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# ANNEXURES

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Setting up of a Material Recovery Facility



MAY 18, 2023

UNITED NATIONS DEVELOPMENT PROGRAMME  
In collaboration with AILSG

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## Annexure 1: Baseline Survey Questionnaire for Status on MRF

Sr. No.	Information	Details
1	Contact Person Details	
	Name	
	Contact No.	
1	E-mail Address	
2	Name of ULB	
3	Name of District	
<b>Population</b>		
4	Population (1991)	
5	Population (2001)	
6	Population (2011)	
7	Current Population	
8	Floating Population with details	
9	Population below poverty line	
10	% Slum Population	
<b>Information about the City/Town</b>		
11	Number of Wards, Zones, Prabhags	
12	Area of Town/City (in sq.km.)	
13	No. of Households (exclude slum HHs)	
14	No. of Slum Households	
15	No. of Commercial Units	
16	No. of Hotels	
17	No. of Guesthouses	
18	No. of Marriage Halls	
19	No. of Hostels	
20	No. of Cinema Halls	
21	No. of Schools/Colleges	
22	No. of Theatres	
23	No. of Hospitals/ clinics/ nursing homes	
24	No of Industrial Units	
25	No. of markets (Vegetable, fish and meat market, Slaughterhouse, haat etc.)	
26	Land-Use (%residential, %commercial, etc.)	
27	Total road length of the ULB (km)	
28	Road width >3.5m	
29	Road width <3.5m	
30	Maximum Temperature	
31	Minimum Temperature	
32	Maximum yearly rainfall (mm)	
33	Maximum Humidity	

34	Minimum Humidity	
35	Land-Use map of town	
36	Ward wise map of town	
<b>Solid Waste System</b>		
37	Estimated waste generated (TPD)	
38	Estimated waste in grams/capita/day	
39	Has the city drafted bye-laws on solid waste management? If yes, what is the implementation status of bye-laws	
40	How many NGOs are involved in system of collection, transportation, processing, and disposal? In not, please state the reason	
<b>Estimated waste generation composition (TPD)</b>		
41	Wet waste	
42	Dry waste	
43	Domestic Hazardous waste	
44	E-waste	
45	Inert waste	
<b>Storage and Collection</b>		
46	Is segregation being done at household level? What is the level? - 2 bins - 3 bins - Others Dry waste? Wet Waste?	
47	No. of Households from where collection is being done	
<b>Vehicle used for Primary and Secondary Collection of Waste</b>		
48	<b>Type</b>	<b>Make &amp; nos.</b>
A	Hand Cart	
B	Rikshaw	
C	Mini Auto (four-wheeler)	
D	Auto Three-wheeler	
E	Any other	
<b>Dry Waste Processing and Disposal Mechanism</b>		
49	Status of MRF -	Constructed Under Construction Tendered Proposed Any other, please specify
50	Received MPCB authorization	
51	Capacity, age, type, size of the waste processing facility	
52	Area of Waste Processing Facility	

53	Machines available and capacity (include operational and non-operational)		
54	Processing quantity by machines, at present		
55	Availability of necessities	Washrooms Fans Lights Drinking water station Control Panel Office Space	
56	Who is doing it? (Private Operator or ULB Staff)		
57	Human resource capacity in dry waste management		
58	PPE kits used and types		
59	Working hours and weekly offs		
60	Type of MRF (select multiple options)	Mixed MRF Dry waste MRF or Clean MRF Manual MRF Semi-Automated MRF Fully Automated MRF	
61	Process Flow of MRF		
62	General Categories of Dry Waste Segregation in MRF		
<b>Expenses on waste processing incurred (Monthly) on the following basis:</b>			
63	Electricity Expenses (Monthly)		
64	Maintenance of equipment (Monthly)		
65	On Operators and Laborers (Monthly)		
<b>Forward Linkages</b>			
66	<b>Type of Material</b>	<b>Recycler/Aggregator Name</b>	<b>Recycler/ Aggregator</b>
A			
B			
C			
D			

Acknowledgement of the respondent:

Date:

Sign:

## Annexure 2: Format of Registers

### A. Incoming Waste Register – for collection vehicles

Date	Vehicle No.	Time Out	Time In	No. of Trips	Section / Wards covered	Total amount of incoming dry waste	Remarks
15-05-23	MH042319	7 am	3 pm	2	84, 85	570 kg	
15-05-23	MH042321	9.15 am	12.15 pm	1	72, 73	230 kg	Complaints received -2

### B. Incoming Waste Register – Purchase from Waste-Pickers, Sweepers, Aggregators

Date	Slip No.	Intake Category	Type of Material Purchased	Qty of Material Purchased	Unit Price (Rs.)	Total Amount (Rs.)	Remarks
15-05-23	153	Sweeper	Tissue	15 kg	3	45	
15-05-23	154	Aggregator	PET bottles	10 kg	35	350	Reject qty = 0.5 kg

### C. Incoming Waste Register – Drop off from Citizens

Date	Name and Address Location	Phone Number	Material Type	Qty of Material	Signature
15-05-23	Alpita (Andheri)	9560045xx5	Cardboard	3 kg	Alpita

### D. Sorting Register

Date	Total Incoming Dry Waste (kg)	Mix Paper (kg)	Plastic (kg)	Glass (kg)	PET (kg)	Textile (kg)	Metal, Tin (kg)	Reject (kg)
15-05-23	1500	300	200	50	500	50	200	200

### E. Material Dispatch and Sale

S. No.	Invoice No.	Date	Vehicle No./ Others	Net weight(kg)	Customer/Recycler Name/Address	Type of Product (Code ID).	Rate/ Kg	Total Amount (INR)	Amount After GST
1	ASSPL/22-23/883	01-02-2023	MH04 KF6430	1720	Paper Pack Recycling	Craft (Puttha)	15	25800	27090
2	ASSPL/22-23/884	01-02-2023	MH02 FG6485	1020	Ajay Enterprises	Glass	6	6120	6426

### F. Gate Pass

Outward Gate Pass		
<b>Gate Pass No.:</b>		
<b>M/s.</b>	<b>Date:</b>	
	<b>Time:</b>	
	<b>Vehicle No.:</b>	
	<b>Reference Invoice No.:</b>	
<b>S. No.</b>	<b>Description of Goods</b>	<b>Quantity (kg)</b>
	<b>Total:</b>	
<b>Customer/Recycler Sign</b>		<b>Authorized Signatory</b>

**Notes:**

1. Print 3 copies of GP.
2. Original copy for the customer along with Invoice.
3. Second copy should be for transporter.
4. Third Copy should be maintained at the Swacchta Kendra.

