

Format-A for Submission of Annual Inventory of Hazardous Waste Management by Occupiers

Name of SPCB/PCC: HP State Pollution Control Board

Year: 2017-18

A1: Detail of Hazardous Waste Generation

S.No.	Name of the District	Number of HW Generating industry	Authorized Quantity of Hazardous Waste (MT)				Quantity of Hazardous Wast Generated as per Annual Return within the State/ UT (MT)				Quantity of Hazardous Waste Imported during the year (MT)	Quantity of Hazardous Waste Exported during the year (MT)
			Landfillable	Incinerable	Recyclable	Utilizable	Landfillable	Incinerable	Recyclable	Utilizable		
			1	2	3	4	5	6	7	8		
1	Distt. Solan	1731	77292	-	5751	9123	12854.5	-	3477	3207.365	-	-
2	Distt. Sirmour	624	4075	-	81	668	523.1	-	2867	14.08	-	-
3	Distt. Una & Hamirpur	200	572	-	2877	58	1097	-	272	19	-	-
4	Distt. Bilaspur	52	2167	-	64	18	4.6	-	19	21.78	-	-
5	Distt. Mandi	58	109	-	54	14	22.6	-	6	0.46	-	-
6	Distt. Kullu & Lahaul Spiti	119	0.735	-	35	0	21	-	3	0	-	-
7	Distt. Kangra	116	82	-	721	11	15	-	0.2	0	-	-
8	Distt. Chamba	29	0.08	-	8	0	0.2	-	-	0	-	-
9	Distt. Shimla	116	0	-	4	0	0.03	-	10	0	-	-
10	Distt. Kinnaur	33	1	-	53	0	0.02	-	-	0	-	-
Total		3078	84299	-	9648	9892	14538	-	6654	3262.685	-	-

A2: Detail of Inter State Movement of Hazardous Waste for recycling/ utilization/ disposal

S.No.	Hazardous Waste	Hazardous Waste received from other State/ UT		Quantity (MT)	
		Name of State/UT from which waste received	Quantity received (MT)	Name of State/UT where waste sent	Quantity sent (MT)
			12		13
1	For disposal in common secured landfill	-	-	-	-
2	For disposal in common incinerator	-	-	-	-
3	For recycling by Schedule-IV recyclers	-	5486	Haryana	338.2
				Rajsthan	304.1
4	For utilization in Co-processing (Cement Plants)	-	-	-	-
5	For utilization under Rule 9 (other than co-processing)	-	-	-	-

A3: Detail of Hazardous Waste Recycled and Utilized

S.No.	Name of the District	Recycling/ utilization of hazardous waste (generated within the State/ UT)				Recycling/ utilization of hazardous waste (received from other State/ UT)			
		Quantity of waste Recycled (listed under Schedule-IV Hazardous Wastes) (MT)	Quantity Utilized (MT)			Quantity of waste Recycled (listed under Schedule-IV Hazardous Wastes) (MT)	Quantity Utilized (MT)		
			Co-processing in Cement Kiln(MT)	Other than Co-processing	Capative Utilization (other than column 15 & 16)		Co-processing in Cement Kiln	Under Rule 9 other than co-processing	Capative Utilization (other than column 19 & 20)
		14	15	16	17	18	19	20	21
1	Distt. Solan	3000	1955.405	1204	Nil	2536	Nil	Nil	Nil
2	Distt. Sirmour	2800	Nil	14	Nil	2950	Nil	Nil	Nil
3	Distt. Una & Hamirpur	200	Nil	19	Nil	Nil	Nil	Nil	Nil
4	Distt. Bilaspur	Nil	21.78	0	Nil	Nil	Nil	Nil	Nil
5	Distt. Mandi	Nil	Nil	0.16	Nil	Nil	Nil	Nil	Nil
6	Distt. Kullu & Lahaul Spiti	Nil	Nil	0	Nil	Nil	Nil	Nil	Nil
7	Distt. Kangra	Nil	Nil	0	Nil	Nil	Nil	Nil	Nil
8	Distt. Chamba	Nil	Nil	0	Nil	Nil	Nil	Nil	Nil
9	Distt. Shimla	Nil		0	Nil	Nil	Nil	Nil	Nil
10	Distt. Kinnaur	Nil	Nil	0	Nil	Nil	Nil	Nil	Nil
	Total	6000	1977.185	1237.16	Nil	5486	Nil	Nil	Nil

