

DRY WASTE MANAGEMENT

Support to State Government



19/20







Regional Centre for Urban & Environmental Studies All India Institute of Local Self-Government, Mumbai

Preface

The management of municipal solid waste in India has been a severe problem not only because of environmental and aesthetic concerns but also because of the enormous quantities generated every day. Even though only 31% of Indian population resides in urban areas, this population of 377 million (Census of India, 2011) generates a gigantic 1,43,449 metric tonnes per day of municipal solid waste, as per the Central Pollution Control Board (CPCB), 2014-15 and these figures increase every day with an increase in population.

India generates an enormous quantum of plastic waste every year of nearly 9.5 million tonnes; of which 43 per cent are single use plastics and nearly 40 per cent remains uncollected. India has also announced its commitment to phase out single-use plastic by 2022. Prime Minister Narendra Modi, in his speech on the Independence Day 2019, reiterated his call for a "new mass movement" against single-use plastic in the country.

With this ambitious target in mind, all state governments are working towards a multi-stakeholder initiative to manage their plastic waste in order to eliminate plastic pollution in nature and move towards a circular economy. Extended Producer Responsibility (EPR) is a concept where manufacturers, producer, brand owner, and importers of products should bear a significant degree of responsibility for the environmental impacts of their products throughout the product life-cycle, including selection of raw material and design to produce the product and its packaging, efficient manufacturing process with minimum impact on environment, and develop collection back mechanism for the post consumed products and get it recycled.

Regional Centre for Urban & Environmental Studies (RCUES) at All India Institute of Local Self-Government (AIILSG), Mumbai has been providing support to Government of Maharashtra through Swachh Maharashtra Mission in the sector of dry waste management since 2017. RCUES of AIILSG has played a key role in formulation of the State's strategy and guidelines for Extended Producer Responsibility for plastic management and reviewed the EPR proposals submitted to the state government for approval.

Acknowledgement

I take this opportunity to put on record our deep appreciation for the Ministry of Housing and Urban Affairs for providing us an opportunity for working on this and also for all logistic support.

I would like to convey our gratitude to the Urban Development Department (UDD), Government of Maharashtra for providing us an opportunity to contribute positively in the ambitious task of plastic waste management in the state. We are indebted to the Principal Secretary, UDD, GoM who took keen interest in order to forward the study and provided valuable insight for the same.

I take this opportunity to express my gratitude towards Shri Ranjit Chavan, President, All India Institute of Local Self Government, Mumbai for showing confidence in us and valuable support to complete the Report. My sincere thanks are to Shri Rajiv Agarwal, IAS (retd.), Director-General, All India Institute of Local Self Government, Mumbai, who was instrumental in initiating the report and providing encouragement and valuable direction to the report.

This work could not have been done without the contribution and tireless effort of the team at RCUES to complete it.

I would also like to thank the Swachh Maharashtra Mission Team which has always supported with data whenever required.

I hope this work will be encouraging and helpful for the other cities and state governments to take positive steps and to focus efforts on collaborative approaches and maximise synergies towards phasing single-use plastic by 2022, in a time-bound manner.

The Director, RCUES of AIILSG, Mumbai

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List of Abbreviations

EPR Extended Producers Responsibility

Gol Government of India

GoM Government of Maharashtra

UDD Urban Development Department

ULB Urban Local Body

CPCB Central Pollution Control Board

MPCB Maharashtra Pollution Control Board

SPCB State Pollution Control Board

SBM Swachh Bharat Mission

PWM Plastic Waste Management

MSW Municipal Solid Waste

MSWM Municipal Solid Waste Management

ARF Advanced recycling fee

MT Metric Tons

TPD Tons per Day



INTRODUCTION

1. Introduction

1.1. Background

Municipal solid waste is a major concern in developing countries like India the problem is much bigger due to the low priority given to waste sector and lack of awareness. Regional Centre for Urban & Environmental Studies (RCUES) at All India Institute of Local Self-Government (AIILSG), Mumbai has been providing support to Government of Maharashtra through Swachh Maharashtra Mission in the sector of dry waste management since 2017. With prior experience in this sector, RCUES Mumbai has undertaken two research studies in dry waste management as an in-depth investigation of the current scenario of the ULBs in Maharashtra which are recycling their dry waste post segregation and generating revenue for themselves. The knowledge gained through this endeavor is being disseminated to the ULBs and municipal functionaries.

In the course of the previous research studies, plastic was found as the major contributor in municipal dry waste. India's contribution to plastic waste that is dumped into the world's oceans and landfills every year is an amazing 60%. The Honourable Prime Minister, Shri Narendra Modi recognized this alarming issue and on 15th August, 2019 he pledged to phase-out all single-use plastic by 2022 from 2 October 2019, the 150th birth anniversary of Mahatma Gandhi. As per the Centre's Plastic Waste Management Rules, 2016, the only law or regulation in place in India, nationwide, requires that no manufacturer or vendor can use a plastic bag which is below 50 microns. Several states have implemented further bans, such as Delhi NCR (National Green Tribunal's ban on disposable plastic), Maharashtra and Himachal Pradesh (government's ban on all single-use plastic) and Sikkim (first state to ban plastic bottles and disposable foam products). However, much more needs to be done to strengthen the move towards the vision of phasing out all single-use plastic in India by 2022. A comprehensive approach that addresses all stakeholders and takes into account major system changes will need to be adopted for this vision to be realized.

Extended Producer Responsibility (EPR) is a concept where manufacturers, producer, brand owner, and importers of products should bear a significant degree of responsibility for the environmental impacts of their products throughout the product life-cycle, including selection of raw material and design to produce the product and its packaging, efficient manufacturing process with minimum impact on environment, and develop collection back mechanism for the post consumed products and get it recycled. Ministry of Environment and Forest & Climate Change has given special emphasis on strengthen the Extended Producer Responsibility in all types of Waste Management Rules notified in 2016. This may help the nation to have efficient waste management system with shared responsibility of all stakeholders of society.

1.2. Scope and limitations

In alignment with the Centre's goals, Swachh Maharashtra Mission- Urban, Government of Maharashtra (GoM) has issued the state-wide ban on single-use plastic products. It has also undertaken several other positive measure to control the quantity of plastic waste being dumped in the landfills, such as using plastic in road construction, etc. In accordance with the Plastic Waste Management Rules, 2016, it is recommended that to bring in the responsibilities of producers and generators, both in plastic waste management system and to introduce collect back system of plastic waste by the producers/brand owners, as per extended producers responsibility. There was also an amendment to the PWM Rules in 2018, by which a six-month deadline was fixed for producers to arrange for recovery of waste in partnership with State's Urban Development Departments.

As a result Maharashtra Government has initiated interventions, invited EPR proposals from various industries. It is observed that the number of plastic producing industries have begun the process of recycling and co-processing plastic. Although 100% recycling isn't achieved, it is a step towards to the ultimate target of eliminating single-use plastic by 2022.

RCUES has played a key role in formulation of the State's strategy and guidelines for EPR. As part of Plastic Waste Management Rules 2016, Producers, Industries, Brand owners (PIBOs) have to undertake EPR. GoM's strategy for EPR is intended to streamline the action plan of PIBOs so as to ensure efficient waste management practices in the state. With the experience in the sector and from the knowledge gained in the previous years' research studies, RCUES has taken up the evaluation of the EPR proposals submitted to the GoM. The scope of this work includes the dissemination of the previous research studies and the evaluation of the EPR proposals submitted by the plastic manufacturing industries to the Government of Maharashtra for evaluation and approval.

RCUES' support is limited to the review of 29 EPR proposals submitted by the plastic manufacturing industries to the GoM and comments have been made accordingly.

1.1. Work Methodology

The evaluation of the EPR proposals is being conducted in consultation with the Government of Maharashtra, in accordance with the state's agenda on plastic waste. Critical observations and improvements have been suggested based on the analysis of the submitted proposals in adherence with the Central Pollution Control Board (CPCB) and Maharashtra Pollution Control Board (MPCB) guidelines and norms.

1.1. Report Structure

This section elucidates the report layout that has been adopted as per the work methodology. It is expected that the intended format helps the plastic manufacturing industries and the urban local bodies in identifying the potential for recycling their waste effectively and thus successfully manage their waste.

- 1. Chapter 1 of this report, which is the current chapter, provides a brief outline of the work, its aim and objectives with a brief methodology.
- 2. Chapter 2 gives an overview of Government of India's initiatives for promoting dry waste management through government schemes.
- 3. Chapter 3 reviews the current status of the Maharashtra state policies and Government Regulations for plastic waste management. The chapter also includes the state Policies, programmes and legal framework for managing plastic waste.
- 4. Chapter 4 gives a broad overview of the RCUES's support to Government of Maharashtra (GOM) for waste management through Swachh Maharashtra Mission. It also elaborates upon the gamut of support extended to the GoM, which have the potential to be a part of the research work based on their experience of dry waste. This chapter also gives current nature of the Extended Producers Responsibility in Maharashtra. It also includes good practice case studies which set a benchmark for the current work.
- 5. Chapter 6 reviews the existing literature and case studies of EPR implemented in various countries. Further, proposals received by UDD, GoM are reviewed in this chapter.
- 6. Chapter 5 highlights the initiatives taken by RCUES of AIILSG, Mumbai to disseminate the research studies conducted on dry waste management through various mediums to the ULBs of Maharashtra.



GOVERNMENT SCHEMES
PROMOTING DRY WASTE MANAGEMENT
IN URBAN AREAS

2. Government schemes promoting Dry Waste Management in Urban Areas

2.1 Swachh Bharat Mission - Urban

Swachh Bharat Mission, a flagship programme launched by the Government of India in 2014, aims to provide basic infrastructural and service delivery with respect to sanitation facilities to every family, including toilets and adopting the scientific methods to collect, process and disposal of municipal solid waste. The mission focuses on quality and sustainability of the service provision as well as emphasising on the commitment on every stakeholder to bring about a visible change in society (MoUD, 2016).

Under the patronage of Swachh Bharat Mission, the Ministry of Environment Forests and Climate Change has recently revised the rules and renamed it as Solid Waste Management Rules, 2016. Swachh Bharat Mission, a flagship programme launched by the Government of India in 2014, aims to provide basic infrastructural and service delivery with respect to sanitation facilities to every family, including toilets and adopting the scientific methods to collect, process and disposal of municipal solid waste. The mission focuses on quality and sustainability of the service provision as well as emphasising on the commitment on every stakeholder to bring about a visible change in society (MoUD, 2016).

The Municipal Solid Waste (Management and Handling) Rules lay down the steps to be taken by all municipal authorities to ensure management of solid waste according to best practice. The Government has revamped the Municipal Solid Wastes (Management and Handling) Rules 2000 and notified the new Solid Waste Management Rules, 2016 on April 8, 2016. The Rules also specify responsibilities of all the stakeholders involved in the solid waste management right from waste generators to different Ministries involved in the recycling and disposal methods.

2.2 Swachh Survekshan

As a prelude to encouraging cities to improve urban solid waste management, Ministry of Housing and Urban Affairs (MoHUA) conducts 'Swachh Survekshan' survey across the country. The objective of the nationwide survey is to encourage large scale citizen participation and create awareness amongst all sections of society about the importance of working together towards making towns and cities a better place to live in. Additionally, the survey also intends to foster a spirit of healthy competition among towns and cities to improve their service delivery to citizens, towards creating cleaner cities and towns.

Apart from collecting waste, segregation it at source was also done on a mission mode in the state for which the state governments conducted numerous awareness building programmes among citizens. According to the latest SBM report, more than 33,420 urban wards in the country have achieved 100 per cent door to door collection while 50,600 (60 per cent) of them practice source segregation. This appears to be a huge improvement since 2014, where segregation was observed in only 41 per cent of wards. In spite of the positive jump in numbers, much is left unaddressed in terms of segregation and waste disposal.

Swachh Survekshan 2020 focuses on the 3 'R" principles of reduce, reuse and recycle of dry waste like plastic, metal, and paper waste. According to the Environment Ministry total plastic waste generated every day is 15342 tonnes of which 60% gets recycled. The state governments have been suggested to facilitate tie-ups between urban local bodies and recycling units for managing dry waste. The recycling units buy the dry waste from ULBs which further sell it to suitable manufacturing firms which can use it as part of raw-material.



MAHARASHTRA STATE POLICIES AND GOVERNMENT REGULATIONS FOR DRY WASTE MANAGEMENT

3. Maharashtra state policies and Government Regulations for Dry Waste Management

3.1. Maharashtra plastic carry bags (Manufacture and usage) Rules 2006

To minimize the environment and health impact of plastic waste State government issued Maharashtra plastic Carry Bags (Manufacture and Usage) Rules 2006 under Maharashtra Non-biodegradable Garbage Control Act 2006. To control plastic waste generation, manufacturing (and stocking, distributing or selling) plastic carry bags made of virgin or recycled plastic of thickness less than 50 micron and of the size 8 x 12 inches are banned in the State (ADB, 2016).