### G. Daily Expenses

Sr. No.	Date	Paid to	Type of Expense	Amount	Voucher No.	Remarks
1						
2						

### H. PPE Kits Register Book

Month: May- 2023							
Human Resource	Date of Given items						
Name	Glove 1	Glove 2	Glove 3	Uniform	Mask	Shoes	Remarks
Priyanka	15-05-23	18-05-23	-	12-05-23	12-05-23	15-05-23	

### I. IEC Activity Report

Name of the activity		
Date & Time of activity	Start- 9 am End- 12pm	
Location		
Purpose		
Chief guest		
Key speakers:		
Activity description	<b>Description:</b>	
Fees charged (Per participant):		
	<b>Name of the organizations</b>	<b>Role</b>

Partner organizations		
Pictures for Reference:		
Details of beneficiaries		
Total Beneficiaries:	Waste-pickers	Male:                      Female:
Age group: 18 to 60 years		
Benefit		

**Attendance Sheet of Activity**

Date:	Time:	Venue:	
<b>Activity Name:</b>			
<b>Sr. No.</b>	<b>Name</b>	<b>Age</b>	<b>Male/Female</b>
1.	Shivani	45	Female

## Annexure 3: Monthly Reporting Format

### I] Incoming Waste Transaction

Date	PET Bottle	Hard Plastic	Soft Plastic	Paper	Cloth	E-waste	xx	Reject	Grand Total
###	2062	1223	552	1199	0	2	xx	50	6754
####									

### II] Waste Transaction Details

Sr. No.	Type of Waste	Incoming Waste (Qty in MTs)	Processed Waste (Qty in MTs)	Dispatched Waste to Recyclers/ Cement Kilns (Qty in MTs)	Date of Dispatch to Recyclers (DD/MM/YYYY) (Ex.01.01.2020)	Name and Address of Recyclers or Cement Co-Processing Plants
1	Mix Plastic Waste					
2	PET					
3	HDPE					
4	LDPE					
5	PVC					
6	PP					
7	PC					
8	Mix Dry Waste					
9	Others					
<b>Total Waste</b>						

### II] Recycler Onboarding Details:

Sr. No.	Name of the Owner/ Contact Person	Name of Recyclers / Co-Processing Unit	Address of Recycler	Type of Waste Recycled	Registered Recycler (Yes/No)	If Yes, does the recycler has CTO? (Yes/No) *	Contact No.
1							

### III] Establishment Onboarding Details:

S.	Ward /	Name of the	Type of	No.	On-boarding Stage
----	--------	-------------	---------	-----	-------------------

No.	Section No.	Establishment	Establishment	of units	Awareness Meeting Conducted (Y/N)	Partnership/Agreement Signed (Y/N)	Waste Pick-Up Initiated (Y/N)	Waste Pick-up (Daily / Weekly)
1								
2								

**IV] IEC Details**

Sr. No.	Date	Activity Name	Activity Details	Beneficiary Details			Output	Follow-up Plan
				Male Count	Female Count	Age Group		
1								
2								
3								
4								
5								