A5: Detail of Hazardous Waste Stored at Occupier Premise:

S.No.	Name of the District	Total Quantity of HW stored at Occupier premises at the beginning of the financial year i.e. 01.04.2017 (MT)				Total Quantity of HW stored at Occupier premises during the financial year i.e. 01.04.2017 to 31.03.2018 (MT)			
		Landfillable	Incinerable	Recyclable	Utilizable	Landfillable	Incinerable	Recyclable	Utilizable
		30	31	32	33	34	35	36	37
1	Distt. Solan	90.53	-	-	-	100.0	-	9.77	48.0
2	Distt. Sirmour	68.21	-	-	-	27.1	-	0.85	0.08
3	Distt. Una & Hamirpur	14.69	-	-	-	-	-	-	-
4	Distt. Bilaspur	-	-	-	-	-	-	-	-
5	Distt. Mandi	-	-	-	-	5.0	-	1.0	0.3
6	Distt. Kullu & Lahaul Spiti	-	-	-	-	-	-	-	-
7	Distt. Kangra	-	-	-	-	-	-	-	-
8	Distt. Chamba	-	-	-	-	-	-	-	-
9	Distt. Shimla	-	-	-	-	-	-	-	-
10	Distt. Kinnaur	-	-	-	-	-	-	-	-
	Total	173.427	-	-	-	132.1	-	11.62	48.38

**Format B for Submission of Annual Inventory on Recycling/ Utilization/ Co-processing of Hazardous waste
(as on 31.03.2018)**

Name of SPCB/PCC: HP State Pollution Control Board

S.No.	Type of Recycling Facilities	No. of Facilities authorized for recycling/ utilization/ co-processing of HW	Total Authorized Capacity (MTA)	Quantity Recycled/ Utilized/ Co-processed (MT) during the year
A	Commonly Recyclable HW			
1	Brass Dross	1	4000	-
2	Zinc Bearing Wastes	1	6000	955
3	Copper Bearing wastes			
4	Spent catalyst containing nickel, cadmium, zinc, copper, arsenic, vanadium and cobalt	-	-	-
5	Lead bearing wastes including battery waste	12	80285	10531
6	E-waste	-	-	-
7	Paint and ink sludge/ residues	-	-	-
8	Used oil	-	-	-
9	Waste oil	-	-	-
10	Any other	-	-	-
	Total	14	90285	11486
B	Utilization of HW under Rule-9			
1	Recovery of solvents from spent solvents	-	-	-
2	Utilization of APCD Dust/ Residue generated from LD Furnance/ EAF/ Blast Furnance for producing cold briquettes for use in Blast Furnance for production of Pig Iron	-	-	-
3	Utilization of spent catalyst to recover Platinum, Iridium, Osmium, Palladium, Rhodium, Ruthenium, Rhenium, Gold and Silver	-	-	-
4	Utilization of Spent H ₂ SO ₄ generated from Pickling operations for manufacturing Ferrous Sulphate	-	-	-
5	Utilization of Spent Acid containing Molybdenum generated from filament industries for producing Molybdenum Oxide by heating process	-	-	-
6	Utilization of spent HCL generated from steel rolling mills for producing Ferric Chloride	-	-	-
7	Utilization of used Anode Butt to produce Carbon Pellets and High Energy (HE) Coke for use in Steel furnance/ foundries	-	-	-
8	Utilization of used Anode Butt to produce Carbon Blended Coke/ Electrode carbon paste/ Carburiser for use in steel or ferroalloy furnances	-	-	-
9	Utilization of Pre-processed used Anode Butt to produce Green Anodes through Anode Baking process for use in Aluminium Smelters	-	-	-
10	Utilization of Pre-processed used Anode Butt generated to produce Carbon Electrode Paste	-	-	-
11	Utilization of Coal tar/ Tarry Residue generated from coal gasifier for energy recovery in sodium silicate industry	-	-	-
12	De-contamination of contaminated drums/ containers/ barrels	16	4181.4	1237.6
13	Utilization of process sludge and primary ETP sludge generated from Pulp and paper Industries for producing Paper Board/ Mill Board/ card Board	-	-	-

