

CURRENT STATUS OF BITOU'S SOLID WASTE DISPOSAL FACILITIES

The Plettenberg Bay Ratepayers Association (PBRRA) is currently undertaking an investigation into the capacity of the Bitou's infrastructure to cope with the rapidly rising population. The investigation of the status and capacity of the solid waste collection and disposal facilities is being undertaken by Bill Alexander who has been representing the Associations interests in the portfolio for the last 2 years. During that time, he has interacted closely with the Manager for Integrated Waste, Douglas Baartman and has acted as the Chairman of the Bitou Waste Management Committee so he is well placed to make an assessment of the Municipality's waste management facilities.

The only landfill disposal site available to Bitou is the PetroSA site located near Mossel Bay. The disposal of waste in Bitou involves the following steps:

- a) The waste is collected using compacting trucks.
- b) It is transported to the Transfer Station off the N2 just beyond Kwanokuthula where it is compacted into special compacting containers.
- c) It is then transported to Mossel Bay by road.

In this report the current status of the following aspects of the waste management infrastructure is analysed:

- d) The collection of domestic waste
- e) The management and operation of the Waste Transfer Station
- f) The final disposal of waste
- g) The recycling of waste.

Suggestions are then made on how the performance of the Department can be improved.

The Waste Management falls under the Director of Community Services. A new Director, Melony Paulsen has been appointed this year. This report was submitted to her prior to circulation and her comments and explanations are added where appropriate.

2. CURRENT STATUS OF THE BITOU INTEGRATED WASTE MANAGEMENT DEPARTMENT

2.1. The Collection of Domestic Waste

2.1.1. Service provided

Most of the Bitou area is covered by the collection service as shown in the Table below

BITOU MUNICIPALITY - WASTE COLLECTION SCHEDULE	
MONDAY	North of Piesang Valley, Poortjies, River Club, Kranshoek, , Keurbooms /Aventura, Businesses, Hotels & Housing Estates Etc.
TUESDAY	South of Piesang Valley, The Craggs,(Farm Area), Redford Road, Forest Hall, Askop, Natures Valley, , & Goose Valley, Businesses, Hotels & Housing Estates Etc.
WEDNESDAY	Kwanokuthula Phase 3 & 4 , Kurland Village, New Horizons/ Lady Wood, Businesses, Hotels & Housing Estates Etc.
THURSDAY	Green Valley/ Wittedrift & Keurbooms, Kwanokuthula Phase1 & 2 North of Piesang Valley , Industrial Area, Businesses, Hotels & Housing Estates Etc
FRIDAY	South of Piesang Valley , Bossiegif /Pine Tree Gaartjie / Qolweni , Natures Valley/ Cowie , Airport Road& Harkerville, Businesses, Hotels & Housing Estates Etc.
SATURDAY	Businesses
SUNDAY	Businesses

The service operates 6 days a week and all residents are visited once a week. There are not sufficient permanent staff to man the collection crews, but the numbers are made up by EPWP workers.

Response from Municipality

Most of the vacant positions was filled in terms of a recruitment process which concluded in March 2023. Another 3 positions to be advertised in due course. Submissions have been made to add an additional waste collection team to focus on the outlying areas of Kurland, Keurbooms, Natures valley and Cowie. This will assist in the efficiencies of our waste collection and aimed at reducing overtime.

2.1.2. Compacting Trucks

The Council owns six compacting trucks but at time of writing only four were in service. Three of the trucks are three years old and the other three are nine years old. Some of the older trucks require overhauls, particularly to their hydraulic systems. To provide the service it is estimated that 3-4 trucks are required so the current fleet would appear to be adequate provided that they are properly maintained and that the delays in repair described in Section 2.4 below are resolved.

Response fom Municipality:

For the 2023/2024 financial year, submissions have been made to acquire 2 new additional compactor trucks to address the demand of the growing Bitou Community. Further submissions were made to address proper maintenance repair requirements on older compactor trucks requiring full hydraulic and brake system replacements to minimize regular breakdowns. We are confident that the acquisition of additional fleet will enable us to attend to necessary repairs to our fleet which requires complete overhauls.

2.2. Transfer Station

The transfer station to which all the waste collected from the town has adequate space and fixed infrastructure facilities but is generally poorly managed which significantly affects its capacity and efficiency.