**Supporting Documents List of attachments:**

**Report Submitted by:**

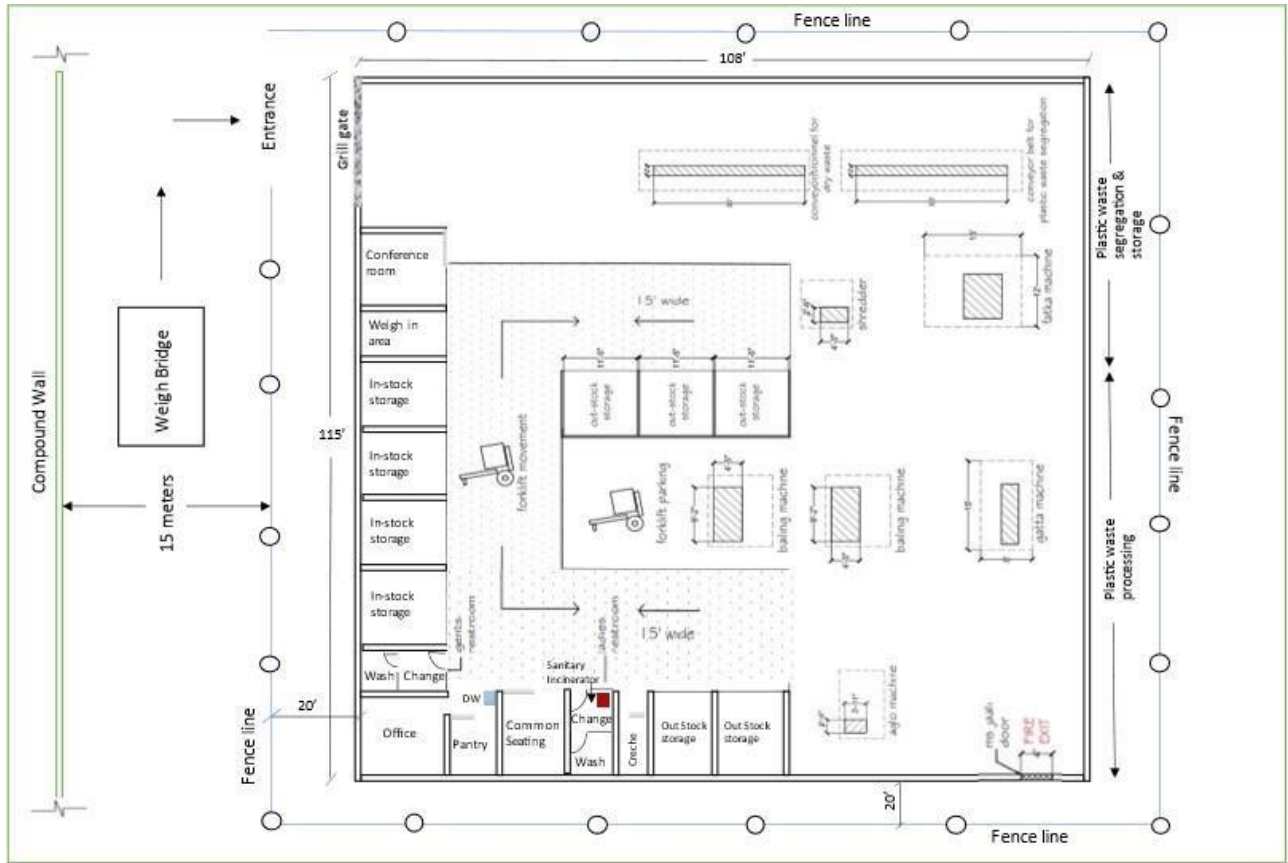
**Date:**

**Sign:**

## Annexure – 4: Display of Information at Material Recovery Facility

<b>Urban Local Body Name:</b>			
<b>Location:</b>			
<b>Operating Time:</b>			
<b>Days Open:</b>		<b>Days Closed:</b>	
<b>Date:</b>		<b>Material</b>	<b>Rate/kg</b>
<b>Total Incoming Waste:</b>		Plastic	
Vehicle No.		Paper	
No. of Trips:		Glass	
Incoming Waste (A):		Textile	
		Metal	
Vehicle No.		Thermocol	
No. of Trips:			
Incoming Waste (B):			

# Annexure – 5: Sample Material Recovery Facility Layout



## Annexure – 6: Capital Expenditure of a Material Recovery Facility

Capacity 5 Tons/Day				
Sr. No.	Particulars	Unit	Unit Cost	Amount (in Rs.)
1	Land			
2a	Civil work – Boundary and internal road, gate			
2b	Civil work – Shed			
2c	Civil work - Flooring			
2d	Civil work – Construction of Washroom, Restroom			
2d	Electricity Connection (with control panel set up) & Water Connection			
3a	Machine 1 (with capacity)			
3b	Machine 2 (with capacity)			
3c	Machine 3 (with capacity)			
3d	Machine 4 (with capacity)			
4	Vehicle (Make and Capacity)			
5	Office Setup & Peripherals			
6	Contingency			
	<b>Total CAPEX</b>			

## Annexure – 7: Operational Expenditure of Material Recovery Facility

Sr. No.	Particulars	Unit	Unit Cost	Amount (in Rs.)
1a	Administrative Human Resource – Staff 1			
1b	Administrative Human Resource – Staff 1			
1c	Administrative Human Resource – Staff 1			
2	Management Fee			
3	Waste workers on site			
4	Workers on Machines			
5	Electricity Bill			
6	Water Bill			
7	Vehicle Fuel			
8	Consumables, PPE Gears			
9	Machinery, Vehicle Regular Maintenance			
10	Insurance			
11	Administrative over-heads			
12	Machine Repair (Ad hoc)			
13	MRF – Civil Work Repair (Ad hoc)			
14	Contingency			
	<b>Total monthly OPEX</b>			

## Annexure – 8: List of Collaterals / Display Material

1. MRF Main Board
2. Process flow of the Material Recovery Facility
3. Incoming Waste Details
4. Sorting of Material - Sample
5. Layout Plan with Exit Gates
6. Material Recovery Facility – Do's and Don'ts
7. Signages and Marking - Overall Facility
8. Social Inclusion Programs
9. Use of PPE at MRF
10. Emergency Contacts' Board
11. IEC activities with citizens
12. Covid-19 Safety Rules for citizens
13. COVID-19: Rules in MRF
14. Fire Extinguisher Board