14	Captive Utilization of Aluminium Dross generated from refining and casting house of Aluminium smelter units to recover Aluminium Metal	-	-	-
15	Utilization of Aluminium Dross generated from refining and casting house of aluminium smelter units to recover Aluminium Metal	-	-	-
16	Utilization of Oil based iron sludge of Ball & Roller bearing for producing Ferroys Sulphate	-	-	-
17	Utilization of Mercury Wastes generated from various industry for recovering Mercury	-	-	-
18	Utilization of Spent H ₂ SO ₄ generated from Dye and Dye intermediates to produce gypsum suitable for use in cement plants	-	-	-
19	Utilization of Spent fixer (hypo) solution generated from Photography/ X-rays films Silver metal for various use	-	-	-
20	Utilization of Hydro floro sillicic acid - Acidic scrubber solution generated during Single super phosphate manufacturing industry Recovered sodium silico fluoride (Sodium fluorosilicate) for used in Glass industry	-	-	-
21	Utilization of Spent Sulphuric Acid Para generated during Nitro Toulene Ortho Sulphonic Acid/ Oxadiargyl Anthrquinine manufacturing industry for production of Ferrous Sulphate	-	-	-
22	Utilization of Vanadium Suudge generated from Alumina refineries for production of Vanadium metal	-	-	-
23	Utilization of Phenilic Waste water generated from Coal Gasifier condensale water for Quenching of hot gases in Alter Burning Chamber of Direct Reduced Iron (DRI) kli of Songe Iron Industry	-	-	-
24	Utilization of Chemical sludge (Promary sludge) of ETP from Pulp & Paper Industry for energy recovery in Atmospheric Fluidized Bed Combustion (AFBC) Boiler/ Pressurized Fluidized Bed Combustion (PFBC) Boiler/ Circulating Fluidized Bed Combustion (CFBC) Boiler for steam or electricity generation	-	-	-
25	Utilization of Spent carbon (Carbon Slurry) generated from Urea manufacturing plant for Quenching of carbon slurry in the reactor for manufacturing carbon calck	-	-	-
26	Utilization of Spent Acid containing Molybdenum compound generated from Bulb filament manufacturing industries for manufacturing of Ammonium Molybdate	-	-	-

27	Utilization of Resin Waste (mixture of Bisphenol A and Epichlorohydrin) generated from Resin impregnation of electrical coils power/ hydro equipments industries for manufacturing of High Tension/Low Tension Industries	-	-	-
28	Utilization of Spent Alumina generated during Polymerization of SWING unit of petrochemical plant for manufacturing of Refractory material like insulation bricks, Mortar, Castables, High Alumina bricks	-	-	-
29	Utilization of Spent Ion Exchange Resin generated from Daminalization (DM) plant for energy recovery in boiler for steam or power generation	-	-	-
30	Spent Ion Exchange Resin generated from Daminalization (DM) plant for energy recovery in Direct reduced Iron (DR) kiln or Sponge Iron Industry	-	-	-
31	Tungsten scrap generated from Metal cutting operation (using Tungsten carbide insert), mining tool button and worn out drills for manufacturing Tungsten Carbide Powder.	-	-	-
32	Spent Pot Lining generated during production of Primary Aluminium from Alumina Smelting Industries for utilization as a supplementary resource for manufacturing of Carbon Mineral Fuel.	-	-	-
33	Spent Sulphuric Acid and Spent Sodium Thiosulphate generated during manufacturing of 4.4 Diaminobenzene Sulphate for Isolation and purification of 2-NADSFA & 6-Acetyl-APSA	-	-	-
34	Coal Tar/Tarry Residue generated from Coal gasifier units for utilization as supplementary fuel in furnace for energy recovery in Frit manufacturing units	-	-	-
35	Gasifier slag containing Nickel & Spent catalyst containing Molybdenum generated from Nitrogenous Fertilizer industry for manufacturing of Alloy steel ingots and stainless steel ingots	-	-	-
36	Synthetic Oil based mud/drill cuttings generated from Oil & Natural Gas Exploration for Road Construction/ Oil Recovery	-	-	-
37	Flue Gas Cleaning Residue generated from Bag filter connected to steel scrap melting induction furnace for recovery Zinc Metal	-	-	-
38	Spent Sulphuric Acid and Spent Sodium Thiosulphate generated during manufacturing of 4.4 Diaminobenzene Sulfamide for Isolation and purification of 2-NADSFA & 6-Acetyl-APSA for manufacturing of Nitrosyl Sulphuric Acid (NSA)	-	-	-
39	Spent Phosphoric Acid generated during manufacturing of Dibasic Calcium Phosphate	-	-	-
40	Spent Sulphuric Acid generated during manufacturing of Vinyl Sulphone for production of H acid	-	-	-
41	Waste Dichromate Solution generated during manufacturing of Ibuprofen for production of Basic Chromium Sulphate	-	-	-
42	Used Waste Thinner generated during cleaning of paint feeding lines using solvents for manufacturing of industrial Primer to be used as Automotive Paints	-	-	-
	Total	16	4181.4	1237.6
C	Co-Processing in Cement Plant	2	-	1977.35