Response from Municipality:

A tariff review process is currently under way to address the correct charge for waste being deposited at the transfer station. In line with this we are in the process of acquiring waste stream identification and monitoring training for facility management staff to ensure all staff are aware and understand waste stream management requirements on the facility. Waste streams to be separated for waste minimization purposes in terms of recyclable waste, green waste, building rubble, solid waste and bulky waste disposals

2.2.1. Equipment

The following equipment is available on the site:

- a) a) A compactor used to compact the waste into the containers prior to it being transported to landfill. There is no back up for this equipment and it cannot operate during load shedding and so an emergency generator should be provided for its operation. It is vital to the proper operation of the waste disposal as it significantly reduces the volume of waste that has to be carted to landfill.
- b) Two tractor/loader/backhoe (TLB)s. One is used for loading the domestic waste into the compactor and the other for general work on the site such as handling green waste. Only one machine is currently operational. The other machine has been out of commission for several months as it requires major repairs. This is typical of the type of delays that occur in the repair of heavy machinery described in Section 2.4 below. These machines are not ideal for the purpose that they are being used for. The loading buckets are small, the backhoe is unnecessary as it is seldom used, and the engine is mounted in the front so is exposed to dust etc which rapidly clogs up its air filter resulting in significant downtime. The single available machine is often diverted to perform other tasks within the municipality which disrupts the handling of the waste on the site. What is required are specialised machines with large capacity buckets, with the engines mounted at the back and no backhoes.
- c) A tipper truck generally used for transporting waste. It is used for the collection of illegally dumped waste as well as for transporting bulky waste to the PetroSA landfill.
- d) A chipper for chipping garden waste. This machine is also not ideal for purpose because dry waste blunts the blades very quickly and excessively leafy green waste tends to clog it. A more suitable machine would be a horizontal grinder that would handle all garden waste more efficiently.

Response from Municipality:

- a) *Ongoing rolling blackouts is affecting the entire country. The challenges experienced is not limited to waste collection but also other critical municipal services such as water and sanitation services. Budget submissions was made to acquire back-up generator for Akupak Machine*
- b) *Safe to state that the challenges experienced with our own TLB is adding to our challenges, budget submissions were made to acquire front end loader with bigger scoop and engine location at the rear to prevent current mechanical failures. The intention is to use TLB primarily for illegal dumping site management and control of the waste transfer station.*

2.2.2. Staff

The staff complement on the transfer station is as follows:

- a) A waste control officer responsible for the overall management of the facility.
- b) A foreman in charge of the operations.
- c) 1 compactor operator, 2 TLB operators, a chipper operator and 2 general workers.
- d) A gatekeeper and a weighbridge operator.

It appears that the staff on the site are dysfunctional and poorly managed, with imposing of discipline by managers proving to be difficult. There is also limited support forthcoming from the Municipal HR department

The major staff related problems on the site are highlighted below:

- a) The gate is poorly controlled. Items such as building rubble that are not meant to be disposed of on the site are allowed in and dumped indiscriminately, mainly on the site reserved for bulky waste site, but also on the site set aside for gardenwaste as shown in the photos below.



- b) Once on the site the waste is not directed to the correct location by supervisory staff.
- c) Not enough staff are allocated to picking of recyclable material from the waste that comes into the station. EPWP staff allocated to jobs such as picking recyclables from the domestic waste pile ofte

Response fom Municipality:

Issues of discipline remain a major challenge at the IWM department, however protocols have been put in place and consequence management steps taken against personnel who are in breach of Council code of conduct.

2.2.3. Managng of Domestic Waste

Once the waste is delivered to the transport station it is dumped on a slab before being fed by a TLB into a machine that compacts it into compacting containers so that it can be transported by truck to the land fill site in Mossel Bay.

The problems experienced with this activity are highlighted below:

- a) Load shedding and breakdowns of the compacting ram or transporting trucks lead to large stockpiles building up on the slab as shown in the picture below



- b) On the day that the picture was taken the TLB (seen in the background) for loading the waste into the compactor had been out of commission for a week because the battery had failed and procuring a new one was mired in red tape.
- c) For the stockpile to be removed a TLB had to be rented daily at significant cost.
- d) It will be seen from the picture that the waste has a very high content of recyclable material which is unnecessarily having to be carted all the way to Mossel Bay at significant cost.
- e) There are two reasons why build ups of waste like this occur:
 - i. When the compacting ram goes down either due to load shedding or mechanical failure.
 - ii. When the hook lift trucks or trailers used to transport waste to Mossel Bay break down.