### 1. MRF Main Board



**बृहन्मुंबई महानगरपालिका**  
Municipal Corporation of Greater Mumbai

# सुका कचरा वर्गीकरण व प्रक्रिया केंद्र

व्यवस्थापक: : आसरा वेलफेर असोसिएशन

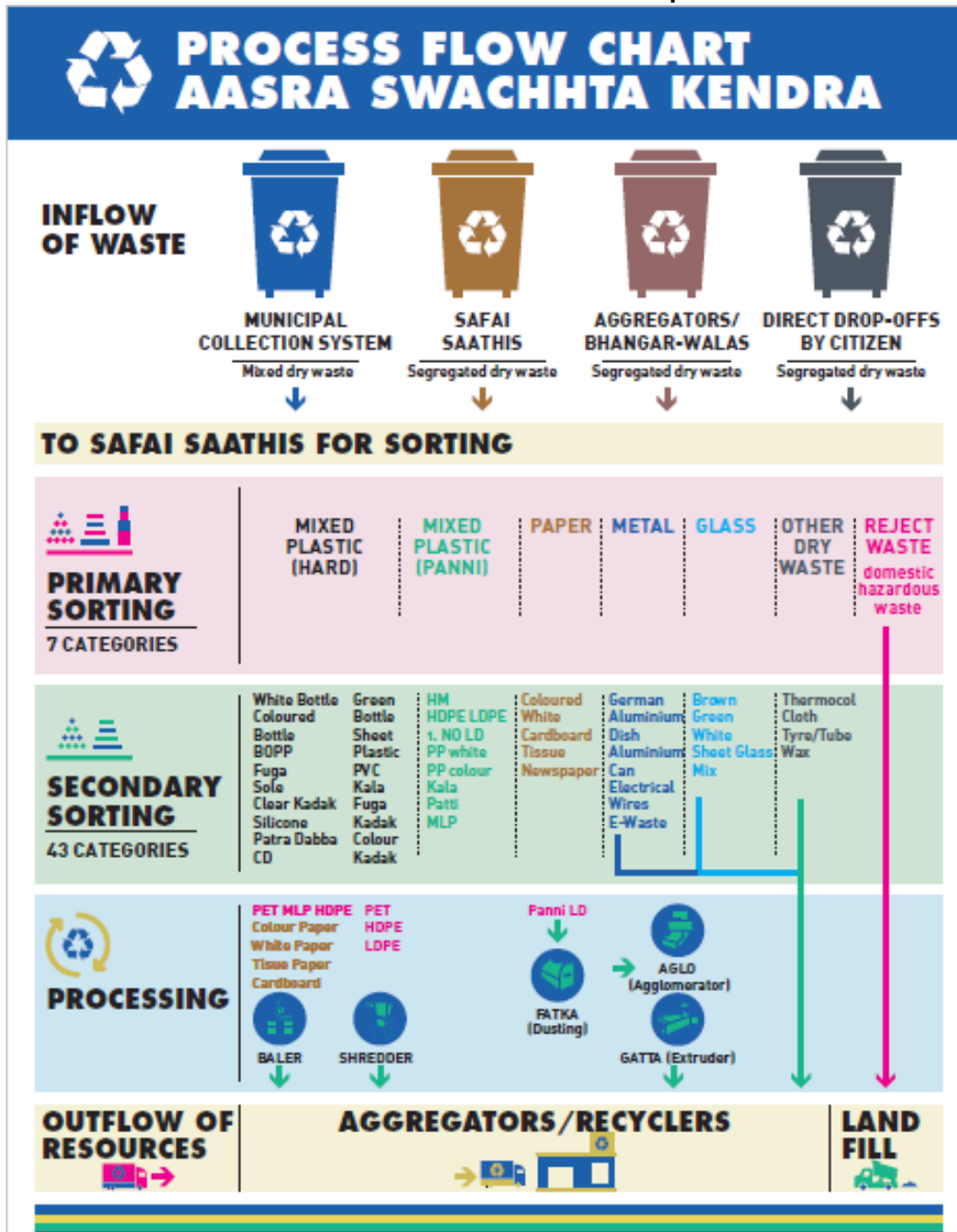
**Design Capacity : 15 MTPD**

**Year of Commissioning: 2015**

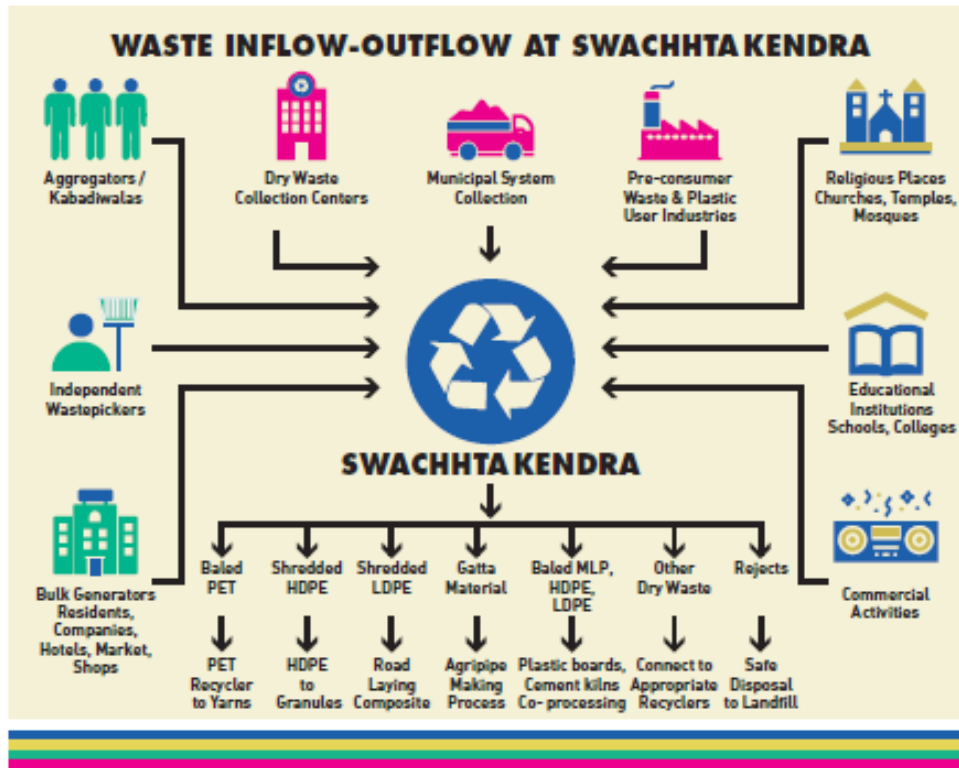
सुका कचरा वर्गीकरण व प्रक्रिया केंद्र, एम. टी. एन. एल. च्या जवळ, वांद्रे (प), मुंबई – ४०००५०

ही मालमत्ता बृहन्मुंबई महानगरपालिकेची आहे. परवानगी शिवाय कोणत्याही व्यक्तीला या ठिकाणी प्रवेश करण्यास सक्त मनाई आहे. दोषीवर कारवाई केली जाईल.