3.2. Maharashtra Plastic bottles manufacture

The Maharashtra State Government has stipulated water bottle manufacturers to set up a reverse supply mechanism and recycling plants, failing which a complete plastic ban will be enforced.

Effective March 2018, a ban on plastic water bottles will be implemented in government and corporate offices and in 5-star hotels.

The move is aimed at extending the responsibility of the plastic item manufacturers of getting the plastic back from the consumer. Some of the salient requirements of this initiative are as follows:

- Adopt a buy-back mechanism
- Must have the capacity to recycle and reuse
- The manufacturers have to set up a system based on a reverse supply chain in which they collect used plastic bottles

Additionally, the state government is planning to crackdown on all unauthorized plastic bottle manufacturers. Within the same initiative, there will be a complete ban on usage of plastic.

A complete ban on plastic bags will also be brought into effect. There will be hefty penalties levied and possible imprisonment for shopkeepers, if they are found using plastic bags. To this effect, plastic milk packets will make way for glass bottles ensuring the ban applies to the dairy industry as well.

3.3. Maharashtra Plastic and Thermocol Products Notification, 2018

The state-wide ban on single use plastic and thermocol products came into effect on March 23, 2017, with the issuance of the Maharashtra Plastic and Thermocol Products (Manufacture, Usage, Sale, Transport, Handling and Storage) Notification, 2018. The notification cited increasing concerns over "usage and disposal of plastic are diverse and include accumulation of waste in landfills, water bodies and in natural habitats, the leaching of chemicals from plastic products and potential for plastics to transfer chemical to wildlife and humans" as the cause of the ban.

The ban covered the manufacture, usage, transport, distribution, wholesale and retail sale and storage and import of the following products:

- Plastic bags
- Disposable plastic items like spoons, forks, cups, glasses, containers

- Disposable thermocol items like plates, glasses, bowls, containers
- Non-woven polypropylene bags
- Plastic pouches for storing liquid
- Plastic wrap used for packaging or storing products
- Plastic packaging for food items
- Plastic and thermocol decorations

The ban was applicable for street food vendors, vegetable sellers, grocery shops, cinema halls, restaurants, places of worship, wholesalers, retailers, bus stands, railway stations and other public places. To ensure the availability of non-plastic carrying bags, the Maharashtra government has budgeted Rs. 5 crore to provide free cloth bags to citizens.

The following items have been excluded from the ban:

- Plastic bags used in packaging of medicines
- Compostable plastic bags
- Plastic used for plant nurseries, horticulture, agriculture
- Plastic used for handling of solid waste (at homes, for example)
- Manufacture of plastic and plastic bags in SEZs or export-centric units
- Food grade virgin plastic bag not less than 50 microns in thickness
- Plastic covers or wraps for material at the manufacturing stage

The government, however, had made it mandatory for manufacturers to prominently print on such plastic items that they are to be used exclusively for these purposes.

3.4. Use of plastic in road construction

In November 2015, the Central Government mandated the use of plastic along with bituminous mixes for road construction. Maharashtra State Government passed a GR on 21st June, 2018, which made it compulsory to use plastic waste for construction of bituminous or asphalt roads. Maharashtra has already imposed a state wide ban on single use plastic, in view of the ban, large quantities of plastic are available with the state which can be added to a hot mix of asphalt or as it is commonly known as 'tar' and stone crush. This reduces the use of bitumen which is the liquid binder that holds asphalt together because once the plastic melts it forms an oily coating for road carpeting.

According to a report by NHAI, compared to their conventional counterparts, the plastic roads have better longevity, water resistance, and require less maintenance. Apart from that, the plastic roads also eliminate the possibility of potholes. They are also equipped to support additional load transport as compared to usual roads better. Also, these roads are regularly checked every three months for quality.



SUPPORT TO GOVERNMENT OF MAHARASHTRA FOR DRY WASTE MANAGEMENT

4. Support to Government of Maharashtra for dry waste management

The RCUES at AIILSG has been supporting Government of Maharashtra (GoM) for dry waste management through Swachh Maharashtra Mission – Urban , since the launch of the Mission in 2015. RCUES, Mumbai has been dedicatedly working towards enabling better sanitation, hygiene and waste management in cities.

In order to support GoM in the management of dry waste RCUES of AIILSG, Mumbai had undertaken a research study in 2017-2018 on 'Identifying Market Potential for Recyclable Solid Waste in Maharashtra' which attempted to address the issues and challenges faced by the ULBs in recycling their dry waste by identifying the potential markets for the segregated and recyclable dry waste and suggesting a sustainable revenue generating models for the ULBs. It was also found that while every ULB was making an effort to increase the percentage of segregation and sorting of waste, it was necessary that they are provided with adequate options for managing the sorted dry waste. It was also found that the management of dry waste by a single ULB may not be a financially viable option. There were several recycling industries in Maharashtra who were willing to work with the ULBs but they needed a bulk source for segregated waste of an individual type to start with.

From these observations, there arose a need to assess other means of decentralized waste management model at the cluster level. RCUES, Mumbai took up a 'Feasibility Study of Cluster Level Dry Waste Management' to explore the cluster based model for management of dry waste of Urban Local Bodies in 2018-2019. This study attempted to address the issues and challenges faced by the ULBs in recycling their dry waste and computing the feasibility of cluster level management of segregated and recyclable dry waste. Through the course of the research, it was found that the ULBs were sorting the dry waste manually and were able to sort dry waste into different categories with plastic being the major contributor of dry waste in various types such as bottles, polythene bags, wrappers, packaging material etc. Successful cases of cluster level dry waste management in India were reviewed to identify the good practices and parameters based on which the cluster level management can be done successfully. Recycling industries were also contacted for their willingness to be a part of such cluster level waste management. 3 divisions of Maharashtra were surveyed on a pilot basis to identify the potential clusters. These clusters were further surveyed to identify the suitable management model, stakeholder involvement, financial considerations that were required for the different models. The parameters of feasibility of cluster level dry waste management were listed and recommendations were made to the GoM, ULBs and the participating recycling industries for implementation of the model on ground. Both the research studies after submission to the UDD, GoM, were further disseminated through various mediums to the ULBs of Maharashtra. The findings of the research and the knowledge was shared with the practitioners who would benefit the most from it and apply that on ground. The details of dissemination is highlighted in the next chapter.

As part of Plastic Waste Management Rules 2016, Producers, Industries, Brand owners (PIBOs) have to undertake Extended Producers Responsibility (EPR). As per the PWM rules, PIBOs have to submit action plan for collecting and recycling the quantity of plastic waste generated by them. PIBOs have to submit their action plan to SPCB/PCC after endorsing it from UDD, GoM.

RCUES of AIILSG, Mumbai has supported Government of Maharashtra for Extended Producers Responsibility for Plastic Waste Management. RCUES contributed GoM for formulating State's strategy and guidelines for EPR. GoMs strategy for EPR aims at streamlining the action plan of PIBOs such that efficient waste management practices are followed. As per GoMs strategy, PIBOs are required to submit

their action plan for 100% recovery of plastic waste out of which 50% plastic has to be recovered from the ULBs of Maharashtra. The PIBOs are required to attach the waste quantity conformation certificate from the ULB to validate the same. GoMs strategy also mandates PIBOs to submit the waste management practices undertaken by the agencies of PIBOs so as to avoid the overlap with other PIBOs.

RCUES has assessed the first 29 proposals received by them from PIBOs. The proposals are assessed as per the PWM Rules, CPCB guidelines and GoMs strategy for plastic waste management. As per the observations from assessing the proposals and gaps in the action plan assessed, guidelines are developed for submission of action plan along with revised format for submitting action plan. The review of proposals and revision in format is made in consultation with GoM.

Figure 4-1 Support to GoM for EPR under PWM



The following chapter details out the literature on EPR reviewed, cases of EPR implementation studied, comments on the EPR proposals and revised format for formation of action plan.



- 05

SUPPORT TO GOM - REVIEW OF PROPOSALS- EXTENDED PRODUCERS RESPONSIBILITY (EPR)

5. Support to GoM- Review of proposals- Extended Producers Responsibility (EPR)

5.1. Introduction- What is EPR

Extended Producers Responsibility refers to the concept of manufacturers taking environmental responsibility for their products and its associated packing when they become waste. The EPR *Guidance Manual for Governments*, the Organization for Economic Co-operation and Development (OECD 2001) defines EPR as 'an environmental policy approach in which a producer's responsibility for a product is extended to the post-consumer stage of a product's life cycle including its final disposal'.

Under EPR, the producers have to develop a mechanism to collect the used plastic products from their costumers and get it recycled. EPR helps to reduce the burden of municipalities to manage the end of the cycle waste generated and thus reduces the cost of waste management. It also reduces the amount of waste dumped for final disposal thus increases the efficiency of recycling.

OECD defines need of extended producers responsibility in two specific features as mentioned below:

- The shifting of responsibility for disposal "upstream" from municipalities to producers.
- Encouragement through incentives to make the design of products more environmentally friendly.

Extended producer responsibility is an attempt to provide an incentive to producers to design products with reduced environmental impacts while shifting the costs associated with disposal to the producer. The benefits of extended producer responsibility policies are categorized as economic, environmental, and social.

Economic- Requiring producers to take responsibility for the disposal of products reduces the volume of material disposed of through incineration or in a landfill thus reducing the load on municipalities for solid waste processing and disposal.

Environment- Environmental motivations for extended producer responsibility include increasing product recyclability, decreasing use of toxic components in products, and reducing the amount of material that is sent to a landfill or incinerator rather than reused or recycled.

Social- Extended producer responsibility also has social benefits. The implementation of extended producer responsibility policies improves the public image of a company.

5.2. Methods of implementing EPR- Approach

The concept of EPR has been an established principal of environment policy for many counties since late 1980s. EPR can be achieved through various policies and their implementation. The most common type of EPR policy, the 'product take-back approach' is seen in most of the countries has been discussed by Walls (2006,2011) and Nnorom and Osibanjo (2008). Based on the literature study following mentioned are the aspects of product take back mechanism –

- Product take-back and recycling rate mechanism-
 - Under this system manufacturer are mandated to take back end of life (EOL) products and specific recycling targets are set. Generally, a 'producer responsibility organization, PRO' is formed and a collective effort by the member companies is made to fulfill EPR obligations.
- Voluntary product take-back mandate and recycling rate targetsThis system requires the manufacturer to take back EOL products purely on voluntary basis. No penalties are levied for not meeting the targets.
- Mandatory take-back and targets with a tradable recycling scheme-In this system, in addition to mandating take-back and setting recycling targets, manufacturers are enabled to trade credits to meet required targets.

The economic tools for implementation of EPR can be categorized as follows-

- Advanced recycling fee (ARF)- To cover the cost of End of Life (EOL) products a tax is imposed on the sale of the product. Fees are assessed per unit of the product. Fees are charged at the point of sale or levied on the manufacturer which is then incorporated in the retail price.
- Recycling fee combined with recycling subsidy- The revenue generated from ARF is used to subsidies the recycling process. Revenue generated can either be used for producer's activity of getting the waste recycled or managing the waste which includes the infrastructure cost.
- Deposit refund system- Tax on the product consumption is refunded when the EOL product is returned for recycling. The deposit amount is based on the commercial cost of the product and environmental cost associated with recycling. The mechanism ensures flow of material for recycling and recovery.
- Material tax- Special taxes levied on the manufacturers for using harmful and difficult to recycle materials. This encourages the manufacturers to use less harmful materials.

5.3. Case studies

The chapter contains review of EPR cases from various countries. The review has been conducted to understand the various methods through which EPR is implemented. This chapter makes an attempt in understanding the role of regulations and stakeholders in implementation of EPR systems.

5.3.1. The United Kingdom

The United Kingdom adopted the EPR concept in its 1995 Environment Act. The government then passed the Producer Responsibility Obligations (Packaging Waste) Regulations in 1997 and the Packaging (Essential Requirements) Regulations in 1998. These regulations, which came into force on March 6, 1997, require producers to recover and recycle a specific percentage of their packaging waste each year, with the percentage rising over time.

1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008

Total recovery 38% 43% 45% 56% 59% 59% 63% 65% 67% 69% 70%

11% 13% 18% 19% 19% 59% 61% 63%

66% 66.5%

Table 1 U.K. Packaging Recovery and Recycling Targets

Recycling

7%

Sources: Salmons (2002), ENDS Environment Daily (2002), ENDS Report (2002), U.K. DEFRA (2003).

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The U.K. regulations have divided producers into four categories. The definitions of producers in the packaging chain is as follows-

Manufacturer- A person who manufactures raw material for packaging

Converter- A person who uses or modifies packaging material

Packer/ filler- A person who puts goods into the packaging

Seller- A person who supplies packaging to a user or a consumer.