Format C1: List of Authorized Recyclers/ Utilizers/ Co-processors of Hazardous Waste

Name of SPCB/PCC: HP State Pollution Control Board

Year: 2017-18

S.No.	Name and Address	Type of Hazardous Waste Recycled	Quantity Authorized under Rule 9 of HOWR, 2016 (MTA)	Quantity Recycled during 2017-18 (MTA)
1	Rama Metal Company, Village Johron, Behind DIC, Industrial Area, KaLa Amb, Distt. Sirmour (HP)	Lead acid batteries plates and other lead scrap/ residue	550	295
2	Radha Krishna Industries, Village Meerpur Gurudwara, KaLa Amb, Distt. Sirmour (HP)	Lead acid battery plates and other lead scrap	10500	nil
3	Sri Balaji Smelters, Plot No. 90, Industrial Area, Lodhimajra, Tehsil Baddi, District Solan (HP)	Lead acid batteries plates/ lead scrap/ ashes/ residues	7000	2650
4	Sai Industry, Plot No. 22, Trilokpur Road, IA, Kala Amb, Distt. Sirmour (HP)	Battery Scrap	4800	-
5	Ras Industry, Plot No. 22, Trilokpur Road, IA, Kala Amb, Distt. Sirmour (HP)	Battery Scrap	4800	-
6	Neel Kanth Industries, Plot No. 38, Sector-5, Parwanoo, Distt Solan (HP)	Brass dross, Copper dross, Zinc dross, Zinc ash & Zinc skimming	4000	Nil
7	SK Engineers, Village Johron, Trilokpur Road, Kala Amb, Tehsil Nahan, Distt. Sirmour (HP)	Lead acid battery plates & Lead scrap	1200	1200
8	Span India Scaffoldings, Village Johron, PO Kala Amb, Tehsil Nahan, Distt. Sirmour (HP)	Lead acid battery plates, Lead scrap	1200	1193
9	Ekta Enterprises, Plot No. 43, Trilokpur Road, Ind. Area, Kala Amb, Tehsil Nahan, Distt. Sirmour (HP)	Lead acid battery plates, Lead scrap	5000	1027
10	Geon International, Plot No. 65, Bhatoli Kalan, Industrial Area, Baddi, Distt. Solan (HP)	Lead acid battery plates, Lead scrap, Lead ash and Lead residue	12000	1749
11	Indo Plast (P) Ltd., Plot No. 46-48, Sector-5, Parwanoo, Distt. Solan (HP)	Zinc ash, Zinc Dross/ Zinc Skimming/Zinc Scrap; Brass Ash/Brass Dross/Brass scrap; Copper Ash/Copper Dross/Copper Scrap; Aluminium Ash/ Aluminium Dross/ Aluminium Scrap	6000	955
12	Sarika Industries, Plot No. 111, HPSIDC, Industrial Area, Tehsil Baddi, Distt. Solan (HP)	Lead acid battery plates, Lead scrap/ ashes/residues	5500	Nil
13	Rama Krishna Industries, Village Jattan, Kala Amb, Distt.Sirmour (HP)	Lead acid battery including grid plates and other lead scrap	27700	2418
14	K.K. Enterprises, VPO Daslehra, Tehsil Jhandutta, Distt.Bilaspur (HP)	Lead acid battery plates and other lead scrap	35	-
		Total	90285	11486

