant of M/s A2Z Waste Management Company (capacity 15 MW) located at Nakodar, Distt. Jalandhar. However, this plant was operated on trial basis only and is not being operated regularly.

2. Jalandhar Cluster

Project status

- **Project Capacity:** 750 TPD
- **Processing Facility:** Approx. 20 acre of site at village Jamsheer near Jalandhar
- **Sanitary Landfill Facility:** Approx. 21 acre of site at Village Piplanwala, Hoshiarpur.
- **No. Of Urban Local Bodies attached:** 27
- **The total project cost** is 133.33 crores.
- **Present Status:** As per the latest status report of the Department of Local Govt. the project site is yet to be handed over to Concessionaire. Though all clearances have been obtained, the Concessionaire has not been handed over the processing site by Commissioner, Municipal Corporation, Jalandhar due to stiff resistance from local people/ local MLA. The local MLA has opposed the existing plant site during the assembly session in 2015. There upon the Hon'ble local Government Minister has constituted a Committee to ascertain whether the site was chosen as per instructions on the subject. The committee has submitted its report and final decision regarding this land is yet to be taken by the State Government. The Department of Local Government has now decentralized the cluster due to public pressure.

The sanitary Landfill site of the Jalandhar Cluster is located at Village Piplanwala, Hoshiarpur. This site is presently used by the Municipal

Corporation, Hoshiarpur for disposing off its Municipal Solid Waste. The Municipal Corporation is partially covering the waste with layer of soil. Also, as per the latest status the work for construction of boundary wall has been completed upto 60%.

3. Bathinda Cluster

Project status

- **Project Capacity:** 350 TPD
- **Processing Facility:** Approx. 20 acre at Mansa Road, Bathinda
- **Sanitary Landfill Facility:** Approx 36.11 acre at village Mandi Khurad Project was awarded to consortium of M/s. JITF Urban Infrastructure Limited, New Delhi (JINDAL Group); and M/s Ladurner Impainti s.r.l., Italy in Nov.,2011;
- **No. Of Urban Local Bodies attached:** 16
- **The total project cost** is 66.46 crores.
- Collection and transportation of MSW is operational since Jan, 2012.
- **Present Status:** The Waste to RDF and compost plant commissioned on trial basis from October 2015, but shut down in April 2016, temporarily due to mal odour complaint by citizens in the neighbourhood. Now, the facility has been restarted in the third week of January 2017 and is in operation regularly at capacity of processing waste @ 100 TPD of Bathinda town only. Two-stage wet scrubber has been installed as proposed and eco solution is being sprayed properly in compost area and processing area. Odour is now sensed inside the shed area, however, it was not sensed outside plant premises. Plantation/green belt was maintained properly by the facility around its periphery.

4. Ferozpur Cluster

Project Status

- **Project Capacity:** 300TPD
- **Processing Facility:** Approx. 20 acre of site at Village Beer Chahal, Faridkot.
- **Sanitary Landfill Facility:** The same site at Village Beer Chahal, Faridkot would be utilized for SLF.

- **No. Of Urban Local Bodies attached:** 18
- **The total project cost** is 66.46 crores.
- Project was awarded to M/s. JITF Urban Infrastructure Limited, New Delhi (JINDAL Group); and M/s Ladurner Impainti s.r.l., Italy In Dec.,2011;
- Collection & Transportation of MSW is operational since Jan.,2012.
- **Present Status:** Except provision of wire fencing and gated entry no work has been started at te site.

5. Amritsar Cluster

Project Status

- **Project Capacity:** 650 TPD
- **Processing Facility:** Approx. 21 acres Site is available at Bhagatanwala within Municipal Limits.
- **Sanitary Landfill Facility:** The same site at Bhagtanwala would be utilized for phase-I SLF.
- **The total project cost** is 116.00 Crores.
- **No. Of Urban Local Bodies attached:** 8.
- **Present Status:** The site is being used for dumping of MSW of MC Amritsar, however no work for installation of Integrated Municipal Solid Waste treatment Plant has been initiated at the site. However, door to door collection has been started in 54 wards of Amritsar by M/s Essel Infraprojects Ltd. & M/s Hitachi Zosen India Pvt. Ltd. Mumbai.

6. GMADA Cluster

Project Status

- **Project Capacity:** 350 TPD
- **Processing Facility:** Aprox. 50 acre of site at Village Samgauli is allocated for MSW project.
- **Sanitary Landfill Facility:** The same site at Village Samgauli would be utilized for SLF.
- **No. Of Urban Local Bodies attached:** 18.
- **The total project cost** is 80 crores.
- **Present Status:** As per report of Local Govt. the project site measuring 50 acres at Samgauli, Dera Bassi is under acquisition. Notification under section 11 of the right to fair compensation and transparency in Land

Acquisition, Rehabilitation and Resettlement Act 2013 was issued on 04.03.2015. The draft notification under section 19 of the new Land Acquisition Act is pending with Land Acquisition Collector cum SDM Derabassi.

7. Patiala Cluster

Project Status

- **Project Capacity:** 500 TPD
- **Processing Facility:** Aprox. 20 acre of site at Village Dudhar is allocated for MSW project.
- **Sanitary Landfill Facility:** The site at Village Samgauli would be utilized for SLF.
- **No. Of Urban Local Bodies attached:** 25.
- **The total project cost** is 95 crores.
- **Present Status:** As per latest status the site has not been demarcated yet and no fencing work or other work has been started yet. No development work has yet been started at the site. As intimated by representative of the MC the technical bid regarding Integrated MSW Management project was done in October, 2016 and again in January, 2017 in which two companies have been shortlisted. The financial bid of the same is remaining which will be done shortly.