The United Kingdom began phasing in 1998, beginning with the largest companies with the annual turnover of more than £5 million. Later, in 2000, companies with annual turnover of £2 million were incorporated. The £2 million threshold included 88.6% percentage of all packaging handled by U.K. companies (EC 2001).

The United Kingdom recently announced a new waste strategy which requires companies to pay full cost of collecting and recycling packaging waste put in the market my them. This involves a tax on plastic packaging containing less than 30% recycled content and a ban on plastic when alternatives exist. The overall plan has two key goals regarding plastic waste management-

- Making all plastic packaging entering the market recyclable, reusable or compostable by 2025.
- Eliminating avoidable plastic waste over 25 years span.

This new strategy from the Department for Environment, Food and Rural Affairs flips the current UK recycling structure. Taxpayers currently pay for 90% of recycling costs and businesses cover about 10%, but the new plan makes producers take on the entire cost.

5.3.2. Japan

Japan's EPR scheme 'The Container and Packaging Recycling Law' (CPRL) is regulated by 'The Packaging Recycling Act'. Under this scheme producer is mandated to recycle the properly sorted packaging waste. They fulfil their obligation either by outsourcing the collection/recycling of the waste to the designated Producers Responsible Organisation (PRO) and paying commission to it, which is known as the 'PRO route' or reuse/ recycle packaging containers used and manufactured by them known as the 'self-collection route' or by collecting/recycling packaging waste by themselves or outsourcing it to agencies other than the PRO known as 'own-recycling route'. The PRO route is most common, while the other two are very rare.

In the case of failure to fulfil the obligation, producers are served with a recommendation for fulfilling their obligation, followed by disclosure of their name along with the orders to conduct recycling. If they do not follow the order, they are finally penalised with a fine not exceeding one million yen. The scheme resulted in the change in design for the reduction of waste containers and packaging through the use of lightweight products and change of materials. During the period 1996–2009, the total quantity of packaging was reduced by 16%.

5.3.3. South Africa

The South African experience has shown that voluntary industry initiatives for EPR can achieve the objective of successful recycling even without any legislative interference. South Africa has implemented EPR for metal cans, glass and PET bottles. EPR for PET bottles was brought in place in 2004 to deal with the issue of recycling PET bottles. For the same a not-for- profit initiative called PETCO was established. PETCO undertakes EPR activities on behalf of its shareholders namely, brand owners, resin producers,

converters and bottlers. The industry has signed a memorandums of understanding (MoU) to not enforce any legislation relating to PET, mutually agreed upon the targets to be achieved and evaluation and monitoring processes.

PETCO has adopted an advanced recycling fee/ incentive system. Converters and bottlers pay a voluntary levy per tonne of PET resin purchased from resin producers and importers. Revenue generated is used to finance operational costs, support recyclers and recycling projects, and support companies promoting PET recycling. PETCO maintains the price of recycled PET at an artificially high level when market conditions are unfavorable to safeguard the interests of recyclers and the collectors and keep them in the market despite fluctuations during adverse cycles.

In 2018 PETCO released statistics which revealed that the South Africa's PET recycling features have increased by six percent since the last year. According to the PETCO report, and average of 6.2 million plastic bottles were recycled every day across South Africa during 2018.

Table 2 Comparative review of the case studies

					Stakeholders role	
Name of the country	Type of plastic waste	Producers responsibility	Recycling/ recovery target	Separate collection/ recycling agency	Retailers	Consumers
United Kingdom	Packaging waste	Mandatory participation- Either have to recycle on own or outsource to PRO	Targets increased every 5 years	Responsible for collection and recycling to meet the targets fixed by the government	Collects waste	None
Japan	Packaging waste	Mandatory participation- Either have to recycle on own or outsource to PRO.	No targets	PROs outsource recycling of the sorted waste from municipality to registered recyclers	None	Responsible for source segregation
South Africa	PET	Voluntary charge for per ton of PET purchased from producers. Revenue is used to finance recycling operation	100% recovery	PETCO (PRO) outsources recycling to the major manufacturers	None	Get cash on returning the used product to scrap dealers or buy-back centers

5.4. Extended Producers Responsibility-India

Plastic Waste Management (PWM) Rules provides framework for plastic waste management in India. The provision of these rules emphasizes on minimizing plastic waste, segregation at source, formalizing waste pickers in the system, recycling etc. These rules are applied to every waste generator, local body, Gram Panchayat, manufacturer, Importers and producer.

It has brought in the responsibilities of plastic waste generators and producers under Extended Producers Responsibility. Under EPR Producer, Importers and Brand Owners (PIBOs) are need to work out modalities for waste collection system for collecting back plastic waste generated by them. They are required to set up a system within a period of six months.

For the implementation of EPR Government of India has taken the approach of 'mandatory take-back and recycling' mechanism. PIBOs are required to attain registration from CPCB/ SOCB/ PCCs (as the case maybe) in order to obtain/ renew registration. The PIBOs are required to apply for registration along with action plan for Plastic Waste Management. For monitoring the compliance of EPR, PIBOs have to submit details of waste collected through any options to CPCB/SPCB on quarterly basis.

5.5. Review of EPR proposals received by UDD, GoM

Central Pollution Control Board (CPCB) has prescribed a format for framing of action plan to the PIBOs. CPCB has provided PIBOs three alternatives for preparing action plan. The alternatives for plastic waste management are:

- 1. Through Own Distribution channels- Waste is collected though own distribution channel
- 2. **Through Urban Local Bodies (ULBs)** The PIBOs can engage with the ULBs for collection, segregation and recycling of equivalent quantity of waste
- Through Agency- Waste collection is carried out in partnership with agency/s. The PIBOs engage
 with an agency which has necessary contracts with the ULBs for collection and segregation of
 waste and with recyclables for reuse/ recycling of waste.

Table 3 Alternatives for preparation of EPR action plan

	Through Own Distribution Channels	Through ULBs	Through Agencies
Waste Quantity	Waste quantity equivalent to generation	Waste quantity equivalent to generation	Waste quantity equivalent to generation
Waste Recycling	Contracts with recyclers, co-processing with Cement mills, road making or any other processing	Contracts with recyclers, co- processing with Cement mills, road making or any other processing	Contracts with recyclers, co- processing with Cement mills, road making or any other processing
Action Plan Coverage	Cover the areas (States/UTs) in which the products are sold	 For PIBOs having Pan India coverage - Preferably 1 ULB from each of five zones. For PIBOs having limited 	 For PIBOs having Pan India coverage - Preferably 1 Agency from each of five zones. For PIBOs having limited

	coverage - ULBs to		coverage - Agencies to
	ensure coverage of		ensure coverage of Max.
	Max. States/ UTs.		States / UTs.
•	Preferably one ULB	•	Preferably one Agency
	each from Tier I, II and		each from Tier I, II and III
	III		

5.5.1. Overview of proposals received by UDD, GoM

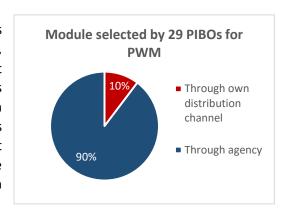
For the state of Maharashtra, the proposals sent by PIBOs have to be endorsed by Urban Development Department (UDD). So far 100 PIBOs have sent their action plans under EPR as per CBCBs format and guidelines. All India Institute of Local Self Government, Mumbai is supporting UDD in assessing the proposals received by them. The EPR proposals are assessed as per the PWM Rules 2016. CPCB guidelines and Government of Maharashtra's strategy for Plastic Waste Management. UDD has shared 29 proposals with AIILSG, Mumbai for initial assessment. The following chapter presents an analysis of those 29 proposals. The detailed assessment of each proposal has been attached in 'Annexure I' for reference.

The proposals can be categorized as:

- Action plan of industries which are functional- These industries have working contracts to prove their engagement with agencies for PWM.
- Action plan of industries which are currently not functional. Since the industries are not functional and no plastic waste is currently generated the action plan of these industries is prepared for when the industry would become functional.

Type of module undertaken for PWM:

The action plan is prepared on one of the three modules prescribed by CPCB i.e. through own distribution channel, through engagement with ULBs and through engagement with agencies. Of the total 29 proposals three industries have opted for plastic waste management through own distribution channel whereas 26 agencies have tie-ups with agencies to carry out PWM. CPCB has mandated that if the PIBOs are engaging agency, the agency should have Pan- India presence. Hence, PIBOs have associated with majorly two industries as mentioned below-



- IPCA, Delhi- 13 PIBOs have association
- Social Lab, Wardha- 10 PIBOs have association
- Others- 3 PIBOs

5.5.2. Observations of EPR proposals assessed

The 29 proposals are assessed by AIILSG, Mumbai based on PWM Rules, CPCB norms and Government of Maharashtra strategy for PWM as mentioned in earlier chapter. This chapter highlights some of the

key observations of the 29 proposals assessed. The detail report on each proposal is attached in 'Annexure I' for reference. Key observations and comments on the EPR proposals assessed are-

1. Very few ULBs in Maharashtra covered for waste collection:

The need for engaging with ULBs for waste collection is mandated by CPCB if the PIBO is undertaking module of 'waste collection through ULBs' or 'through engagement with agency' in which case the agency must have necessary contracts with the ULBs. IPCA, Delhi has association with ULBs of Aurangabad, East Delhi, Jammu and Patiala for waste collection whereas Social Lab, Wardha has tie-up with Aurangabad and Vaijapur ULBs for waste collection. 23 PIBOs who have tie-up with IPCA, Delhi and Social Lab, Wardha have shown have tie-up with the same above mentioned ULBs. In total 23 PIBOs have listed Aurangabad ULB of Maharashtra for waste collection. Other ULBs associated with agencies for waste collection are Dahanu, Satara and Sindkheda of Maharashtra.

2. Cannot verify quantity of waste recovered from ULBs:

Total 26 PIBOs have undertaken plastic recovery though agency module. The agencies have tie-up with ULBs for plastic waste collection as mentioned above. As part of verification for the plastic waste collected, agency's contract of association with the ULBs has been attached. No proof of quantity collected from the ULB is mentioned in order to confirm that the quantity collected by the agency and that there is no overlap/ duplication in with other PIBOs.

3. Need clarity in action plan:

As part of evidence for the action plan submitted, PIBOs are mandated to submit all reference documents to support their clam of waste recovered/ to be recovered. Some PIBOs have attached certain documents but most of the proposals are unclear/ cannot be assessed as they lack information and supporting documents.

4. Percentage of waste recovered:

The average percentage of waste recovery/ recycling is 30. It ranges from 2% to 100%. The action plan is required to be prepared for 100% waste recovery in phased manner. Which is not reflected in any of the proposals. As many PIBOs have not mentioned quantity of plastic generated by them, percentage of waste recovered by them cannot be calculated.

5. Need clarity in waste recovered through association with multiple agencies:

Most of the PIBOs have association with single agency for waste collection and the agency further has multiple associations for waste recovery and recycling. Of the total 29 proposals 3 proposals have PIBOs association with multiple agencies for waste recovery and recycling. The quantity of waste to be recovered is mentioned in total and not as a scope of work of individual agency. The quantity of waste to be recovered and recycled by individual agency should be mentioned in order to verify and assess the proposal.

6. Need clarity on action plan for own waste recycling:

As part of the format for action plan, the PIBOs are mandated to submit action plan for the plastic waste generated by them. Most of the PIBOs have mentioned the quantity of plastic waste generated by them but detail action plan is not presented. Details of recyclers involved by the PIBO for recycling the plastic waste needs to be attached along with necessary documents to verify the same.

5.5.3. Revision in EPR format

The EPR proposals assessed has revealed that the action plan submitted by the PIBOs lack clarity. Critical information and necessary documents have not been attached. Hence, in order to acquire the required information and in order to align the action plan with GoMs strategy for Plastic Waste Management, few revisions in the exiting EPR action format has been suggested. The revised format has been prepared in association with UDD, GoM. Highlights of the revisions in the format for action plan is as mentioned below:

- 1. To get uniformity in action plan, the same should be prepared for the Financial Year of 2019-20.
- 2. Action plan to be prepared for 100% waste recovery. For the 100% waste recovered, 50% should be from the ULBs of Maharashtra.
- 3. Agencies associated with PIBOs should provide detail plan for the collection of waste from ULBs of Maharashtra with timeline so that there is no overlap within the PIBOs.
- 4. Instructions/ guidelines have been added so that clarity in action plan is achieved.
- 5. Sub-heads/ sub-questions are added for providing sufficient information so as to assess the case.

Revised format for framing of Action Plan under EPR has been attached in 'Annexure II' for reference.