- e) In extreme cases private contractors have to be employed to clear the backlog in uncompacted trucks at considerable expense. This occurred over the recent festive season when trucks and trailers broke down and a private contractor had to be called in at a cost of R1.1 million to clear the backlog.

Response fom Municipality:

Turn around time with the repairs and maintenance of critical IWM fleet remains a major challenge. IWM made budgetary submissions for new fleet equipment which value is in excess of R9 million rand.

Interdepartmental meeting scheduled between SCM Meeting required with SCM and CFO regarding IWM repairs that needs to be priority in SCM section once SCM processes are initiated

2.2.4. Bulky Waste

Bulky waste is defined as anything that will not fit into a black plastic bag or be collected by a compacting truck, but its origin must be of domestic nature and building rubble is specifically excluded.

Currently the waste is brought to site by private citizens and contractors and is indiscriminately dumped at the site within the transfer station allocated to it, and large stockpiles are allowed to build up as shown in the photograph below.



The following should be noted:

- a) As will be seen from the photo the stockpile has been built up without any control and all types of material are totally mixed. It is estimated that there is approximately 1500 tons in the current stockpile.
- b) Much of the material does not qualify as bulky and is made up of:

- i. Domestic waste and should be compacted prior to being transported.
 - ii. Building rubble and should not be on the site at all.
 - iii. Garden waste that should be chipped and disposed of to gardeners etc.
 - iv. Recyclable material and should be recovered and sold rather than be sent to landfill.
- c) Most of the above problems could be solved by proper gate control and site supervision cope with the volume of waste delivered to the site.
 - d) It is estimated that it will cost approximately R4 million to load and cart the waste to the landfill at Mossel Bay. The waste cannot be compacted and so the volume per ton transported is very high which makes it expensive.
 - e) The transport of the waste is put out to tender and there is currently a delay in the procurement department in awarding the contract for the removal of the current stockpile.

Response fom Municipality:

We agree with the contents of this section.

c) We reiterate our previous advice set out in 2.2 and 2.2.2

Safe to state that our disposal of bulky waste remains one of our biggest challenges, but due to budgetary constraints, we were only able to address this in part. A budget submission has been made for funding for the rental of a wheel grinding machine on a quarterly basis.

We are looking into specifications for our recycling to see whether we can broaden the scope to include bulky waste streams, capable of recycling.

2.2.5. Garden waste

The public are entitled to dispose of garden waste free of charge in the following ways:

- a) Either by delivering it to one of the drop-off sites provided by the council, from where it is transported to the Transfer Station by the Council.
- b) Delivery directly to the Transfer Station.

Once delivered to the site the waste is currently being chipped and the resultant material made available to the public. However, this process is beset by problems as listed below:

- c) As stated in Section 2.1.4 d) above the chipper is not fit for purpose and cannot cope with the volume of waste delivered to the site.
- d) Up until now the Council has not appointed a full-time chipper operator so it does not work to its full capacity.
- e) The chips that are produced are not always collected by the public.

As a result of the above an excess stockpile of garden waste builds up on the site and has to be carted to the landfill site or to the KK Sand quarry. The chips that are produced are either collected by the public or are distributed to the parks and recreation department for use on open land or community vegetable garden projects.

The establishment of a proper composting facility at the Transfer Station as discussed in Section 3 below would add significantly to the value of the end product and make it more easily disposable.

Response fom Municipality:

Current tariffs are applied for depositing of green waste.

d) Chipper operator was appointed in November 2022

e) Chips are limited and sufficiently collected by the public and community initiatives.

Tariff review process will include the rate for selling of chips to the public. The composting facility is to be made operational to its full capacity and selling of compost is to be actioned accordingly i.e applicable tariff for selling of compost

2.3. Disposing of waste to landfill

All the domestic waste generated in the Garden Route towns is currently transported by road to the landfill site operated by PetroSA outside Mossel Bay.