8. Pathankot Cluster

Project Status: The Commissioner, Municipal Corporation, Pathankot vide letter dated 03.12.2015 has intimated that in compliance to the orders of the Govt. an advertisement was given in newspapers for identifying suitable land for the Cluster. Accordingly, New site measuring 21 acres has been identified near village Gurukalan, District Pathankot and NOC has been applied to Airport Authorities. Presently, the MSW is being dumped at Village Deriwal and authorization for the same has already been obtained from PPCB.

Present Physical process:

Although, the Deptt. of Local Govt., Punjab has already identified 8 sites for setting up of Integrated Municipal Solid Waste Clusters at Amritsar, Bathinda, Ferozpur, Jalandhar, Patiala, GMADA and Ludhiana, however the NOC of Airport Authorities has yet not been obtained for Pathankot Cluster site. The practical work of

installation of RDF plants has been completed at Bathinda and Ludhiana. Ferozpur lease agreement has been made and fencing has been provided. There is no work at site in the Cluster sites at Patiala, Jalandhar, Amritsar and GMADA. Thus all the Cluster sites lacks timeline framed for the progress of the work.

The existing treatment plants installed by MC, Jalandhar at Village Wariana is not being operated since long and the entire waste is dumped unscientifically. The Vermi-Culture based plant set up by 3 MCs at Shamchaurasi is found to be in operation.

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Status of Environmental Clearance under EIA Notification dated 14.09.2006 of the eight 'Integrated Municipal Solid Waste Management Facilities' to be developed in the State of Punjab

There are eight clusters identified by the State Government for setting up of Integrated Municipal Solid Waste Management Projects for management of MSW. All the concerned Municipal Corporations/Councils have identified land and applied for Authorization from the Board. The Board has granted Authorization under Municipal Solid Waste (Management & Handling) Rules, 2000 to all the projects including landfill site at Hoshiarpur after considering their case in the Committee constituted for the effective implementation of the provisions in Sub Rule (2) of Rule 6 of Municipal Solid Wastes (Management & Handling) Rules, 2000. After obtaining Authorization from the Board, the concerned MCs have also applied for Environmental Clearance from the Competent Authority. The Department of Local Government, Punjab has not given any target date for completion of the projects. The Status of Environmental Clearance is as under:

Sr. No.	Name of the Cluster	Status of Environmental Clearance.
1.	Municipal Corporation, Bathinda	Environmental clearance under EIA notification dated 14.09.2006 has been granted by SEIAA, Punjab vide letter No. 36350 dated 30.08.2012 for establishment of an 'Integrated Municipal Solid Waste Management Facility' at Mansa Road, Bathinda in an area of 20 acres to handle 350 Tons/day of Municipal Solid Waste and 'Engineered Sanitary Landfill Facility' in an area of 36.8 acres in the revenue estate of Village Mandi Khurd, District Bathinda.
2.	Municipal Corporation, Jalandhar	Environmental clearance under EIA notification dated 14.09.2006 has been granted by SEIAA, Punjab vide letter No. 36378 dated 30.08.2012 for establishment of an 'Integrated Municipal Solid Waste Management Facility' in the revenue estate of Village Jamsher, Distt. Jalandhar in an area of 20 acres to handle 750 Tons/day of Municipal Solid Waste and 'Engineered Sanitary Landfill Facility' in an area of 22 acres in the revenue estate of Village Piplanwali, District Hoshiarpur.

3.	Municipal Corporation, Amritsar	Environmental clearance under EIA notification dated 14.09.2006 has been granted by SEIAA, Punjab vide letter No. 31793 dated 15.07.2014 for development of existing dump site into 'Integrated Municipal Solid Waste Management Facility' including Engineered Sanitary Landfill Facility @ 130 TPD, Compost plant @ 350 TPD, RDF plant @ 250 TPD and Recycling unit @ 50TPD in an area of 10 hectares to handle 650 Tons/day of Municipal Solid Waste in the revenue estate of Village Bhagtanwala, Tehsil & Distt. Amritsar.
4.	Municipal Council, Ferozerpur	EC been granted by SEIAA, Punjab vide letter No. 44 dated 07.01.2015 for establishment of Management Facility consisting of Engineered Sanitary Landfill Facility, RDF Plant and Compost plant in the revenue estate of Village Bir Chahal, District Faridkot to handle 350 Tons/day of Municipal Solid Waste.
5.	Municipal Corporation, Ludhiana	Environmental clearance under EIA notification dated 14.09.2006 for both Integrated Municipal Solid Waste Management facilities to be developed at Village Jainpur and Village Jamalpur, District Ludhiana has been granted by the MoEF, New Delhi on 31.01.2013.
6.	Municipal Corporation, Pathankot	The site has not been finalized for the project.
7.	Municipal Corporation, Patiala	EC been granted by SEIAA, Punjab vide letter No. 4320 dated 27.07.2015 for establishment of 'Integrated Municipal Solid Waste Management Facility' consisting of Engineered Sanitary Landfill Facility, RDF Plant and Compost plant in the revenue estate of Village Dudhar, District Patiala to handle 500 Tons/day of Municipal Solid Waste.
8.	Municipal Corporation, SAS Nagar	Environmental clearance under EIA notification dated 14.09.2006 has been granted vide letter dated 09.03.2012 by the Ministry of Environment & Forests, New Delhi for establishment of an 'Integrated Municipal Solid Waste Management Facility' in the revenue estate of Village Samgauli, District SAS Nagar.