SUPPORT TO GOM - DISSEMINATION OF RESEARCH STUDY UNDERTAKEN BY RCUES, MUMBAI

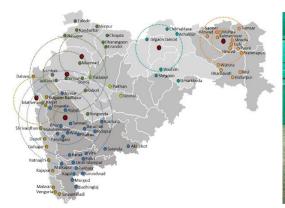
6. Support to GoM- Dissemination of research study undertaken by RCUES, Mumbai

In the research study conducted by RCUES in 2017-18, 'Identifying market potential for recyclable dry waste in Maharashtra', the study attempts to address the issues and challenges faced by the ULBs in recycling their dry waste by identifying the potential markets for the segregated and recyclable dry waste and suggesting a sustainable revenue generating model for the ULBs.

This study was presented in the advisory meeting on 27th March 2018 and was appreciated by the Advisory Committee and the Government of Maharashtra as resourceful for managing dry waste of ULBs. It was decided that this study will be disseminated to ULBs as a resource material in the upcoming workshops of GoM.

Hence RCUES research study for 2018-19 was conducted in continuation with previous year's study to understand the feasibility of cluster level dry waste management for the Urban Local Bodies of Maharashtra. The report has identified the parameters that affect the feasibility of cluster level dry waste management. Based on the assessment of 60+ cities, visits conducted to 24 cities and interviews conducted with 74 recycling industries, feasibility was assessed and potential 10 clusters were identified in consultation with Government of Maharashtra (GoM).

The research study was presented in the RCUES Annual Advisory Committee meeting in March 2019, during which it was appreciated by the Director, UD&LSG, MoHUA, GoI and Principal Secretary UDD, GoM.









6.1. Dissemination through Capacity building programs

The Regional Centre for Urban & Environmental Studies (RCUES) Mumbai is established by the Ministry of Housing and Urban Affairs (MoHUA), Government of India (GoI) to undertake strengthening work capabilities of municipal officials and elected representatives members from the States of Goa, Gujarat, Maharashtra, Rajasthan and UT's of Diu, Daman, Dadra & Nagar Haveli and Lakshadweep in the Western Region and States of Assam and Tripura in the North East Region. RCUES has been dissimilating the findings of the research conducted on Solid Waste Management in all the programmes conducted in the above mentioned States ad Union Territories.

AIILSG is empaneled for conducting Integrated Capacity Building Programmes (ICBP). AIILSG Mumbai is supporting the states of Maharashtra, Rajasthan and Goa for the same. RCUES has conducted lectures on Solid Waste Management in all the ICBP programmes conducted in the three States. SWM filed expects were invited to address the participants.

RCUES is supporting Government of Maharashtra to build capacities of municipal officials and elected representatives by conducting regional workshops. Four specialized training programmes were conducted to assist ULBs in achieving their envisioned targets under SBM. State level review was conducted during the programmes in which the progress made by the ULBs so far and their way forward was discussed. The objective of conducting these specialized programs and the topics to be covered under it, were decided in consultation with the State team to support the State's strategy for efficient Solid Waste Management in cities of Maharashtra. In these training programmes, technical sessions on the topics of processing of wet and dry waste, community participation and involvement of waste pickers were conducted. RCUES's research on available market for dry waste and potential for developing cluster level dry waste management was discussed during the programmes which gave the ULB officials a new approach for dry waste management. Locally available industry recycling plastic waste collected from ULB was invited to address the participants. The session helped the participants to understand the locally available market for recycling dry waste.

Table 4 Details of the training programmes conducted

Sr. no.	Number of participates	Districts in Maharashtra covered	Designation of participates
1	24 participants from 11 cities	Yavatmal	Chief Officers, Engineers and Sanitary Inspectors.
2	44 participants from 21 cities	Buldhana	Chief Officers, Engineers and Sanitary Inspectors.
3	62 participants from 25 cities	Amravati and Buldhana	Chief Officers, Engineers and Sanitary Inspectors.
4	62 participants from 31 cities	Akola, Amravati, Yavatmal and Washim	Chief Officers, Engineers and Sanitary Inspectors.

Snapshots of the training programmes:





Ms. Utkarsha Kavadi, Director, RCUES of AIILSG, Mumbai addressing the participants.



Mr. Omkar Shauche, Technical Expert, SMM-U Directorate, GoM, Mumbai addressing the participants.

6.2. Dissemination through publications

RCUES, Mumbai has two publications, Urban World and Urban Environ Vision. Urban Environ Vision is an information bulletin which covers activities undertaken by RCUES, Mumbai. Urban World, is a

quarterly journal in which articles and research papers are published on several thematic topics of urban sector, current happenings in urban development management / governance and environment management. These publications are widely circulated in the country for wider dissemination and knowledge management.





ANNEXURE

Annexure I - Comments on 29 EPR proposals received by UDD, GoM

1. SUVIDHI PLASTO PACK PVT. LTD.

Please note:

The following comments are based on the CPCB format and Solid Waste Management Rule 2016.

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	3.6 MT
Total plastic recycled (2018-19)	72MT
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad Municipal Corporation

- Suvidhi Plasto has tie-up with Indian Pollution Control Association (IPCA) which has pan India presence.
- IPCA has agreement with Social Lab Environment Solution as plastic waste collector in Maharashtra. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad in Maharashtra.
- On behalf of Suvidhi Plasto, IPCA will collect 72 MT of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to plan for 100% plastic recycling.
- Need to attach relevant documents as mentioned below for references.
- Contract with agencies should be of longer duration, which is currently only till Dec. 2019.

Item wise comments on the action plan based on CPCB format

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.

5.	In one of Favirulant Overtity of		
5.	In case of Equivalent Quantity of		
	Waste, source of waste generation to		
	be identified.		
6.	Action Plan based on:		
	i. Own Distribution Channel	Engagement	
	i. Engagement with ULBs	of Agency	
	i. Engagement of Agency	0.7.8007	
	v. Any other (please provide details)		
6a	Own Distribution Channel	NA	
6b	Engagement with ULBs	NA	
6c	Engagement of Agency		
i.	List of Agency to be engaged with for		
	PWM		
ii.	Does the above list ensure Pan India		
	coverage		
iii.	Document supporting engagement of		Attach certificate from Aurangabad ULB
	the Agency by the ULBs / Bulk Waste		mentioning quantity of plastic waste sent to the
	generators.		industry
iv.	Break up of Waste to be collected /		Currently action plan only mentions 29% of
	segregated by the Agency		plastic to be collected and recycled. Mention
			action plan for increasing the recycling to 100%.
٧.	Mode of Reusing / Recycling Waste		
	(Recycler / Road Making /		
	Coprocessing)		
vi.	Engagement with Recycler /		
	Coprocessor / Agency engaged in Road		
	making		
vii.	Details (including registration details)		
	of Recycler / Coprocessor / Agency		
	engaged in Road making.		
viii.	Break up of quantity proposed to be		
	sent to Recycler / Coprocessor /		
	Agencies engaged in Road making.		
6d.	Any other Options (Please specify and		
	provide details on PVM as per 6 a-c		
	above)		
	440101	l	

- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity of plastic waste actually collected by the industry is required to be attached.
- One of the seven recyclers engaged by IPCA is Balaji Enterprises. The scope of work in the agreement between IPCA and Balaji mentions the later to be plastic waste collector and not as a recycler. Clarity on the same is needed.
- Action plan for expanding recycling of plastic waste till 100%, along with the timeline is required to be submitted.
- Need to mention recyclers identified for own waste recycling and attach relevant documents.
- The above mentioned information with relevant documents is necessary to further assess the action plan submitted by the industry.

2. PARAS PLASTIC

Please note:

The following comments are based on the CPCB format and Solid Waste Management Rule 2016.

Summary of Action plan

Total plastic generated (2017-18)	388 MT
In house plastic waste (2017-18)	3.8 MT
Total plastic recycled (2018-19)	78 MT
% of plastic recovery against total plastic generated	20%
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Dahanu and Satara Municipal Councils

- Paras plastic has tie-up with NEPRA Environmental Solutions Pvt. Ltd for EPR compliance.
- NEPRA Resource Management Pvt. Ltd. has tie-up with Dahanu and Satara Municipal Councils in Maharashtra for plastic waste collection.
- Collected plastic waste will be recycled by NEPRA.
- On behalf of Paras Plastic, NEPRA has already collected 78MT of plastic waste in 2017-18.

Key comments

- Need to plan for 100% plastic recycling. At present it is only 20%
- Need to attach relevant documents as mentioned below as evidence and reference.

Item wise comments on the action plan submitted as per CPCB format

Sr. No.	Item	Description	Comments
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		Please clarify if the quantity of plastic consumed is same as total sale
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic produced by Paras Plastics and attach relevant proof for the year 2018-19 based on which EPR of 31.3 MT (30%) is calculated.
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 Please mention type of plastic waste generated. (recyclable/ non-recyclable) Please mention recyclers involved and attach relevant documents of proof for engagement of agency and quantity of waste recycled by them.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: /. Own Distribution Channel i. Engagement with ULBs i. Engagement of Agency	Engagement of Agency	

	i. Any other (please provide details)		
6a	Own Distribution Channel	NA	
6b	Engagement with ULBs	NA	
6с	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		
iv.	Break up of Waste to be collected / segregated by the Agency		Please attach certificate from Dahanu and Satara ULBs mentioning quantity of plastic waste collected by / sent to the industry.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Certificate from the Dahanu and Satara Municipal Councils endorsing the quantity of plastic waste given to the industry is required to be attached.
- Currently, only 20% of plastic is recycled by the industry. Action plan for expanding it till 100% with timeline is required to be submitted.
- Clear demarcation of plastic waste consumed as raw material, produced and waste generated is required.
- Mention recyclers identified for own waste recycling and attach relevant documents.
- The above mentioned information with relevant documents is necessary to further assess the action plan submitted by the industry.

3. KESHAR PLASTIC

Please note:

The following comments are based on the CPCB format and Solid Waste Management Rule 2016.

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned	
In house plastic waste (2018-19)	In house 1.8 MT + loading/ unloading 0.75=	
	2.5MT/month	
Total plastic estimated to be recycled (2019-20)	60 MT	
% of plastic recovery against total plastic generated	Cannot be calculated	
Action plan based on	Engagement of Agency	
ULBs in Maharashtra covered	-	

- Keshar Plastic has tie-up with Shakti Plastic Industries for EPR compliance.
- Shakti Plastic Industries to collect plastic waste from various housing societies, waste pickers, bulk users, scrap dealers etc. and recycling it through authorized recyclers.
- For own waste recycling, Keshar Plastic has setup a system through own distribution channel as pilot basis for which they have identified collection centers

Key comments

- Need to plan for 100% plastic recycling.
- Need to attach relevant documents as mentioned below as evidence and reference.
- As per the attached documents, Keshar Plastic has engaged an agency and has also setup a
 system of collecting the plastic through its own distribution network. In the action plan only
 engagement of agency has been detailed out. Need to modify the action plan and attach
 proof of waste recycled through both the systems. At present there is no clarity in the
 systems.

Item wise comments on the action plan submitted as per CPCB format

Sr. No.	Item	Description	Comments
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated. Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, need to mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, please provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of		

	Waste, source of waste generation to be identified.		
6.	Action Plan based on: C. Own Distribution Channel C. Engagement with ULBs i. Engagement of Agency i. Any other (please provide details)	Engagement of Agency	
6с	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		Please attach proof of engagement between Shakti Plastic Industries and agencies mentioned in annexure C with their scope of work and quantities to be collected/recycled by them
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		 Please attach proof of engagement between the agency and bulk waste generators, housing societies etc. in Maharashtra Please attach proof of quantities of waste collected through various sources in Maharashtra
iv.	Break up of Waste to be collected / segregated by the Agency		
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		Please attach relevant proof of engagement between the agencies.
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		Please attach relevant proof of engagement between Shakti Plastic Industries and both the agencies mentioned.
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Need to attach proof of engagement between Shakti Plastic Industries and their sources for plastic waste collection i.e. bulk waste generators, housing societies of Maharashtra.
- Action plan for expanding recycling of plastic waste till 100% with timeline is required.
- Mention recyclers identified for own waste recycling and attach relevant documents of engagement.
- Attach proof of engagement for Annexure C.

4. SUYASH INDUSTRIES

Please note:

The following comments are based on the CPCB format and Solid Waste Management Rule 2016.

Summary of Action plan

Total plastic generated (2018-19)	1013 MT	
Total plastic generated – sale to industries in	935 MT	
Maharashtra (2017-18)		
In house plastic waste (2018-19)	72 MT	
Total plastic estimated to be recycled (2019-20)	240 MT	
% of plastic recovery against total plastic generated	25% (of sale in Maharashtra)	
Action plan based on	Own distribution channel	
ULBs in Maharashtra covered	-	

- Suyash Industries will be collecting plastic waste from their customers.
- The collected plastic waste will be recycled at their in-house recycling plant.