2.3.1. Bitou's transport facilities

The waste that arrives at the Transfer Station is compacted into containers using a hydraulic ram which reduces the volume that needs to be transported. The transporting equipment available is described below:

2.3.1. Bitou's transport facilities

- a) There are currently 8 containers of which only 6 are operational.
- b) The containers are generally in poor condition as will be seen in the photographs below.



- c) Six containers are required every day so there are no backups available.
- d) If they were to fail they would create a serious bottleneck in the system

2.3.1.2. Hook Lift Trucks for transporting waste to landfill

Bitou currently owns and operates 2 hook lift trucks and trailers for transporting the contained waste to the landfill.

The daily requirement of trucks and trailers as well as the cost of the transport is summarised in the Table below.

	Out of Season	In Season
Tons/month	590	944
Tons /d	29.5	47.2
Tons/container	4.9	5.2
Containers/d	6	9
No of trips/d	2	3

Total tons/year	7788
Annual Fuel Cost/year	R3,600,000
Average Salaries/year	R830,400
Average Maintenance/year	R220,000
Average tyres/year	R340,000
Total Transport Cost/year	R4,990,400
Landfill Disposal Cost/ton	R250
Landfill Disposal Cost/year	R1,947,000
TOTAL DISPOSAL COST/YEAR	R6,937,400
Transport Cost/Ton	R641
Landfill Cost ton	R250
Total Disposal Cost/Ton	R891

The following should be noted:

- Each truck and trailer combo can transport 3 containers per trip. The truck takes one container and the trailer takes two.
- These trucks are 7 years old and travel up to 80 000km/year.
- As shown in the Table above both truck/trailer combinations are needed to meet the requirements of the daily transport demand, particularly during the peak season.
- The trailers are in worse shape than the trucks and also need refurbishment and maintenance.
- The cost given in the table do not include capital redemption on the trucks and trailers.
- These trucks and trailers are specifically designed to accommodate the compacting containers used to transport the waste to landfill and so cannot be readily replaced by hired trucks when they are out of operation.
- When the trucks are out of order the waste has to be transported to landfill by hired open trucks without compaction or in the compacting trucks used for waste collection which is also costly.
- During the 2022/2023 festive season one truck and one and a half trailers failed which led to a massive build up of waste that spilled over to the Old Nick drop-off station. A private service provider had to be brought in to clear the backlog at a cost of approximately R1.1 million.

It appears from the above assessment that at least one new hook lift truck/trailer combination should be purchased by the Department if the carting of waste to the landfill site is to be maintained.

Response from Municipality:

Calculations on the various averages presented are to be verified. Budget submission was made for proper operational costing purposes. Further budget submissions were made to address requirements as recommended in the report. One new truck/trailer combination, three new open containers and 5 new compacting containers have been budgeted for.

2.3.2. Landfill disposal facilities

The Robberg Landfill in Bitou was closed in 2015 and has now been successfully rehabilitated at a cost of over R22 million. Part of that expenditure was caused by the fact that the land fill had exceeded its licenced height and had to be significantly reshaped.

The only landfill currently available to Bitou is that operated by PetroSA in Mossel Bay. However, this facility is now full and will be closing at the end of February 2023. The Garden Route District Municipality (GRDM), whose responsibility it is to provide landfill facilities for the region have not been able to timeously arrange for an alternative facility.

The following should be noted in this regard:

- a) A new landfill has been designed, also near Mossel Bay. It is optimistically predicted that it can come into operation by September 2023 but will probably be later.
- b) A consultant has been appointed by Mossel Bay to investigate how the regions waste can be disposed of after the closing of the PetroSA site. Their initial findings are summarised below:
 - i. There is no room for temporary storage of excess waste on the PetroSA site.
 - ii. There is a possibility that settlement of the PetroSA landfill over time will allow that an additional 1m of waste can be deposited on the site which will extend the capacity to 2025. This will provide the additional capacity needed

- c) This matter is important to the viability of Bitou's waste disposal activities and the outcomes should be closely monitored.
- d) The new landfill will be financed by contributions from all the towns within the region, but at this stage Bitou's contribution has not been fully determined. Bitou should be staying in touch with this situation and monitoring their potential liability.
- e) The fact that all Bitou's waste has to be sent to Mossel Bay means that everything possible should be done to ensure the minimisation of the amount of waste generated. The major target should be the optimisation of recycling of reusable materials such as aluminium, glass, paper and plastics.