## 2. Process Flow Chart Sample



### 3. Incoming Waste Details



### 4. Sorting of Materials - Sample

## TERTIARY SORTING OF HARD PLASTIC

### HIGH DENSITY POLYETHYLENE (HDPE) POLYPROPYLENE (PP)



**Milky PP**



**Natural PP**



**Johnson HD**



**Gas Pipe**



**Blue Drum**



**Tray**



**Kerwa**



**Colour Mix PP**



**Mix Jhap**



**Brush**

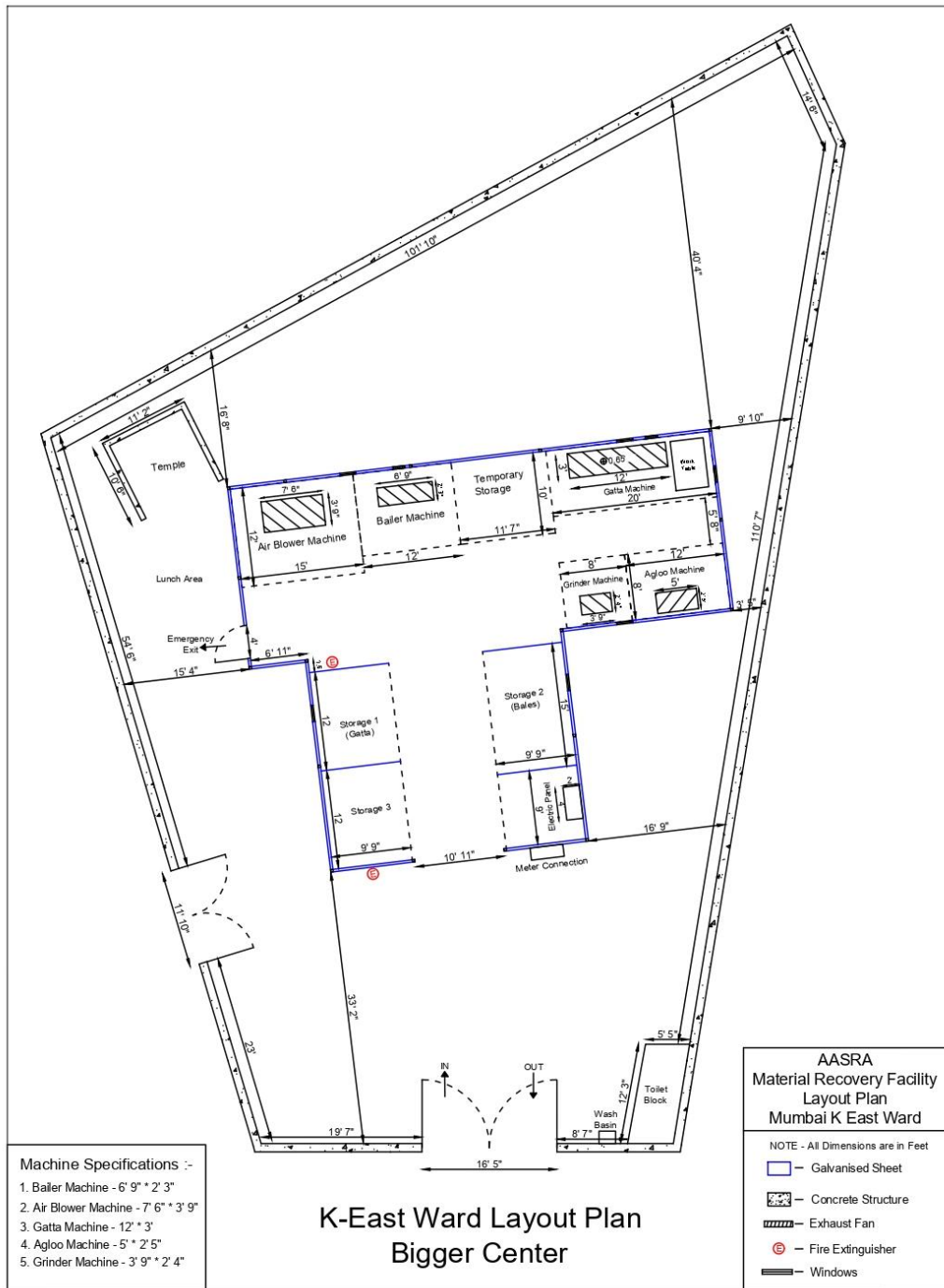


**Mix Balti**







































**Milky Chair**

## 5. Layout Plan with Exit Gates



## 6. Material Recovery Facility – Do's and Don'ts

# स्वच्छता केंद्र के नियम

 <b>ये कीजिए</b>	 <b>ये मत कीजिए</b>	 <b>सुरक्षा सबसे पहले</b>
 अपनी स्वच्छता का ध्यान	 किसी भी प्रकार ज्वलनशील पदार्थ स्वच्छता केंद्र में लाने की अनुमति नहीं है	 प्राथमिक उपचार पेटी
 सुरक्षा नियमों का हर समय पालन	 स्वच्छता केंद्र में धुंधपान की अनुमति नहीं है	 अग्निशामक यंत्र
 सूखे कपड़े की पूरी तरह से छंट्टाई	 स्वच्छता केंद्र में बाल श्रम की अनुमति नहीं है	 व्यक्तिगत संरक्षण किट (मास्क, दस्ताने और जूते)
 शौचालय और स्नान कक्ष साफ रखें	 गर्भवती महिलाओं को मशीनरी संचालित करने की अनुमति नहीं है	 मशीन ऑपरेटर और सफाई साधियों का बीमा होना अनिवार्य है
 स्वच्छता केंद्र को साफ सुथरा रखें	 स्वच्छता केंद्र में पशु नहीं लाएं	
 पेयजल सुविधा उपलब्ध कराएं	 सूखे कपड़े को न जलाएं	<b data-bbox="990 850 1055 913">मशीन से संबंधित जानकारी</b>
 मशीन को चलाने वाले हिस्से से सुरक्षित दूरी बनाए रखें	 मशीनरी के आसपास ढीले कपड़े पहन कर न जाएं	 सभी मशीनरी का बीमा होना अनिवार्य है
 नियमित रूप से बहीखातो लिखें	 स्वच्छता केंद्र में कोई भी विस्फोटक या आग्नेयास्त्र लाने की अनुमति नहीं है	 मशीनरी ऑपरेशन से पहले उचित प्रशिक्षण सुनिश्चित करें
 उपयोग के बाद सभी मशीनरी और औजार को साफ करें	 यदि आप विद्युत उपकरण पर काम कर रहे हैं किसी भी प्रकार की धातु न पहनें	 उपयोग से पहले रोजाना सभी मशीनरी का निरीक्षण करें
 सफाई साधियों की हर महीने बैठक	 बिजली के तारों का गलत उपयोग न करें	 मशीनरी बिना देखे रख न छोड़ें
<b>आपातकालीन स्थिति संपर्क करें</b>		
 अस्पताल नाम	 अस्पताल नंबर	 पुलिस स्टेशन
 अग्निशमन केंद्र		

7. Signages and Marking - Overall Facility



वजन काटा  
**WEIGHING  
SCALE**



कार्यालय  
**OFFICE**



पानी का स्टेशन  
**WATER  
STATION**



उतरान स्थल  
**UNLOADING  
STATION**

१ न. एल. डी.  
**1 NO. LD**



माल खाना  
**STORAGE**



छँटाई टेबल  
**SORTING  
TABLE**

कलर एल. डी.  
**COLOUR LD**



अस्वीकार  
अपशिष्ट  
**REJECT PILE**



तृतीय छँटाई  
**TERTIARY  
SORTING**

Signages at the  
Material Recovery  
Facility



शौचालय  
**WASHROOM**

## 8. Social Inclusion Programs



# SAFAI SAATHI CORNER

### MAINSTREAMING SAFAI SAATHIS

#### KEY ISSUES OF WASTE VALUE CHAIN



Broken Supply Chain



Lack of Adequate Infrastructure



Highly Informal Sector



Lack of Transparency



Low Dignified Livelihood



Unhygienic Working Conditions

#### KEY ISSUES OF WASTE PICKERS



Informal Employment & Low Wages



Lack of Skills & Opportunities



Health Hazards & No Medical Facility



Lack of Access to Financial Systems



Social & Financial Exploitation



Prevailing Societal Biases



Lack of Growth

### SUPPORT SYSTEM TO SAFAI SAATHIS

- ID Cards
- Insurance
- Pension Scheme
- Bank Account
- Training
- SHG Formation
- Children's Creche
- Increased Collection and Better Quality of Waste
- Predictable and Increased Income
- Dignified Livelihood
- Fair Price for Recyclables
- Safe Work Environment