Key comments

- Need to plan for 100% plastic recycling. At present it is only 25%
- Need to attach relevant documents as mentioned below for references.
- Need to attach proof of engagement of Suyash Industries with their customers for plastic waste collection.

Item wise comments on the action plan submitted as per CPCB format

Sr. No.	Item	Description	Comments
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		
4.	Action Plan for Own Waste / Equivalent quantity of Waste		
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: a) Own Distribution Channel b) Engagement with ULBs c) Engagement of Agency d) Any other (please provide details)		
6a	Own Distribution Channel		Please mention quantities to be recovered through proposed systems
i.	Details of Distribution Network.		Please mention adequate details
ii.	Does the Network have Plan – India coverage		Please mention adequate details
iii.	Estimated Qty of Waste to be collected		 Please mention names of agencies from whom plastic waste will be collected with the quantity of plastic waste to be

			collected.
			Please attach proof of contract signed with the resident to a second.
			signed with them in this regard.
iv.	Mode of Reusing / Recycling Waste (Recycler /		
	Road Making / Coprocessing / Others (please specify)		
٧.	Details (including registration details) of		
	Recycler / Coprocessor / Agency engaged in		
	Road making / others (please specify)		
vi.	Break –up of quantity proposed to be sent to		
	Recycler / Coprocessor / Agencies engaged in		
	Road making / Others (please specify)		
6b	Engagement with ULBs	NA	
6с	Engagement of Agency	NA	

- Overall, the proposed system for collecting plastic through own distribution network is described/ planned. However, quantities are not mentioned for any system. Kindly mention quantities to be recovered that will result into collection and recycling of 100% waste of the waste estimated to be generated; along with the timeline.
- Need to attach proof of engagement between Shree Plastic Industries and their sources for plastic waste collection in Maharashtra.

5. SHREE PLASTIC INDUSTRIES

Please note:

The following comments are based on the CPCB format and Solid Waste Management Rule 2016.

Summary of Action plan

Total plastic generated (2017-18)	710 MT	
Total plastic generated – sale to industries in	290 MT	
Maharashtra (2017-18)		
In house plastic waste (2017-18)	36 MT	
Total plastic estimated to be collected (2019-20)	60 MT	
Total plastic estimated to be recycled (2019-20)	Not mentioned specifically	
% of plastic recovery against total plastic generated	Cannot be calculated	
Action plan based on	Own distribution channel	
ULBs in Maharashtra covered	-	

- Shree Plastic Industries will be collecting plastic waste from their customers.
- The collected plastic waste will be recycled at their in-house recycling plant.

Key comments

- Need to plan for 100% plastic recycling.
- Need to attach relevant documents as mentioned below for references.
- Need to attach proof of engagement of Shree Plastic Industries with their customers for plastic waste collection.

Item wise comments on the action plan submitted as per CPCB format

Sr. No.	Item	Description	Comments
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		695 MT is consumed in 2018-19. What was generated through this? Other details are provided for 2017-18, when plastic was generated.
3.	Estimated quantity of Plastic Waste to be generated		
4.	Action Plan for Own Waste / Equivalent quantity of Waste		
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: e) Own Distribution Channel f) Engagement with ULBs g) Engagement of Agency h) Any other (please provide details)		
6a	Own Distribution Channel		Please mention quantities to be recovered through proposed systems
i.	Details of Distribution Network.		Please mention details of collection centers

ii.	Does the Network have Pan – India coverage		
iii.	Estimated Qty of Waste to be collected		 Please mention names of agencies from whom plastic waste will be collected with the quantity of plastic waste to be collected. Please attach proof of contract signed with them in this regard.
iv.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing / Others (please specify)		
V.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making / others (please specify)		
vi.	Break –up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making / Others (please specify)		
6b	Engagement with ULBs	NA	
6c	Engagement of Agency	NA	

- Overall, the proposed system for collecting plastic through own distribution network is described/ planned. However, quantities are not mentioned for any system. Kindly mention quantities to be recovered that will result into collection and recycling of 100% waste of the waste estimated to be generated; along with the timeline.
- Need to attach proof of engagement between Shree Plastic Industries and their sources for plastic waste collection in Maharashtra.

6. SVP PACKAGING INDUSTRY PVT. LTD.

Please note:

The following comments are based on the CPCB format and Solid Waste Management Rule 2016.

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
Estimated quantity of plastic waste (2019-20)	30 MT
Total plastic estimated to be recycled (2019-20)	60 MT
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad Municipal Corporation

- SVP Packaging Industry has tie-up with Indian Pollution Control Association (IPCA) which has pan India presence.
- IPCA has agreement with Social Lab Environment Solution as plastic waste collector in Maharashtra. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad in Maharashtra.
- On behalf of SVP Packaging Industry, IPCA will collect 60 MT of recyclable non-MLP waste from the state of Maharashtra in one year.
- SVP Packaging Industry with its NGO partner will create a network of waste pickers to train them for plastic waste collection, segregation and storage.

Key comments

- Need to plan for 100% plastic recycling.
- Need to attach relevant documents as mentioned below for references.

Item wise comments on the action plan submitted as per CPCB format

Sr. No.	Item	Description	Comments
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated.
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, need to mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, please provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on:		

6a 6b	 i. Own Distribution Channel v. Engagement with ULBs v. Engagement of Agency i. Any other (please provide details) Own Distribution Channel Engagement with ULBs 	NA NA	
6c	Engagement of Agency	1411	
i.	List of Agency to be engaged with for PWM		Please attach proof of engagement with the agency.
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		 Attach certificate from Aurangabad Municipal Corporation, mentioning quantity of plastic waste sent to the industry.
iv.	Break up of Waste to be collected / segregated by the Agency		 Currently action plan only mentions target of 20% of plastic to be collected and recycled in the first year. Please provide action plan for increasing the recycling to 100%.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		Please attach relevant proof of engagement between the agencies.
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Need to attach proof of engagement between the agencies as mentioned above
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity of plastic waste given to the industry is required to ensure plastic waste from ULBs of Maharashtra is collected and recycled.
- Need to attach list and proof of engagement of recyclers to be engaged for recycling of collected plastic waste by IPCA.
- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- Mention recyclers identified for own waste recycling and attach relevant documents.



7. AADINATH FLEXO PRINTER

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	1.5 MT
Total plastic recycled (2018-19)	72MT
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad Municipal Corporation

- Aadinath Flexo Printers has tie-up with Indian Pollution Control Association (IPCA) which has pan India presence.
- IPCA has agreement with Social Lab Environment Solution as plastic waste collector in Maharashtra. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad in Maharashtra.
- On behalf of Aadinath Flexo Printers, IPCA will collect 72 MT of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to plan for 100% plastic recycling.
- Need to attach relevant documents as mentioned below for references.
- Contract with relevant agencies such as IPCA should be of longer duration, which is currently only till March, 2019 (pilot basis, as mentioned on the EPR Action Plan).

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		,
6.	Action Plan based on: i. Own Distribution Channel i. Engagement with ULBs	Engagement of Agency	

	k. Engagement of Agencyk. Any other (please provide details)	
6с	Engagement of Agency	
i.	List of Agency to be engaged with for PWM	
ii.	Does the above list ensure Pan India coverage	
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.	Attach scanned copy of agreement with Social Lab Environmental solutions. Attach certificate from Aurangabad ULB mentioning quantity of plastic waste sent to the industry. Attach agreement with agencies which will be in charge of waste collection and waste disposal/processing.
iv.	Break up of Waste to be collected / segregated by the Agency	Currently action plan only mentions 20 % of plastic to be collected and recycled. Mention action plan for increasing the recycling to 100%.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)	
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making	
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.	
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.	
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)	

- Need to attach proof of engagement between the agencies as mentioned above.
- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.
- Need to attach list and proof of engagement of recyclers to be engaged for recycling of collected plastic waste by IPCA.
- Mention recyclers identified for own waste recycling and attach relevant documents.
- Need to mention the locations of Waste Collection Centres and provide relevant documents attesting the amount of waste being collected at each centre.
- Need to provide relevant document endorsing the collected waste material is being supplied to the Waste to Energy / Cement Industries.

8. EASY PACK PLASTICS PVT. LTD

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	0.5 MT
Total plastic recycled (2018-19)	24 MT
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad Municipal Corporation

- Easy Pack Plastics Pvt. Ltd has tie-up with Indian Pollution Control Association (IPCA) which has pan India presence.
- IPCA has agreement with Social Lab Environment Solution as plastic waste collector in Maharashtra. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad in Maharashtra.
- On behalf of Easy Pack Plastics Pvt. Ltd, IPCA will collect 72 MT of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to plan for 100% plastic recycling.
- Need to attach relevant documents as mentioned below for references.
- Contract with relevant agencies should be of longer duration, which is currently only till December, 2019.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		,
6.	Action Plan based on: i. Own Distribution Channel i. Engagement with ULBs	Engagement of Agency	

	i. Engagement of Agencyv. Any other (please provide details)	
6с	Engagement of Agency	
i.	List of Agency to be engaged with for PWM	
ii.	Does the above list ensure Pan India coverage	
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.	Attach scanned copy of agreement with Social Lab Environmental solutions. Attach certificate from Aurangabad ULB mentioning quantity of plastic waste sent to the industry. Attach agreement with agencies which will be in charge of waste collection and waste disposal/processing.
iv.	Break up of Waste to be collected / segregated by the Agency	Currently action plan only mentions 20 % of plastic to be collected and recycled. Mention action plan for increasing the recycling to 100%.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)	
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making	
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.	
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.	
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)	

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.
- Need to attach list and proof of engagement of recyclers to be engaged for recycling of collected plastic waste by IPCA.
- Mention recyclers identified for own waste recycling and attach relevant documents.
- Need to mention the locations of Waste Collection Centres and provide relevant documents attesting the amount of waste being collected at each centre.
- Need to provide relevant document endorsing the collected waste material is being supplied to the Waste to Energy / Cement Industries.

9. NEW PACK INDUSTRIES

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
Sale in Maharashtra	31 MT
In house plastic waste (2018-19)	1.2 MT
Total plastic recycled (2018-19)	6.2 MT
% of plastic recovery against total plastic generated	20% (Calculated only as per sale in
	Maharashtra)
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad Municipal Corporation

- New Pack Industries has tie-up with Swachh Sustainable Solutions Pvt. Ltd and All India Plastics Manufacturing Association which has pan India presence.
- New Pack Industries has agreement with Swachh Sustainable Solutions Pvt. Ltd as plastic waste collector in Maharashtra.
- New Pack Industries has engagement with All India Plastics Manufacturing Association in Maharashtra for plastic waste recycling.
- New Pack Industries has engagement with Ambuja Ultratech Cement for

Key comments

- Need to plan for 100% plastic recycling.
- Need to attach relevant documents as mentioned below for references.
- Contract with relevant agencies should be of longer duration, which is currently only till December, 2019.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		

6.	Action Plan based on: v. Own Distribution Channel i. Engagement with ULBs i. Engagement of Agency i. Any other (please provide details)	Engagement of Agency	
6c	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		Attach scanned copy of agreement with Social Lab Environmental solutions. Attach certificate from Aurangabad ULB mentioning quantity of plastic waste sent to the industry. Attach agreement with agencies which will be in charge of waste collection and waste disposal/processing.
iv.	Break up of Waste to be collected / segregated by the Agency		Currently action plan only mentions 20 % of plastic to be collected and recycled. Mention action plan for increasing the recycling to 100%.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.
- Need to attach list and proof of engagement of recyclers to be engaged for recycling of collected plastic waste by IPCA.
- Mention recyclers identified for own waste recycling and attach relevant documents.
- Need to mention the locations of Waste Collection Centres and provide relevant documents attesting the amount of waste being collected at each centre.
- Need to provide relevant document endorsing the collected waste material is being supplied to the Waste to Energy / Cement Industries.

9. SUPREME

Please note:

The following comments are based on the CPCB format and Solid Waste Management Rule 2016.

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
Total plastic generated – sale to industries in	935 MT
Maharashtra (2017-18)	
In house plastic waste (2018-19)	600 MT
Total plastic estimated to be recycled (2019-20)	120 MT
% of plastic recovery against total plastic generated	Can't be calculated
Action plan based on	Own distribution channel
ULBs in Maharashtra covered	-

- Supreme will be collecting plastic waste from their customers and distributers.
- The collected plastic waste will be recycled at their in-house recycling plant.

Key comments

- Need to plan for 100% plastic recycling. At present it is only 25%
- Need to attach relevant documents as mentioned below for references.
- Need to attach proof of engagement of Surpreme Industries with their customers for plastic waste collection.