Response from Municipality:

All processes required by the Municipality to comply with GRDM requirements for the Regional Landfill Site were addressed with the exception of a public participation process to be approved by Council in due course. The waste minimization processes required will require full operational cost confirmation and operational savings are to be identified to consider the funding of a material recovery facility and the appointment of a service provider with the correct operational model for a buy-back centre to facilitate the reduction of waste at the waste transfer station.

2.4. Vehicle Maintenance

The maintenance of vehicles operated by the Department is a problem in that it cannot be handled by the municipal workshop that falls under the Engineering portfolio of the Municipality. This facility is only capable of maintaining small vehicles and so the maintenance of the large trucks, trailers and loaders operated by the department has to be outsourced. A new maintenance contract has recently been signed with a service provider in George.

There is a significant bottleneck in the procurement of maintenance services within the Municipality as described below:

- a) When a vehicle breaks down it is immediately reported to the Municipal Workshops who then issue a job card and have to verify the cause of the problem. This process takes up to 2 days.
- b) The Workshop then calls for a quotation from the service provider to do the repair based on their assessment of the problem and then has to assess and approve the quote once it is received. This can take up to a week.

- c) The workshop then has to apply for an order from Supply Chain Management for them to issue an order for the repairs to be done. This takes 2-3 weeks. No priority is given to orders for essential services.
- d) Once the order has been issued it is sent to the service provider and the vehicle then has to be transported to his workshops in George where he can finally start working on it.
- e) If there is any variation to the order (which was based on an assessment by the Workshop) the whole procedure has to be repeated with the same time frame.
- f) This means that when a machine breaks down it can take more than a month before work even starts on it. In many cases the machine is essential to the proper functioning of the Department
- g) and a replacement has to be hired at significant cost.
- h) Even the provision of small items such as battery for a vehicle has to be processed through Supply Chain Management and can take weeks during which a replacement vehicle has to be hired.

Response from Municipality:

We agree with the contents of this section.

2.5. Disposal of Building Rubble

The current status of the disposal of building rubble is summarised below.

- a) Disposing of it is not permitted at the Transfer Station
- b) Contractors currently transport it to a disused quarry known at KK Sands where they are charge for its disposal by the owner. It is not clear to us at this stage what the rehabilitation status of the quarry is or what its ultimate capacity is for absorbing the town's building rubble.
- c) It should be noted that if the owner were to stop the dumping at this site the disposal of building rubble would probably become the responsibility of the Council. Although they would be able to charge contractors for the service, it is nevertheless important that this aspect be investigated and be included in the medium to long term planning of the Department.

Response from Municipality:

We agree with the contents of this section.

2.6. Recycling

A service provider called Masiqhame Trading has been appointed to operate Bitou's recycling initiative. The following should be noted:

- a) The main initiative comprises the issuing of yellow bags to residents who are then required to separate their recyclable materials at source and place them in the bags that are then collected weekly by the contractor. The scheme only operates properly in certain areas of the municipality and needs to be rolled out throughout all the communities.
- b) Several sites are maintained by the contractor where the public can dispose of recyclable materials.
- c) Masiqhame are paid close to R1.2 million/year for providing the service and sell the recyclables recovered for their own account.
- d) They currently collect 92 tons/month on average which is approximately 15% of the total mass of domestic waste collected in Bitou. It is commonly assumed that up to 60% of all domestic waste is recyclable which indicates that there is a long way to go before recycling is optimised within Bitou. This is borne out by the picture below that shows how much plastic, glass, paper and organic kitchen waste is in the domestic waste delivered to the Transfer Station,
- e) The current service provider contract is poorly drafted as it does not include any provision for measuring of performance, incentives for increasing the performance, strict performance specifications for expanding the scope of the initiative, education of the public etc. The contract expires at the end of June 2023, and work is already underway to improve the performance requirements of the new contract.
- f) The management of the bulky waste also provides a clear opportunity for improving



the recycling effort and consideration should be given to including this activity within the scope of the new recycling service provider contract.

The Council commissioned a Consultant to produce a Waste Minimisation Report which has finally been tabled and approved by the Council. It contains several excellent proposals for implementing and improving waste minimisation within the operations of the Integrated Waste Management Department that will be addressed in more detail in the next section of this report.