**Regular Health Camps**



**Provision of Personal Protective Gears**



**Livelihood Trainings & Skilling Workshops**



**Regular Meetings**

## 9. Use of PPE at MRF

# SHREDDING MACHINE श्रेडिंग मशीन

**P.P.E. MUST BE WORN WHEN OPERATING THIS MACHINE**  
**मशीनमध्ये काम करण्यापूर्वी पी.पी.ई चा वापर करा**



**FOOT PROTECTION  
MUST BE WORN  
IN THIS AREA**

सुरक्षा शूजचा  
उपयोग करा



**EYE PROTECTION  
MUST BE WORN  
IN THIS AREA**

सुरक्षा चशम्याचा  
उपयोग करा



**PROTECTION  
GLOVES MUST BE  
WORN IN THIS AREA**

सुरक्षा हातमोज्यांचा  
उपयोग करा



**HEARING  
PROTECTION MUST  
BE WORN IN  
THIS AREA**

एअर प्लगचा  
उपयोग करा

## 10. Emergency Contacts' Board

EMERGENCY CONTACTS		
S NO.	NAME	CONTACT
1	AASRA Rep	
2	Ambulance	
3	Fire Brigade	
4	Police	
5	Electricity Cut Off	
6	Woman Helpline	
7	Child Helpline	
8	Animal Rescue	
9	Drugs Helpline	
10		
11		
12		

# 11. IEC Activities with citizens

Swachhata Kendra - Waste Segregation Guidelines Poster - Artwork - 210 mm (W) x 297 mm (H)



## WASTE SEGREGATION GUIDELINES



### KITCHEN WASTE

- Vegetable/fruit peels
- Cooked food/leftovers
- Egg shells
- Chicken/fish bones
- Rotten fruits/vegetables
- Tissue paper soiled with food
- Tea bags/coffee grinds
- Leaf plates

### GARDEN WASTE

① SMALL QUANTITY ONLY FROM HOUSES

- Fallen leaves/twigs
- Puja flowers/garlands
- Weeds



### PLASTIC

① MUST BE RINSED IF SOILED

- Plastic covers/bottles/boxes
- Chips/cookie wrappers
- Milk/curd packets
- Plastic cups

### PAPER

① MUST BE RINSED IF SOILED

- Newspaper/magazines
- Cardboard cartons
- Stationery/junk mail
- Pizza boxes
- Tetrapaks
- Paper cups and plates

### METAL

- Foil containers
- Metal cans

### GLASS

① HANDLE WITH CARE

- Unbroken glass bottles

### OTHER DRY WASTE

- Rubber/thermocool
- Mops/dusters/sponges
- Ceramics/wooden chips
- Cosmetics
- Hair
- Coconut shells

### E-WASTE

① MUST BE RINSED IF SOILED

- Batteries
- Thermometers
- CDs/tapes
- Bulbs/CFLs/tube lights



### SANITARY WASTE

① USE A NEWSPAPER FOR WRAPPING

- Diapers/sanitary napkins
- Bandages
- Condoms
- Nails
- Used tissues
- Medicines
- Swept dust

① LIMITED QUANTITIES OF MIXED WASTE IS ALLOWED, SUCH AS HEAVILY SOILED PLASTIC OR SOILED PAPER

### SHARP OBJECTS

① SMALL QUANTITIES ONLY, WRAP IN NEWSPAPER & HAND OVER SEPARATELY

- Razors/blades
- Used syringes
- Injection vials

### CONSTRUCTION DEBRIS/INERTS

① HAND OVER SEPARATELY

- Rubble
- Paints
- Silt from drains
- Cement powder
- Bricks
- Broken glass
- Flower pots



## 12. COVID – 19 Safety Rules for Citizens

# RED BIN

OTHERS

PPEs

Is For

## Domestic Hazardous Waste (Rejects)

- 1 Please put **“LINER”**
- 2 Please Wrap waste in **“NEWSPAPER”**

### Steps to DISPOSE MASKS & GLOVES

We are SAFAI SATHI and we collect your garbage. Remember, your used MASKS & GLOVES could be contaminated and affect US.

### 13. COVID-19: Rules in MRF

## आपकी सुरक्षा के लिए महत्वपूर्ण जानकारी



कोविड –19 से बचाव के लिए सारे नियमों का पालन करें



सोशल डिस्टेंसिंग का पालन करें



मास्क, दस्ताने और जूते पहनना अनिवार्य है




मशीन के उपयोग से पहले और बाद में हाथ साबुन से धोएं



खतरनाक कचरे को अलग रखें, इस पर कीटाणुनाशक स्प्रे करें

**ये करें**



हर समय सुरक्षात्मक गियर पहनें



अपनी स्वच्छता का ध्यान रखें



स्वच्छता केंद्र को साफ सुधरा रखें



उपयोग के बाद सभी मशीनरी और औजारों को साफ रखें



शौचालय और स्नान कक्ष साफ रखें

**ये न करें**



किसी भी प्रकार के ज्वलनशील पदार्थ स्वच्छता केंद्र में न लाएं



कचरा न फैलाएं



पानी और बिजली बर्बाद न करें



किसी प्रकार का भेदभाव न करें



गर्भवती महिलाएँ मशीनरी का उपयोग न करें



पशुओं को न लाएं



सूखे कचरे को न जलाएं


### 14. Fire Safety Board Sample

#### FIRE SAFETY


There is a risk of fire at Swachhta Kendra  
**Do you know?**

Plastic is made of petroleum, and it is highly flammable.