Item wise comments on the action plan submitted as per CPCB format

Sr. No.	Item	Description	Comments
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: i) Own Distribution Channel j) Engagement with ULBs k) Engagement of Agency l) Any other (please provide details)		
6a	Own Distribution Channel		Please mention quantities to be

			recovered through proposed systems
i.	Details of Distribution Network.		Please mention adequate details
ii.	Does the Network have Plan – India coverage		 Presently on in Maharashtra.
iii.	Estimated Qty of Waste to be collected		 Please mention names of agencies from whom plastic waste will be collected with the quantity of plastic waste to be collected. Please attach proof of contract signed with them in this regard.
iv.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing / Others (please specify)		Recycling to be done at own facility- Total capacity of 5.4 MT/day with 3 machines.
V.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making / others (please specify)		
vi.	Break –up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making / Others (please specify)		
6b	Engagement with ULBs	NA	
6с	Engagement of Agency	NA	

- Overall, the proposed system for collecting plastic through own distribution network is described/ planned. However, quantities are not mentioned for any system. Kindly mention quantities to be recovered that will result into collection and recycling of 100% waste of the waste estimated to be generated; along with the timeline.
- Need to attach proof of engagement between Supreme and their sources for plastic waste collection in Maharashtra.

10. PREMIER GREEN TECH

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	1 MT
Total plastic recycled (2018-19)	24 MT
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad Municipal Corporation

- Premier Green Tech has tie-up with Indian Pollution Control Association (IPCA) which has pan India presence.
- IPCA has agreement with Social Lab Environment Solution as plastic waste collector in Maharashtra. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad in Maharashtra.
- On behalf of Premier Green Tech, IPCA will collect 120 MT of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to plan for 100% plastic recycling.
- Need to attach relevant documents as mentioned below for references.
- Contract with relevant agencies should be of longer duration, which is currently only till November, 2019.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		,
6.	Action Plan based on: k. Own Distribution Channel k. Engagement with ULBs	Engagement of Agency	

	i. Engagement of Agencyi. Any other (please provide details)	
6с	Engagement of Agency	
i.	List of Agency to be engaged with for PWM	
ii.	Does the above list ensure Pan India coverage	
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.	Attach scanned copy of agreement with Social Lab Environmental solutions. Attach certificate from Aurangabad ULB mentioning quantity of plastic waste sent to the industry. Attach agreement with agencies which will be in charge of waste collection and waste disposal/processing.
iv.	Break up of Waste to be collected / segregated by the Agency	Currently action plan only mentions 20 % of plastic to be collected and recycled. Mention action plan for increasing the recycling to 100%.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)	
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making	
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.	
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.	
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)	

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.
- Need to attach list and proof of engagement of recyclers to be engaged for recycling of collected plastic waste by IPCA.
- Mention recyclers identified for own waste recycling and attach relevant documents.
- Need to mention the locations of Waste Collection Centres and provide relevant documents attesting the amount of waste being collected at each centre.
- Need to provide relevant document endorsing the collected waste material is being supplied to the Waste to Energy / Cement Industries.

11.JAY AGRO INDUSTRIES

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	0.5 MT
Total plastic recycled (2018-19)	24 MT
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad Municipal Corporation

- Jay Agro Industries has tie-up with Indian Pollution Control Association (IPCA) which has pan India presence.
- IPCA has agreement with Social Lab Environment Solution as plastic waste collector in Maharashtra. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad in Maharashtra.
- On behalf of Jay Agro Industries, IPCA will collect 20 MT of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to plan for 100% plastic recycling.
- Need to attach relevant documents as mentioned below for references.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: i. Own Distribution Channel /. Engagement with ULBs /. Engagement of Agency i. Any other (please provide details)	Engagement of Agency	

6a	Own Distribution Channel	NA	
6b	Engagement with ULBs	NA	
6с	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		Attach scanned copy of agreement with Social Lab Environmental solutions. Attach certificate from Aurangabad ULB mentioning quantity of plastic waste sent to the industry. Attach agreement with agencies which will be in charge of waste collection and waste disposal/processing.
iv.	Break up of Waste to be collected / segregated by the Agency		Currently action plan only mentions 20 % of plastic to be collected and recycled. Mention action plan for increasing the recycling to 100%.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.
- Need to attach list and proof of engagement of recyclers to be engaged for recycling of collected plastic waste by IPCA.
- Mention recyclers identified for own waste recycling and attach relevant documents.
- Need to mention the locations of Waste Collection Centres and provide relevant documents attesting the amount of waste being collected at each centre.
- Need to provide relevant document endorsing the collected waste material is being supplied to the Waste to Energy / Cement Industries.

12. RADHAN PLASTICS

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	1.1 MT
Total plastic recycled (2018-19)	50 MT
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad Municipal Corporation

- Radhan Plastics has tie-up with Indian Pollution Control Association (IPCA) which has pan India presence.
- IPCA has agreement with Social Lab Environment Solution as plastic waste collector in Maharashtra. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad in Maharashtra.
- On behalf of Radhan Plastics, IPCA will collect 50 MT of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to plan for 100% plastic recycling.
- Need to attach relevant documents as mentioned below for references.
- Need to clarify the amount of waste IPCA will be collecting 50 per year.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: i. Own Distribution Channel i. Engagement with ULBs c. Engagement of Agency	Engagement of Agency	

	Any other (please provide details)	
6с	Engagement of Agency	
i.	List of Agency to be engaged with for PWM	
ii.	Does the above list ensure Pan India coverage	
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.	Attach scanned copy of agreement with Social Lab Environmental solutions. Attach certificate from Aurangabad ULB mentioning quantity of plastic waste sent to the industry. Attach agreement with agencies which will be in charge of waste collection and waste disposal/processing.
iv.	Break up of Waste to be collected / segregated by the Agency	Currently action plan only mentions 20 % of plastic to be collected and recycled. Mention action plan for increasing the recycling to 100%.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)	
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making	
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.	
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.	
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)	

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- Need to clarify the amount of waste IPCA will be collecting 50 or 120 MT per year.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity of plastic waste given to the industry is required to ensure plastic waste from ULBs of Maharashtra is collected and recycled.
- Need to attach list and proof of engagement of recyclers to be engaged for recycling of collected plastic waste by IPCA.
- Mention recyclers identified for own waste recycling and attach relevant documents.
- Need to mention the locations of Waste Collection Centres and provide relevant documents attesting the amount of waste being collected at each centre.
- Need to provide relevant document endorsing the collected waste material is being supplied to the Waste to Energy / Cement Industries.
- Need to provide proof of liason with local gram panchayets in the final disposal of the plastic.

13. QUALITY PLASTICS

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	.24 MT
Total plastic recycled (2018-19)	29 MT
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad Municipal Corporation

- Quality Plastics has tie-up with Indian Pollution Control Association (IPCA) which has pan India presence.
- IPCA has agreement with Social Lab Environment Solution as plastic waste collector in Maharashtra. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad in Maharashtra.
- On behalf of Quality Plastics, IPCA will collect 29 MT of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to plan for 100% plastic recycling.
- Need to attach relevant documents as mentioned below for references.
- Contract with relevant agencies should be of longer duration, which is currently only till November, 2019.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: i. Own Distribution Channel i. Engagement with ULBs	Engagement of Agency	

	i. Engagement of Agencyv. Any other (please provide details)		
6с	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.	Attach scanned copy of agreement with Stab Environmental solutions. Attach certified from Aurangabad ULB mentioning quantitied plastic waste sent to the industry. A agreement with agencies which will be charge of waste collection and will disposal/processing.	ficate ity of ttach
iv.	Break up of Waste to be collected / segregated by the Agency	Currently action plan only mentions % of plastic to be collected and recy Mention action plan for increasing recycling to 100%.	/cled.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.
- Need to attach list and proof of engagement of recyclers to be engaged for recycling of collected plastic waste by IPCA.
- Mention recyclers identified for own waste recycling and attach relevant documents.
- Need to mention the locations of Waste Collection Centres and provide relevant documents attesting the amount of waste being collected at each centre.
- Need to provide relevant document endorsing the collected waste material is being supplied to the Waste to Energy / Cement Industries.

14. PAHAL IMPEX

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	.2 MT
Total plastic recycled (2018-19)	17 MT
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad Municipal Corporation

- Pahal Impex has tie-up with Indian Pollution Control Association (IPCA) which has pan India presence.
- IPCA has agreement with Social Lab Environment Solution as plastic waste collector in Maharashtra. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad in Maharashtra.
- On behalf of Pahal Impex, IPCA will collect 17 MT of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to plan for 100% plastic recycling.
- Need to attach relevant documents as mentioned below for references.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: v. Own Distribution Channel i. Engagement with ULBs i. Engagement of Agency i. Any other (please provide details)	Engagement of Agency	

6a	Own Distribution Channel	NA	
6b	Engagement with ULBs	NA	
6с	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		Attach scanned copy of agreement with Social Lab Environmental solutions. Attach certificate from Aurangabad ULB mentioning quantity of plastic waste sent to the industry. Attach agreement with agencies which will be in charge of waste collection and waste disposal/processing.
iv.	Break up of Waste to be collected / segregated by the Agency		Currently action plan only mentions 20 % of plastic to be collected and recycled. Mention action plan for increasing the recycling to 100%.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity of plastic waste given to the industry is required to ensure plastic waste from ULBs of Maharashtra is collected and recycled.
- Need to attach list and proof of engagement of recyclers to be engaged for recycling of collected plastic waste by IPCA.
- Mention recyclers identified for own waste recycling and attach relevant documents.
- Need to mention the locations of Waste Collection Centres and provide relevant documents attesting the amount of waste being collected at each centre.
- Need to provide relevant document endorsing the collected waste material is being supplied to the Waste to Energy / Cement Industries.

15. RAHEJA INCORPORATED

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	.4 MT
Total plastic recycled (2018-19)	36 MT
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad Municipal Corporation

- Raheja Incorporated has tie-up with Indian Pollution Control Association (IPCA) which has pan India presence.
- IPCA has agreement with Social Lab Environment Solution as plastic waste collector in Maharashtra. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad in Maharashtra.
- On behalf of Raheja Incorporated, IPCA will collect 17 MT of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to attach the relevant contract document between Raheja Incorporated and Indian Pollution Control Association (IPCA) for Plastic Waste Management.
- Need to attach relevant documents as mentioned below for references.
- Need to plan for 100% plastic recycling.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: k. Own Distribution Channel l. Engagement with ULBs i. Engagement of Agency i. Any other (please provide details)	Engagement of Agency	

6с	Engagement of Agency	
i.	List of Agency to be engaged with for PWM	Need to attach the relevant contract document between Raheja Incorporated and Indian Pollution Control Association (IPCA)
ii.	Does the above list ensure Pan India coverage	
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.	Attach scanned copy of agreement with Social Lab Environmental solutions. Attach certificate from Aurangabad ULB mentioning quantity of plastic waste sent to the industry. Attach agreement with agencies which will be in charge of waste collection and waste disposal/processing.
iv.	Break up of Waste to be collected / segregated by the Agency	Currently action plan only mentions 20 % of plastic to be collected and recycled. Mention action plan for increasing the recycling to 100%.
v.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)	
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making	
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.	
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.	
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)	

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.
- Need to attach list and proof of engagement of recyclers to be engaged for recycling of collected plastic waste by IPCA.
- Mention recyclers identified for own waste recycling and attach relevant documents.
- Need to mention the locations of Waste Collection Centres and provide relevant documents attesting the amount of waste being collected at each centre.
- Need to provide relevant document endorsing the collected waste material is being supplied to the Waste to Energy / Cement Industries.

16.S.M INDUSTRIES

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	.3 MT
Total plastic recycled (2018-19)	29 MT
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad Municipal Corporation

- S.M Industries has tie-up with Indian Pollution Control Association (IPCA) which has pan India presence.
- IPCA has agreement with Social Lab Environment Solution as plastic waste collector in Maharashtra. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad in Maharashtra.
- On behalf of S.M Industries, IPCA will collect 29 MT of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to plan for 100% plastic recycling.
- Need to attach relevant documents as mentioned below for references.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: i. Own Distribution Channel v. Engagement with ULBs v. Engagement of Agency i. Any other (please provide details)	Engagement of Agency	

6a	Own Distribution Channel	NA	
6b	Engagement with ULBs	NA	
6с	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		Attach scanned copy of agreement with Social Lab Environmental solutions. Attach certificate from Aurangabad ULB mentioning quantity of plastic waste sent to the industry. Attach agreement with agencies which will be in charge of waste collection and waste disposal/processing.
iv.	Break up of Waste to be collected / segregated by the Agency		Currently action plan only mentions 20 % of plastic to be collected and recycled. Mention action plan for increasing the recycling to 100%.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.
- Need to attach list and proof of engagement of recyclers to be engaged for recycling of collected plastic waste by IPCA.
- Mention recyclers identified for own waste recycling and attach relevant documents.
- Need to mention the locations of Waste Collection Centres and provide relevant documents attesting the amount of waste being collected at each centre.
- Need to provide relevant document endorsing the collected waste material is being supplied to the Waste to Energy / Cement Industries.