Response from Municipality:

We agree with the contents of this section.

3. SUGGESTED INTERVENTIONS THAT WOULD IMPROVE THE OPERATION OF THE WASTE MANAGEMENT FACILITIES

There are several challenges facing the Integrated Waste Management Department that need to be overcome if the department is to have sufficient capacity to deal with growing population in the town. These challenges highlight the situation under existing conditions and can only become worse as the population of Plett continues to grow at the current high rate. After discussions with the officials the following interventions are suggested:

3.1. Collection of Domestic Waste

The equipment and teams for collecting the domestic waste are adequate for the future, provided that the equipment is well maintained, and the collection crews properly trained. However, if the maintenance bottlenecks in Section 2.4 above are not removed additional trucks will have to be purchased to provide backup.

3.2. Transfer Station

There are several problems at the Transfer Station that need to be resolved:

3.2.1. Equipment

The following changes should be made to the equipment available on site:

- a) The two TLBs should be allocated to other duties within the municipality and should be replaced by front end loaders that are more fit for purpose with large loading buckets. This will increase the efficiency of the waste handling on the site.
- b) The chipping machine should be replaced by a horizontal grinder that is more suited to breaking up all manner of garden waste. This will facilitate composting and disposal of the garden waste. The existing chipper can be used at the drop off stations to reduce the volume of waste that has to be transported to the Transfer Station.
- c) A standby generator should be provided so that the waste compactor can operate during load shedding

3.2.2. Staff

The following staff interventions should be considered:

- a) The organogram for the facility should be restructured to provide required capable management and staff.
- b) The staff should be properly trained so that they can perform their duties efficiently. In particular the gate and weighbridge should be manned by properly trained staff with the authority to allocate where waste is dumped within the site and also to reject material that is not allowed on the site. The waste manager of the GRDM has offered assistance in the training process and this should be exploited.
- c) The disposal of domestic waste, bulky waste and garden waste areas should be properly managed to ensure that only appropriate waste is admitted to the respective areas within the Transfer Station. Every effort should be made to encourage the separation of recyclable waste so that it can be collected by the recycling service provider. EPWP workers should be deployed for this purpose, possibly with incentives to encourage high performance.

- d) The management should be trained and empowered to maintain discipline within the workforce and should be effectively supported by the HR Department in this regard.

3.2.3. Bulky Waste

A consultant has drawn up plans for the construction of a bulky waste management facility in which the incoming bulky waste is sorted into different categories and placed in dedicated bins as it enters the facility. The construction of this facility should be expedited as it will have the following advantages:

- a) Each category of bulky waste will be kept separate which will significantly facilitate its disposal and prevent the build up of large stockpiles that are expensive to dispose of.
- b) It will significantly improve the capacity for recycling and hence reduce the amount that must be disposed of to landfill. This will lead to significant savings in the operating cost of the Transfer Station and increase its capacity.

Money has been allocated for the construction of the facility in next year's budget. However, no funds have been made available in the current budget for the preparation of the detailed design or the drafting of the enquiry documents. If this can be done this year the construction would be able to start at the beginning of the new financial year. It should also be noted that funds have been allocated to this project in previous year budgets but have then been subject to a virement and used elsewhere. Every effort should be made to expedite this construction as the financial benefits it offers are clear.

Consideration should be given to including the management of the facility in the scope of the new recycling service provider contract to be let next year. Much of the bulky waste is recyclable so this would be a natural fit.

3.2.4. Garden waste

The value of the garden waste can be enhanced if it is properly chipped and composted. A horizontal grinder should be purchased to increase the chipping capacity and a proper composting facility should be constructed to effectively increase the garden waste disposal capacity. Consideration could be given to either appointing a service provider to install and operate such a facility or arranging with an existing composting contractor to collect the properly chipped waste from the site.

3.3. Transporting Domestic Waste to Landfill

The following steps should be considered in increasing the capacity of the waste transporting facilities:

- a) The quantity of waste to be transport should be reduced as much as possible by proper controls and recycling.
- b) The compacting containers are reaching the end of their useful lives and should be progressively replaced. Without them the transport system cannot function.
- c) The hook lift trucks and trailers are each clocking up approximately 87 000 kms a year transporting the waste to Mossel Bay. They are already 7 years old so sufficient funds should be made available to ensure that they are properly maintained and replaced as required. They are both fully utilised during the peak season so there is currently no excess capacity. It would appear that at least one new truck/trailer combination should be purchased immediately, particularly if the maintenance bottlenecks highlighted in Section 2.4 above are not resolved.
- d) If a new truck/trailer combination were to be purchased, it could be used to remove the bulky waste from the site when not required for domestic waste removal. Over the last year alone this would have resulted in a saving of more that R5 million paid to private services providers.