**How to protect yourself from fire while working at Swachhta Kendra**




WEAR HELMET




WEAR COTTON CLOTHES



WEAR GLOVES



LEARN TO USE FIRE EXTINGUISHER




KNOW YOUR NEAREST EXIT

**IN CASE OF FIRE, DIAL THE BELOW**


101

FIRE DEPARTMENT  FIRE DEPARTMENT


#### WHAT TO DO WHEN THERE'S FIRE AT THE SWACHHTA KENDRA




Raise an alarm and inform all co-workers



**EMERGENCY**




Use a fire extinguisher



Immediately inform fire department

**In case there's a fire at Swachhta Kendra**




Use fire exit to escape

**IF YOU CATCH FIRE**


**STOP**

1. Don't Run




**DROP**

2. To the ground



**ROLL**

3. To put out the fire



**DO:**

- ✓ Cover your face with wet cloth
- ✓ Stay Calm. Stay Low
- ✓ Protect yourself first, then help others

**DON'T:**

- ✗ Do not use any electrical appliances or machines
- ✗ Do not litter inside and outside Swachhta Kendra
- ✗ Do not Smoke
- ✗ Do not obstruct firefighters

## **Annexure – 9: Authorization from MPCB**

### **Information to be submitted with the Application**

The following information shall be submitted along with the consent application form for the speedy processing.

#### **Consent to establish**

- Site plan/index Topographical Map
- Detailed layout plant of different processes and point sources of effluent discharge/ emissions and position of stack and documents including D.G. set capacity in KVA
- Process flow sheet
- Details of Water Pollution Control/Air Pollution Control devices proposed to be provided.
- Ambient Air Quality Report (if available)
- SSI Certificate/NOC from Directorate of Industries Government of Maharashtra.
- D.G.T.D. Registration. (If applicable)
- Details of chemical reactions with mass balance.
- Consent fees in the form of D.D. drawn on favor of MPCB. Local body NOC.
- Undertaking on Rs. 20 stamp paper or Chartered Accountant certificate about proposed Capital Investment (Land, building, and machineries.

#### **Consent to Operate/Renewal**

- Detailed layout plant of different processes and point sources of effluent discharge/ emissions and position of stack and documents including D.G. set capacity in KVA.
- Process flow sheet.
- Latest analysis report of effluent, fuel gases, solid waste & hazardous wastes. Details of Water Pollution Control /Air Pollution Control devices provided.
- Ambient Air Quality Report (if available)
- SSI Certificate/NOC from Directorate of Industries Government of Maharashtra.
- D.G.T.D. Registration. (if applicable)
- Details of chemical reactions with mass balance.
- Consent fees in the form of D.D. drawn on favour of MPCB. Xerox copy of previous consent (for renewal only).
- Xerox copy of Environmental Clearance of Government of Maharashtra or Government of India in case of 1st consent to operate in case of industries/process requiring environmental clearance.

## FORM

Common Application for Consent under

Water (Prevention and Control of Pollution) Act, 1974,

Air (Prevention and Control of Pollution) Act, 1981 and Authorization under Hazardous Wastes (Management and Handling) Rules, 2016 as amended.

No. ....

Accompanying form in triplicate to be submitted by the applicant. One copy may be retained by the applicant.

### **Explanatory note for filling in application form for Consent/Authorization**

1. Any applicant knowingly giving incorrect information or suppressing any Information pertaining to an of the items of the application shall be liable for punishment as per provisions under the relevant Act.
2. The application form shall be submitted at the respective Sub-Regional Officer of the Board under whose jurisdiction the applicant's activity falls.
3. The application shall be accompanied by the consent fee in the form of Demand Draft in favor of **Maharashtra Pollution Control Board**. Fee paid is Not refundable.
4. For the items marked \* strike out which is not relevant
5. If any of the items is not relevant to the activity of the applicant, please state "Not Applicable".
6. If the space for reply provided for any item is inadequate, use additional sheets, duly referenced.
7. Item 1: Give the name of the person who is authorized by the applicant to transact their business.
8. Item 2: Also state the concerned instructions under whose administrative area the unit falls.
9. Item 2: Also state the concerned instructions under whose administrative area the unit falls.
10. The form shall be accompanied by the relevant documents specified on the last page of the application.
11. Capital Investment - Consent fee is to be paid based on gross block investment of the unit without depreciation till the date of application. The gross block capital investment shall include cost of land, building, plant and machinery without depreciation same shall be certified by Chartered Accountant.

In case of proposed unit total project cost shall be considered.

Note: The form maybe get download from the MPCB Website: <http://mpcb.mah.nic.in> From fee of Rs.100/- may be added in the current fee in case the downloaded form is used

## PAYMENT OF CONSENT FEES

The Fees have been revised vide govt. of Maharashtra, GR dt. 25/08/2011 and are as below:

Sr. No.	Capital Investment of Industry (including land, building, machinery without depreciation)	Consent to Establish	Consent to Operate
1	More than 100 Cores	0.02% of Capital Investment	0.02% of Capital In-vestment
2	More than 75Cr to 100Cr	1,25,000/-	1,25,000/-
3	More than 50 Crs to 75 Crs	1,00,000/-	1,00,000/-
4	More than 25 Crs to 50 Crs	75,000/-	75,000/-
5	More than 10 Crs to 25 Crs	50,000/-	50,000/-
6	More than 5 Crs to 10 Crs	25,000/-	25,000/-
7	More than 1 Crs to 5 Crs	15,000/-	15,000/-
8	More than 60 Lakhs to 1Cr	5,000/-	5,000/-
9	More than 10 Lakhs to 60 Lakhs	1,500/-	1,500/-
10	Below Rs.10 Lakhs	500/-	500/-

### Urban Local Bodies (Under water Act)

1	Municipal Corporation	Rs.1,00,000/-
2	Municipal Council Class-A	Rs. 50,000/-
3	Municipal Council Class-B	Rs. 5,000/-
4	Municipal Council Class-C	Rs. 2,000/-

**“The mining projects will pay Rs.0.40 per tonne of Mineral per annum in addition to the payment as per capital cost of the mining project, as consent fee”.**

Consent fees should be paid by way of Demand Draft drawn in favour of “Maharashtra Pollution Control Board” only. Payable at the HQ of the Concern Sub-Regional officer.