17.H.R PACKAGING

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	.2 MT
Total plastic recycled (2018-19)	12 MT
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad Municipal Corporation

- H. R Packaging has tie-up with Indian Pollution Control Association (IPCA) which has pan India presence.
- IPCA has agreement with Social Lab Environment Solution as plastic waste collector in Maharashtra. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad in Maharashtra.
- On behalf of H. R Packaging, IPCA will collect 12 MT of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to plan for 100% plastic recycling.
- Need to attach relevant documents as mentioned below for references.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: i. Own Distribution Channel i. Engagement with ULBs k. Engagement of Agency k. Any other (please provide details)	Engagement of Agency	

6a	Own Distribution Channel	NA	
6b	Engagement with ULBs	NA	
6с	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		Attach scanned copy of agreement with Social Lab Environmental solutions. Attach certificate from Aurangabad ULB mentioning quantity of plastic waste sent to the industry. Attach agreement with agencies which will be in charge of waste collection and waste disposal/processing.
iv.	Break up of Waste to be collected / segregated by the Agency		Currently action plan only mentions 20 % of plastic to be collected and recycled. Mention action plan for increasing the recycling to 100%.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity of plastic waste given to the industry is required to ensure plastic waste from ULBs of Maharashtra is collected and recycled.
- Need to attach list and proof of engagement of recyclers to be engaged for recycling of collected plastic waste by IPCA.
- Mention recyclers identified for own waste recycling and attach relevant documents.
- Need to mention the locations of Waste Collection Centres and provide relevant documents attesting the amount of waste being collected at each centre.
- Need to provide relevant document endorsing the collected waste material is being supplied to the Waste to Energy / Cement Industries.

18.K.K PLASTIC

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	.3 MT
Total plastic recycled (2018-19)	13 MT
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad Municipal Corporation

- K.K Plastics has tie-up with Indian Pollution Control Association (IPCA) which has pan India presence.
- IPCA has agreement with Social Lab Environment Solution as plastic waste collector in Maharashtra. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad in Maharashtra.
- On behalf of K.K Plastics, IPCA will collect 13 MT of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to attach the relevant contract document between K.K Plastics and Indian Pollution Control Association (IPCA) for Plastic Waste Management.
- Need to plan for 100% plastic recycling.
- Need to attach relevant documents as mentioned below for references.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: i. Own Distribution Channel i. Engagement with ULBs i. Engagement of Agency	Engagement of Agency	

	v. Any other (please provide details)		
6a	Own Distribution Channel	NA	
6b	Engagement with ULBs	NA	
6c	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		Need to attach the relevant contract document between K.K Plastics and Indian Pollution Control Association (IPCA)
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		Attach scanned copy of agreement with Social Lab Environmental solutions. Attach certificate from Aurangabad ULB mentioning quantity of plastic waste sent to the industry. Attach agreement with agencies which will be in charge of waste collection and waste disposal/processing.
iv.	Break up of Waste to be collected / segregated by the Agency		Currently action plan only mentions 20 % of plastic to be collected and recycled. Mention action plan for increasing the recycling to 100%.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.
- Need to attach list and proof of engagement of recyclers to be engaged for recycling of collected plastic waste by IPCA.
- Mention recyclers identified for own waste recycling and attach relevant documents.
- Need to mention the locations of Waste Collection Centres and provide relevant documents attesting the amount of waste being collected at each centre.
- Need to provide relevant document endorsing the collected waste material is being supplied to the Waste to Energy / Cement Industries.

19. ROTOFLEX LAMIPICK

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	2 MT per month
Post Consumer plastic waste (2018-2019)	18-23 MT per month
Total plastic recycled (2018-19)	4 MT per month
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad & Vaijapur Municipal Corporation

- Rotoflex Lamipick has tie-up with Social Lab Environment Solution which has pan India presence. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad and Vaijapur in Maharashtra.
- Social Lab Environment Solution has an agreement with Ambuja Cement Co-Processing Plant for the recycling of plastic waste thus collected.
- On behalf of Rotoflex Lamipick, Social Lab Env. Solution will collect 3 MT per month of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to attach relevant documents as mentioned below for references.
- Need to plan for 100% plastic recycling.
- Need to attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: y. Own Distribution Channel	Engagement of Agency	

	i. Engagement with ULBsi. Engagement of Agencyi. Any other (please provide		
	details)		
6a 6b	Own Distribution Channel	NA NA	
6c	Engagement with ULBs Engagement of Agency	IVA	
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		Attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.
iv.	Break up of Waste to be collected / segregated by the Agency		Currently action plan does not specify what percentage of plastic is being collected and recycled. Mention action plan for recycling 100% plastic waste.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.

20.SKC POLY ENGINEERING PVT. LTD.

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	6 MT per month
Post Consumer plastic waste (2018-2019)	94 MT per month
Total plastic recycled (2018-19)	15 MT per month
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad & Vaijapur Municipal Corporation

- SKC Poly Engineering Pvt. Ltd. has tie-up with Social Lab Environment Solution which has pan India presence.
- Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad and Vaijapur in Maharashtra, Material Recovery facilities of Pune Municipal Corporation, Scrap dealers in Jalgoan, Malegaon and those in the network of the recycler.
- Social Lab Environment Solution has an agreement with Biyani Polymers which is a plastic waste recycler recognized by MPCB.
- On behalf of SKC Poly Engineering Pvt.Ltd, Social Lab Env. Solution will collect 15 MT per month of recyclable non-MLP waste from the state of Maharashtra in one year.
- Contract with relevant agencies should be of longer duration, which is currently only till October, 2019.

Key comments

- Need to attach relevant documents as mentioned below for references.
- Need to plan for 100% plastic recycling.
- Need to attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of		

	Waste, source of waste generation		
	to be identified.		
6.	Action Plan based on: c. Own Distribution Channel		
	Engagement with ULBs	Engagement	
	 Engagement of Agency 	of Agency	
	 Any other (please provide 		
	details)		
6a	Own Distribution Channel	NA	
6b	Engagement with ULBs	NA	
6с	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		Attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.
iv.	Break up of Waste to be collected / segregated by the Agency		Currently action plan does not specify what percentage of plastic is being collected and recycled. Mention action plan for recycling 100% plastic waste.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be		
	sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify		
ou.	and provide details on PVM as per 6		
	a-c above)		
	a c abovej		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.

21.SUNITA PLASTENPRINT

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	0.5 MT per month
Post Consumer plastic waste (2018-2019)	12 MT per month
Total plastic recycled (2018-19)	2.5 MT per month
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad & Vaijapur Municipal Corporation

- Sunita Plastenprint has tie-up with Social Lab Environment Solution which has pan India presence.
- Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad and Vaijapur in Maharashtra, Material Recovery facilities of Pune Municipal Corporation, Scrap dealers in Jalgoan, Malegaon and those in the network of the recycler.
- Social Lab Environment Solution has an agreement with Dalmia Polypro Ltd. which is a plastic waste recycler not recognized by MPCB.
- On behalf of Sunita Plastenprint, Social Lab Env. Solution will collect 2.5 MT per month of recyclable non-MLP waste from the state of Maharashtra in one year.
- Contract with relevant agencies should be of longer duration, which is currently only till October, 2019.

Key comments

- Need to attach relevant documents as mentioned below for references.
- Need to plan for 100% plastic recycling.
- Need to attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of		

	Waste, source of waste generation		
	to be identified.		
6.	Action Plan based on:		
0.	i. Own Distribution Channel ii. Engagement with ULBs iii. Engagement of Agency iv. Any other (please provide details)	Engagement of Agency	
6a	Own Distribution Channel	NA	
6b	Engagement with ULBs	NA	
6c	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		Attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.
iv.	Break up of Waste to be collected / segregated by the Agency		Currently action plan does not specify what percentage of plastic is being collected and recycled. Mention action plan for recycling 100% plastic waste.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		Please provide certification of the recycler as per MPCB
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		Please provide certification of the recycler as per MPCB
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6		
	a-c above)		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.

22.BK ENTERPRISES

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	0.65 MT per month
Post Consumer plastic waste (2018-2019)	8.35 MT per month
Total plastic recycled (2018-19)	2.5 MT per month
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad & Vaijapur Municipal Corporation

- BK Enterprises has tie-up with Social Lab Environment Solution which has pan India presence.
- Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad and Vaijapur in Maharashtra, Material Recovery facilities of Pune Municipal Corporation, Scrap dealers in Jalgoan, Malegaon and those in the network of the recycler.
- Social Lab Environment Solution has an agreement with Dalmia Polypro Ltd. which is a plastic waste recycler not recognized by MPCB.
- On behalf of BK Enterprises, Social Lab Env. Solution will collect 2.5 MT per month of recyclable non-MLP waste from the state of Maharashtra in one year.
- Contract with relevant agencies should be of longer duration, which is currently only till October, 2019.

Key comments

- Need to attach relevant documents as mentioned below for references.
- Need to plan for 100% plastic recycling.
- Need to attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation		

	to be identified.		
6.	Action Plan based on:		
	i. Own Distribution Channel	_	
	ii. Engagement with ULBs	Engagement	
	iii. Engagement of Agency	of Agency	
	iv. Any other (please provide details)		
6a	Own Distribution Channel	NA	
6b	Engagement with ULBs	NA	
6c	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		Attach scanned copy of agreement of Aurangabad ULB with Social Lab Environmental solutions for waste collection. Attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.
iv.	Break up of Waste to be collected / segregated by the Agency		Currently action plan does not specify what percentage of plastic is being collected and recycled. Mention action plan for recycling 100% plastic waste.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		Please provide certification of the recycler as per MPCB
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		Please provide certification of the recycler as per MPCB
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.

23. VISION PACKAGING

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	3 MT per month
Post Consumer plastic waste (2018-2019)	27 MT per month
Total plastic recycled (2018-19)	5 MT per month
% of plastic recovery against total plastic generated	Can't be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad & Vaijapur Municipal Corporation

- Vision Packaging has tie-up with Social Lab Environment Solution which has pan India presence. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad and Vaijapur in Maharashtra.
- Social Lab Environment Solution has an agreement with Ambuja Cement Co-Processing Plant for the recycling of plastic waste thus collected.
- On behalf of Vision Packaging, Social Lab Env. Solution will collect atleast 3 MT per month of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to attach relevant documents as mentioned below for references.
- Need to plan for 100% plastic recycling.
- Need to attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: Own Distribution Channel	Engagement of Agency	

	Engagement with ULBs		
	Engagement of Agency		
	Any other (please provide details)		
6a	Own Distribution Channel	NA	
6b	Engagement with ULBs	NA	
6с	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		Attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.
iv.	Break up of Waste to be collected / segregated by the Agency		Currently action plan does not specify what percentage of plastic is being collected and recycled. Mention action plan for recycling 100% plastic waste.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity of plastic waste given to the industry is required to ensure plastic waste from ULBs of Maharashtra is collected and recycled.

24. ROYAL FLEXO PLAST

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	0.2 MT per month
Post Consumer plastic waste (2018-2019)	4.8 MT per month
Total plastic recycled (2018-19)	0.49 MT per month
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad & Vaijapur Municipal Corporation

- Royal Flexo Plast has tie-up with Social Lab Environment Solution which has pan India presence. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad and Vaijapur in Maharashtra.
- Social Lab Environment Solution has an agreement with Ambuja Cement Co-Processing Plant for the recycling of plastic waste thus collected.
- On behalf of Royal Flexo Plast, Social Lab Env. Solution will collect recyclable _____ non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to attach relevant documents as mentioned below for references.
- Need to plan for 100% plastic recycling.
- Need to attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: Own Distribution Channel	Engagement of Agency	

	Engagement with ULBs		
	Engagement of Agency		
	Any other (please provide details)		
6a	Own Distribution Channel	NA	
6b	Engagement with ULBs	NA	
6c	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		Attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.
iv.	Break up of Waste to be collected / segregated by the Agency		Currently action plan does not specify what percentage of plastic is being collected and recycled. Mention action plan for recycling 100% plastic waste.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.

25.SAI BABA PLASTICS

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	1 MT per month
Post Consumer plastic waste (2018-2019)	19 MT per month
Total plastic recycled (2018-19)	0.49 MT per month
% of plastic recovery against total plastic generated	Cannot be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad & Vaijapur Municipal Corporation

- Royal Flexo Plast has tie-up with Social Lab Environment Solution which has pan India presence. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad and Vaijapur in Maharashtra.
- Social Lab Environment Solution has an agreement with Ambuja Cement Co-Processing Plant for the recycling of plastic waste thus collected.
- On behalf of Royal Flexo Plast, Social Lab Env. Solution will collect atleast 10 MT per month of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to attach relevant documents as mentioned below for references.
- Need to plan for 100% plastic recycling.
- Need to attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: Own Distribution Channel	Engagement of Agency	

	Engagement with ULBs		
	Engagement of Agency		
	Any other (please provide details)		
6a	Own Distribution Channel	NA	
6b	Engagement with ULBs	NA	
6с	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		Attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.
iv.	Break up of Waste to be collected / segregated by the Agency		Currently action plan does not specify what percentage of plastic is being collected and recycled. Mention action plan for recycling 100% plastic waste.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.