Consideration should be given to the outsourcing of the transport of the waste to landfill as is done by other municipalities in the region

3.4. Vehicle Maintenance

The procurement procedure for the maintenance of all trucks and heavy equipment should be expedited because there is no extra capacity within the system for them to be out of order for extended periods. The current turnaround time for approving repairs and maintenance orders of up to 6 weeks should be significantly reduced to a matter of days not weeks. The workshops and Supply Chain Management Departments should prioritise orders for essential services so that the use of current assets can be optimised.

3.5. Landfill Disposal Facilities

As pointed out in Section 2.2.2 above there are no landfill facilities available to Bitou from the end of February 2023. Every effort should be made to liaise with the GRDM to ensure that this creates as little inconvenience and cost for Bitou as possible. This is the single most pressing issue facing the security of the of the Integrated Waste Management Department and should be vigorously pursued.

3.6. Disposal of Building Rubble

The following should be considered:

- a) An agreement should be entered into with the owners of the KK Sands quarry formalising the disposal of building rubble to that site, thereby providing planning security.
- b) If necessary, contingency plans should be developed for when another means of disposal is required.

3.7. Recycling

Every effort should be made to optimise recycling as it could save as much as R3 million per year. Consideration should be given to including the following factors in drafting the new contract for the appointment of a recycling service provider:

- a) Incentivising the service provider to spread the collection net as wide as possible.
- b) Introducing strict performance targets with penalties if not met
- c) Including a recyclable buy back scheme that encourages the public to collect recyclable material and rewards them financially for doing so.
- d) Making the contractor responsible for the education of the public on the advantages of recycling.
- e) Including the operation of the bulky waste facility once it is built.
- f) Consideration should be given to establishing a Materials Recovery Facility at the Transfer Station to improve the removal of recyclables from the domestic waste. Initially this could take the relatively simple form for hand picking recyclables from the waste as it arrives on site.

- g) Separation at source is the most efficient way to collect recyclables and so the yellow bag project should be expanded as widely as possible. This would be done by educating the public, making bags readily available and by the service provider replacing full the bags with empty ones and so removing the hassle of having to collect them from a central depot.

3.8. Implementation of the Waste Minimisation Report Recommendations

The Waste Minimisation report contains many recommended interventions that will minimise the disposal of waste to landfill. The PBRPA and the Integrated Waste management officials have cooperated in drawing up a priority matrix for the implementation the recommendations and every effort should be made to follow this plan.

3.9. Alternative technologies

Several alternative technologies such as Pyrolysis exist for disposing of the waste that can result the generation of significant quantities of electricity. Considering the current state of power generation in the country this could be an attractive option. The following should be considered in this regard:

- a) Contractors and suppliers of the technology should be encouraged and facilitated to set up pilot installations within the region to prove the viability of their technologies.
- b) The GRDM should be encouraged to appoint a consultant to perform a viability study on the various disposal options on behalf of all the Municipalities in the Region.
- c) If the options were found to be viable the consultant should draw up a performance specification for tender purposes.
- d) In the meantime, the Waste department should conduct a waste characterisation exercise so that the quantity and nature of the waste currently being generated can be established for use in the feasibility study and the sizing of the alternative technology installation should it prove to be viable. The GRDM have offered to assist in this exercise.

Response from Municipality:

All recommendations proposed are worth consideration as most have already been addressed in the latest budget submissions including budget for appointment of consultants to address various operational and infrastructure requirements in facilitating waste minimization operations.

BM remains committed in its endeavours to address various challenges at the Waste Transfer Station.

Many strategic focus areas have been identified of which the main priority in the new financial year will be actions plans for implementation of our Waste Minimisation and Integrated Waste Management plans.



The Plettenberg Bay Ratepayers and Residents' Association
(PBRRA) welcomes all members and visitors.
Connect with us on info@plettratepayers