Format C2: List of Authorized Recyclers/ Utilizers/ Co-processors of Hazardous Waste

Name of SPCB/PCC: HP State Pollution Control Board

FY 2017-2018

S.No.	Name and Address of the Unit	No. of Drums Authorized (MT)	Total Utilized (MT)
1	Gulshan Trading Company, Sai Road, Baddi	388.8	3.6
2	Super Trading, Gullarwala, Sai Road, Baddi	194.4	49.9
3	Shiv Shakti Enterprises, Village Chakjangi, Baddi	388.8	-
4	Him Trading Company, Village Shettalpur, PO Baddi, Tehsil Baddi, Distt. Solan	259.2	117.1
5	Balaji Trading Company, Village Swaraj Majra PO Baddi, Tehsil Baddi, Distt. Solan (HP)	81.0	39.8
6	AK Enterprises, Village Malkumajra, PO Bhud, Tehsil Badd	259.2	12.5
7	KK Enterprises, Khasra No. 1308/ 478, Village Shitalpur, Baddi, Distt. Solan (HP)	194.4	87.0
8	Neha Enterprises, Village Kaimbawala, PO Mandhala, Tehsil Baddi, Distt. Solan (HP)	388.8	62.3
9	Two Star Trading Co., Village Thana (Narangpur), Tehsil Baddi, Distt Solan	194.4	22.5
10	Kamal Enterprises, Village Kotla, Baddi, Distt Solan (HP)	388.8	87.0
11	SK Trading Company, Village & PO Barotiwala, Tehsil Kasauli, Distt. Solan	194.4	55.6
12	Shivalik Solid Waste Management Ltd., Village Majra, PO Dabhota, Tehsil Nalagarh, Distt. Solan (HP)	259.2	259.0
13	M Rauf Enterprises, Plot No. 1746, Village Thana, PO Baddi, Tehsil Baddi, Distt. Solan (HP)	252.0	222.9
14	Enviro Enterprises, Plot No. 18-C, Industrial Area Lodhimajra, Tehsil Baddi, Distt. Solan (HP)	259.2	133.9
15	Lucky Enterprises, Plot No. 42, Industrial Area Lodhimajra, Tehsil Baddi, Distt. Solan (HP)	388.8	65.5
16	Salam Traders Company, Village Dattowal, Tehsil Nalagarh, Distt. Solan (HP)	90.0	19.0
	Total Drums	4181.4	1237.6

Format D1: Annual Inventory w.er.t. Common TSDF (s)

Name of SPCB/PCC: HP State Pollution Control Board

Year: 2017-18

S.No.	Name and Address of the TSDF	Quantity in stock at the beginning of the year (MT)		Quantity of Hazardous Waste Received (MT)			Quantity of Hazardous waste Disposed (MT)			Quantity Pre-processed for utilization (MT)	Quantity in the stock at the end of the year (MT)		Cumulative HW disposed in SLF by the end of financial year (MT)	Capacity		
		Landfillable	Incinerable	For Direct Landfill	For Landfill after treatment	For incineration	Quantity Landfilled directly	Quantity Landfilled after treatment	Quantity Incinerated		Landfillable	Incinerable		Incinerator (KCal)	Incinerator (T/H)	Landfill (MTA)
1	M/s Shivalik Solid Waste Management Ltd., Village Majra, PO Dabhota, Tehsil Nalagarh, Distt. Solan (HP) 174101	173.427	---	2167.515	12335.412	---	2167.515	12411.332	---	1) 1998.315 MT sent to Cement Plant for Co-processing 2) 289.647 MT Paint Sludge sent to Authorized Recycler	97.507	---	139268 MT excluding raw material & soil	---	---	50000 MT/year

Format D2: Annual Inventory w.er.t. CapativeTSDF (s)

Name of SPCB/PCC: HP State Pollution Control Board

Year: 2017-18

S.No.	Name and Address of of capative Facility	Type of facility (landfillable/incinerable/both)	Capacity		HW Disposed during the year	Commulative HW disposed till the end of the financial year
			Incinerator (T/H)	Landfill (MTA)		
1	Number of capative Landfillable Facility					
2	Number of capative Incinerable Facility					