26.SUNRISE INDUSTRIES

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	1.2 MT per month
Post Consumer plastic waste (2018-2019)	28.8 MT per month
Total plastic recycled (2018-19)	5 MT per month
% of plastic recovery against total plastic generated	Can't be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad & Vaijapur Municipal Corporation

- Sunrise Industries has tie-up with Social Lab Environment Solution which has pan India presence. Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad and Vaijapur in Maharashtra.
- Social Lab Environment Solution has an agreement with Ambuja Cement Co-Processing Plant for the recycling of plastic waste thus collected.
- On behalf of Sunrise Industries, Social Lab Env. Solution will collect atleast 3 MT per month of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to attach relevant documents as mentioned below for references.
- Need to plan for 100% plastic recycling.
- Need to attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		
6.	Action Plan based on: Own Distribution Channel	Engagement of Agency	

	Engagement with ULBs		
	Engagement of Agency		
	Any other (please provide details)		
6a	Own Distribution Channel	NA	
6b	Engagement with ULBs	NA	
6с	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		Attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.
iv.	Break up of Waste to be collected / segregated by the Agency		Currently action plan does not specify what percentage of plastic is being collected and recycled. Mention action plan for recycling 100% plastic waste.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.

27. YUVRAJ PACKAGING INDIA. PVT. LTD

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	3 MT per month
Post Consumer plastic waste (2018-2019)	52 MT per month
Total plastic recycled (2018-19)	5 MT per month
% of plastic recovery against total plastic generated	Can't be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad Municipal Corporation &
	Sindhkheda Municipal Council

- Yuvraj Packaging India. Pvt. Ltd has tie-up with Social Lab Environment Solution & Sampurn(E)arth Environmental Solutions which has pan India presence.
- Social Lab Environment Solution has engagement with Aurangabad Municipal Corporation & Sindhkheda Municipal Council in Maharashtra.
- Social Lab Environment Solution has an agreement with Ambuja Cement Co-Processing Plant for the recycling of plastic waste thus collected.
- On behalf of Yuvraj Packaging India. Pvt. Ltd, Social Lab Env. Solution will collect atleast 5 MT per month of recyclable non-MLP waste from the state of Maharashtra in one year.

Key comments

- Need to attach relevant documents as mentioned below for references.
- Need to plan for 100% plastic recycling.
- Need to attach compliance certificate from Aurangabad and Sindhkheda ULB mentioning quantity of plastic waste being sent to the industry every month.

Sr. No.	Item	Description	Remarks
1.	Name & Address of the Unit		
2.	Quantity & Type of Plastic Consumed		
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity of plastic waste generated Please mention type of plastic waste generated (recyclable / non-recyclable)
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste.
5.	In case of Equivalent Quantity of Waste, source of waste generation to be identified.		

6.	Action Plan based on: Own Distribution Channel		
	Engagement with ULBs	Engagement	
	Engagement of Agency	of Agency	
	Any other (please provide details)		
6a	Own Distribution Channel	NA	
6b	Engagement with ULBs	NA	
6с	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		Attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.
iv.	Break up of Waste to be collected / segregated by the Agency		Currently action plan does not specify what percentage of plastic is being collected and recycled. Mention action plan for recycling 100% plastic waste.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.

28. HARIPACK EXTRUSIONS PVT. LTD

Summary of Action plan

Total plastic generated (2018-19)	Not mentioned
In house plastic waste (2018-19)	0 MT per month
Post Consumer plastic waste (2018-2019)	100 MT per month
Total plastic recycled (2018-19)	Not mentioned
% of plastic recovery against total plastic generated	Can't be calculated
Action plan based on	Engagement of Agency
ULBs in Maharashtra covered	Aurangabad & Vaijapur Municipal Corporation

- Haripack Extrusions Pvt. Ltd has tie-up with Social Lab Environment Solution and Central India EPR Corporation which has pan India presence.
- Social Lab Environment Solution has engagement with Municipal Corporation of Aurangabad and Vaijapur in Maharashtra.
- Social Lab Environment Solution has an agreement with Biyani Polymers which is a plastic waste recycler recognized by MPCB.

Key comments

- Need to attach relevant documents as mentioned below for references.
- Need to plan for 100% plastic recycling.
- The contract document does not specify what quantity of waste is being collected by Social Lab Environment Solution on behalf of Haripack Extrusions Pvt. Ltd.
- Need to attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being sent to the industry every month.

Sr. No.	Item	Description	Remarks	
1.	Name & Address of the Unit			
2.	Quantity & Type of Plastic Consumed			
3.	Estimated quantity of Plastic Waste to be generated		 Please mention quantity of plastic generated by the industry annually. Please attach relevant proof of quantity or plastic waste generated Please provide clarity on 0 MT industrial in house waste as mention and provide supporting Can Please mention type of plastic waste generated (recyclable / non-recyclable) 	
4.	Action Plan for Own Waste / Equivalent quantity of Waste		 For action plan of recyclable own waste, mention recyclers involved. Attach relevant documents If plastic waste is non-recyclable, provide action plan for phasing-out use of non-recyclable plastic waste. 	
5.	In case of Equivalent Quantity of Waste, source of waste generation			

	to be identified.		
6.	Action Plan based on: Own Distribution Channel Engagement with ULBs Engagement of Agency Any other (please provide details)	Engagement of Agency	
6a	Own Distribution Channel	NA	
6b	Engagement with ULBs	NA	
6c	Engagement of Agency		
i.	List of Agency to be engaged with for PWM		
ii.	Does the above list ensure Pan India coverage		
iii.	Document supporting engagement of the Agency by the ULBs / Bulk Waste generators.		Attach compliance certificate from Aurangabad and Vaijapur ULB mentioning quantity of plastic waste being given to the industry every month.
iv.	Break up of Waste to be collected / segregated by the Agency		Currently action plan does not specify what percentage of plastic is being collected and recycled. Mention action plan for recycling 100% plastic waste.
V.	Mode of Reusing / Recycling Waste (Recycler / Road Making / Coprocessing)		
vi.	Engagement with Recycler / Coprocessor / Agency engaged in Road making		
vii.	Details (including registration details) of Recycler / Coprocessor / Agency engaged in Road making.		
viii.	Break up of quantity proposed to be sent to Recycler / Coprocessor / Agencies engaged in Road making.		
6d.	Any other Options (Please specify and provide details on PVM as per 6 a-c above)		

- Action plan for expanding recycling of plastic waste till 100% along with the timeline is required to be submitted.
- Please provide clarity on 0 MT industrial in-house waste as mention and provide supporting documents.
- For the plastic waste collected from the ULB, certificate from the ULB endorsing the quantity
 of plastic waste given to the industry is required to ensure plastic waste from ULBs of
 Maharashtra is collected and recycled.

Annexure II- Revised format for framing Action Plan under EPR

SN	Item	Descriptio	Remarks
		n	
	General Information (as applicable to registered or non-registered units)		_
1.	a) Name and address of the unit		
	c) Registration No. with MPCB (if valid)		
2.	a) Quantity and type of plastic consumed as raw material in 2018-19		Attach
	(in MT)		evidence
	b) Estimated quantity of plastic to be consumed as raw material in 2019-20 (in MT)		
3.	a) Quantity and type of plastic produced in 2018-19 (in MT)		Attach
			evidence
	b) Estimated quantity of plastic to be produced in 2019-20 (in MT)		
	• Recyclable =		
	Non-recyclable =		
4.	a) Quantity of waste (plastic) generated in 2018-19 (in MT)		Attach
			evidence
	b) Estimated quantity of waste (plastic) to be generated in 2019-20 (in MT)		
	Recyclable =		
	Non-recyclable =		
	Action Plan for 2019-20		
5.	Action plan for managing quantity of own waste / equivalent quantity of waste (for 4b above)	(Describe	
		with	
		details)	
	In case of own waste –		Attach
	 Processing agencies: 		evidence
	Processing method:		for every
	Reuse for:		answer, if
	 Quantity of waste recovered/ reused (in MT/ year) 		already
	% of waste recovered/ reused:		started

lx lx l:	Action plan based on: (Specify applicable option/s) kxiii. Own Collection / Distribution Network kxiv. Engagement with Urban Local Bodies (ULBs) kxvv. Engagement of Agency kxvi. Any other (please provide details)	
6A .	Through Own Collection/ Distribution Network	
	Details of Network	
	i. Which cities are covered / to be covered?	
	 ii. Provide details of stakeholders involved/ to be involved – locations, role, capacities etc. iii. Stakeholder wise quantity of waste collected/ proposed to be collected (in MT/year) • Stakeholder 1 • Stakeholder 2 • Stakeholder 3 • Total- 	
	iv. Describe the buy-back mechanism/ flow chart	Attach relevant documents
	Details of Recycler / Coprocessor / Agency (Registered with Pollution Control Board)	
	 i. Mode of reusing / recycling the waste Recycler / road making / co-processing / others (please specify) 	Attach evidence/ relevant documents if already started
	 ii. Details of recycler / coprocessor / agency engaged in road making – Name, address and registration details of individual recycler / coprocessor / agency Type of formal association/ engagement with recycler / coprocessor / agency Are MoAs/ formal associations signed with any agencies? If yes, which? Quantities recycled / to be recycled through each agency – recycler / coprocessor / agency (1) recycler / coprocessor / agency (2) 	Attach evidence/ relevant documents if already started

		Attach the MoA with recycler / coprocesso r / agency, if already signed
6B	Engagement with ULBs in Maharashtra	
	Details of ULBs	
	i. List of ULBs engaged/ to be engaged with for PWM	
	ii. Are MoAs/ formal associations signed with ULBs?	Attach MoA with ULB/s, if already signed
	 iii. ULB wise quantity of waste collected/ to be collected (in MT/ year) – ULB 1 ULB 2 ULB 3 	Attach evidence for quantity of waste actually collected, if already collected
	Details of Recyclers/Coprocessor / Agency (Registered with Pollution Control Board)	
	i. Mode of reusing / recycling waste (recycler / road Making / co-processing)	
	 ii. Details of recycler / coprocessor / agency engaged in road making – Name, address and registration details of individual recycler / coprocessor / agency Type of formal association/ engagement with recycler / coprocessor / agency Are MoAs/ formal associations signed with any agencies? If yes, which? Quantities recycled / to be recycled through each agency – ▶ recycler / coprocessor / agency (1) 	Attach evidence/ relevant documents , if already available

	recycler / coprocessor / agency (2)				
6C	Engagement of Agency (Agencies must collect waste from ULBs in Maharashtra)				
	Details of Agency/ies (Registered with Pollution Control Board)	gency/ies (Registered with Pollution Control Board)			
	i. List of agency/ies to be engaged with for PWM	Attach			
	ii. Are MoAs signed with agencies?	MoA with			
		agencies, if			
		already			
	iii. Provide details of agencies- name, address, registration details etc.	signed			
	iv. Quantity of waste being collected/ to be collected through agencies on behalf of you (in MT/ year)				
	v. Association/ engagement of agency with ULBs in Maharashtra	Attach			
	List of ULBs	MoAs			
	ULB wise waste collected (in MT/ year)	between			
	vi. Agency wise quantity of waste collected/ to be collected from ULBs in Maharashtra (in MT/ year)—	agency and			
	Agency 1	ULBs			
	Agency 2				
	Agency 3	Attach			
		evidence/			
		certificatio			
		n of ULBs for			
		quantity of			
		waste			
		actually			
		collected, if			
		already			
		collected			
	Details of Recycler / Coprocessor / Agency for road making				
	i. Mode of reusing / recycling waste (recycler / road making / co-processing)				
	ii. Does the collecting agency have formal association with recycler / coprocessor / agency?	Attach			
	iii. Details of recycler / coprocessor / agency engaged in road making	evidence/			
	Name, address and registration details of individual recycler / coprocessor / agency	relevant			
	Type of formal association/ engagement with recycler / coprocessor / agency	documents , if already			
	 Are MoAs/ formal associations signed with any agencies? If yes, which? 	, ij uireddy			

	Quantities recycled / to be recycled through each agency —		available
	recycler / coprocessor / agency (1)	1	
	recycler / coprocessor / agency (2)	1	Attach
		1	certificatio
		1	n for waste
		1	actually
		1	recycled, if
		1	already
		1	done.
	iv. % of plastic waste recycled of the total produced (MT/ year)		
6D	Any other Options (Please specify and provide details on PWM as per 6 A-C above)		



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