## Annexure – 11: Monthly Monitoring Checklist

### 1. Preparatory Checklist (to be filled within 3 months of start of operations)

Sr. No.	Guideline to be followed by Service Provider to start operations	Yes/No	Remarks
1	Letter from ULB to operate Material Recovery Facility		
3	Provided orientation training to Staff and workers on Safety, Hygiene practices, and operating guidelines		
4	Procured and distributed Personal Protective Gears for Staff and workers		
5	Installed hand washing and sanitization stations with enough hand sanitizers/soaps and water supply.		
6	Scheduled for Sanitation Routine of Material Recovery Facility including vehicles, machinery, equipment, tools, etc.		
7	Trained Material Recovery Facility In-Charge with Sanitation Schedule, routine inspections, audits and maintaining monitoring reports.		
8	Provided designated changing area to change work clothes and PPE		
9	Provided designated safe space for lunch, resting etc.		
10	Provided Yellow bag Bins to dispose used masks, gloves, and other domestic hazardous waste, and connected with ULB for disposal		
11	Completed safety audit of the machineries, equipment, and infrastructure		
12	Put up signages, information material at designated areas		
14	Procured Medical Kit including Thermal Scanners, First Aid etc.		
15	Installed all Fire Safety Equipment		

### 2. Monthly Monitoring Checklist for Material Recovery Facility

Sr. No.	Basic Standards for a Material Recovery Facility	Present Status (Yes/No)	Remarks
<b>A</b>	<b>Machines:</b>		
1	Breakdown of Machines If Any		
2	Condition of Machines		
3	Working of Machines		
3	Space available for working with Machines		
4	Floor and surrounding condition		
5	Cleanliness of Machines		
6	Movable Parts and Guard Position and Condition		
7	Any Leakage of oil		
8	Machines motor condition/compatibility		
9	Machine safety switches/locks are working or not		

Sr. No.	Basic Standards for a Material Recovery Facility	Present Status (Yes/No)	Remarks
10	Workers using instructions at the time of starting and stopping the machines		
11	Machines Working per Day in Hrs.		
	a. Air Blower Machine (Fatka)		
	b. Baling Machine		
	c. Shredder Machine		
	d. Agglomeration Machine		
	e. Extrusion Machine (Gatta)		
<b>B</b>	<b>Civil:</b>		
1	Material Recovery Facility approach from Road		
2	Material Recovery Facility Civil Structure condition		
3	Material Recovery Facility Civil Work Status If any		
4	Loading and Unloading Area Condition		
5	Waste Segregation Area status		
6	Working Area condition inside Material Recovery Facility		
7	Worker's Rest Room status		
8	Stock Status inside Material Recovery Facility		
	a. Incoming Waste		
	b. Recycled Plastic		
9	Cleanliness of Material Recovery Facility		
10	Surroundings of cleanliness status		
11	Ladies & Gents Toilet Condition		
12	Worker's Lockers' status		
13	Plumbing work condition of washrooms		
14	Water connection available or not		
<b>C</b>	<b>Mechanical:</b>		
1	Water Cooler status at Material Recovery Facility		
2	Status of Ventilation and Air Quality / Fans at MRF		
3	Status of Segregated Plastic Waste Bins		
4	Status of prefabricated steel structure if any		
5	Status of Machines body & frame		
6	Status of Moving Parts of Machines		
7	Status of greasing /oiling of Machines		
8	Any abnormal sound / vibrations in machines		
<b>D</b>	<b>Electrical:</b>		
1	Main Panel Electrical connections are proper or not		
2	Electrical cables connecting to starter panel of machines are saddled or laid on cable tray		
3	Flexible wiring run through conduit of SS/GI		
4	All Electrical connections has been made through IP 65 rating connection box with connector		
5	Insulation condition of the wiring		
6	Separate earthing used for motor and body of the machines		

Sr. No.	Basic Standards for a Material Recovery Facility	Present Status (Yes/No)	Remarks
7	Electrical Control Panel secured and have proper connection for each of the machine		
8	Check the wiring that is in damp area or passing through the area for any defects		
9	Condition of connection boxes and Main Panel		
<b>E</b>	<b>Fire Safety</b>		
1	MRF equipped with 6 kg ABC Type Fire Extinguishers		
2	MRF equipped with 4.5 kg CO2 Type Fire Extinguishers		
3	MRF equipped with 9 liters fire buckets filled with sand		
4	All Fire Extinguishers are in easily accessible area		
5	All Fire Extinguishers are checked regularly and healthy		
6	Water tank with capacity of 100 Liters with tap available		
7	Provision of Fire Exit is there in Material Recovery Facility		
8	Last fire training of workers and Staff details		
9	Display of Local Fire Station Contact Number		
<b>F</b>	<b>Personnel Safety</b>		
1	Worker wearing Gloves, Mask, and shoes		
2	Worker not wearing any loose cloth while working on machines		
3	Worker wearing long sleeve cloth and gloves while working with machines		
4	Date of Health Checkup Camp last organized for Worker's		
5	Training for precautions to be taken about Covid - 19		
<b>G</b>	<b>Insurance</b>		
1	Insurance of Machines		
2	Insurance of Waste Material & Recycled Material		
3	Insurance of Material Recovery Facility Shed		
4	Insurance of Worker's / Machine Operators		
Sr. No.	Basic Standards for a Material Recovery Facility	Present Status (Yes/No)	Remarks
<b>H</b>	<b>Source of Waste Material</b>		
1	From Bulk Waste Generators		
2	From Municipal Corporation / Nagar Nigam / Cantonment Board		
3	From Local Kabadis (aggregators)		
4	From Local Waste Pickers		
5	From Citizen drop-offs		
6	Total Waste Collection Per Day		

**3. Fire Safety Readiness at Material Recovery Facility:**

Sr. No.	Actions taken	Details	Remarks
1	Fire extinguisher quantity with the type		
2	Fire extinguisher placement location		
3	Water tank capacity with tap at Material Recovery Facility		
4	Fire Exit availability and size		
5	Sand buckets quantity		
6	Distance between site and nearest fire station		
7	Fire hazard drill of workers, operators, and Staff - educating on cause of fires, types of fires, measures to be taken at the time of fire, operating fire cylinders, etc.		
8	Insurance of machinery		
9	Insurance of material		
10	Insurance of infrastructure		
11	Coverage under health insurance for Staff, workers, and operators		
12	Fire Control Room, Fire Warden / Operation Manager phone number display board		
13	Location of main power supply to be known to Supervisors and Machine Operators		
14	Material Recovery Facility distance from boundary wall		

<b>Checklist Completed by:</b>	
• Name of the person:	
• Designation:	
• Date:	
• Signature:	