Maritana Minerals Limited

TSF 3 Non-Putrescible Landfill Management Plan

[redacted]

1 Objective

To prevent pollution by disposing of waste material and recyclable waste materials in an environmentally responsible way and to comply with requirements of the Landfill Waste Classification and Waste Definitions 1996 (As amended December 2009) and the Environmental Protection (Rural Landfill) Regulations 2002.

2 Scope

This Work Instruction relates to the management of all waste streams that stem from Maritana's operating work areas at Black Swan.

3 Legislation, Regulations and Standards

- *Environmental Protection Act 1986*
- *Landfill Waste Classification and Waste Definitions 1996 (As amended December 2019);*
- *Environmental Protection (Rural Landfill) Regulations 2002;*
- *Black Swan Environmental Licence 6933/1996/142011.*

4 Definitions

- ***Industrial Waste (Class 1 Inert)** - Vegetation offcuts, building and demolition waste (bricks, concrete, steel), broken pallets (untreated timber), etc.*
- ***Putrescible/General Waste (Class 2)** - Component of the waste stream likely to become putrid (in most cases food scraps).*

5 Safety

All personnel and contractors are obligated to dispose of inert waste in accordance with this procedure. Duty of care for all personnel to dispose of inert waste into TSF 3; care is to be taken when disposing of wastes in line with normal company policies.

6 TSF-Specific Considerations

The use of TSF 3 as a landfill involves specific risks and design considerations arising from its former use as a tailings storage facility. The following matters must be addressed prior to and during operation.

6.1 Structural Integrity

Prior to commencement of landfill operations, a geotechnical or structural assessment of the TSF 3 bunds shall be obtained to confirm the embankment can safely contain the additional waste load. Any recommendations from this assessment shall be implemented before waste disposal commences. The assessment report shall be held on file and referenced in this plan.

6.2 Residual Tailings and Contamination

TSF 3 contains residual tailings material from previous mining operations. The Environmental Officer shall assess the interaction between residual tailings and incoming waste streams, with particular consideration of leachate generation, chemical reactions, and potential groundwater impact. Waste streams that present a risk of incompatibility with residual tailings shall not be accepted.

6.3 Liner and Base Permeability

Tailings storage facilities are typically constructed to be permeable. A formal liner and base permeability assessment shall be completed and documented prior to landfill operations commencing. This assessment shall confirm suitability of TSF 3 for receipt of Class 1 Inert waste under DWER requirements and shall identify any supplementary containment measures required.

7 Capacity and Fill Rate Monitoring

The Environmental Officer shall estimate the available void space in TSF 3 at the commencement of operations. Fill rate shall be tracked quarterly to enable projection of the closure date. When the

facility reaches 80% capacity, the Environmental Officer shall initiate closure planning in accordance with the Rehabilitation and Closure section of this plan.

8 Management Activity

8.1 Permitted Industrial Waste

Table 1 Permitted Waste Streams – Acceptance Criteria

Permitted	Not Permitted
Dry Paint	Bulk Wet Paint
Clean Concrete waste and bricks	Ammonia
Dried Drilling Fluids	Hydrocarbons
Wooden Pallets	Bulk Chemicals
Steel and Corrugated Iron	Recyclable cans, plastic, cardboard, poly pipe
Bulka bags	Food scraps
Green drill bags, calico bags	Medical Waste
Dried vegetation off-cuts	Hazardous waste
Non-hazardous waste	Reactive waste

8.2 Waste Acceptance Criteria and Screening

All waste destined for TSF 3 shall be assessed against the acceptance criteria prior to disposal. The following process shall be followed for each disposal event:

- Disposer identifies waste type and verifies it is permitted as per the acceptance criteria and Landfill Waste Classification and Waste Definitions 1996.
- Environmental Officer reviews the waste type and approves or rejects the load prior to disposal.
- Approved load is transported to TSF 3; tipping is supervised by maintenance or environmental personnel.
- Entry recorded in Landfill Register (MRT-EN-REG-2909): date, waste type, estimated volume, operator name, and load origin.
- Any non-conforming or rejected waste is returned to the generator or redirected to an appropriate waste stream.

Where a non-standard waste type is proposed for disposal at TSF 3, a written waste classification assessment shall be obtained from the waste generator and approved by the Environmental Officer before disposal proceeds.

Recyclable items, hazardous waste or hydrocarbons are to be disposed of into purpose built skips and bins that are clearly labelled and taken off-site. For disposal of Hazardous Wastes or hydrocarbons, see the Maritana ***MRT-EN-WI-2704 Hydrocarbon and Hazardous Substance Work Instruction***. Comingled recyclable wastes that cannot be practically separated may also be placed into designated recyclable bins.

8.3 Stormwater Management

Stormwater management within and around TSF 3 is critical to preventing contamination and maintaining structural integrity of the facility. The following controls apply:

- Drainage channels and berms surrounding TSF 3 shall be maintained clear of debris and functional at all times.
- Stormwater shall not be directed into the landfill cell. Any ponding of stormwater within the waste disposal area shall be reported to the Environmental Officer immediately.
- After significant rainfall events (greater than 25 mm in a 24-hour period), the Environmental Officer shall conduct a visual inspection of the TSF 3 stormwater controls and bund condition.
- Any erosion, bund scour, or drainage failure identified during inspections shall be reported to the Site Manager and rectified within a reasonable timeframe.
- Stormwater that contacts the waste disposal area and may be contaminated shall not be discharged to the environment without assessment and, where required, approval from DWER.

9 Monitoring and Inspection

Regular monitoring and inspection of TSF 3 shall be conducted to verify compliance with this plan, identify potential issues, and maintain accurate records for regulatory reporting. The minimum monitoring program is as follows:

- Visual inspection of TSF 3 bunds, access tracks, and waste placement area – Monthly, by Environmental Officer.
- Waste type verification against acceptance criteria – Each disposal event, by Environmental/Maintenance.
- Volume and fill rate estimation – Quarterly, by Environmental Officer; results included in environmental report.
- Stormwater controls and drainage channel condition – After significant rainfall events (>25 mm/24 hr), by Environmental Officer.
- TSF bund structural integrity visual check – Six-monthly, by Environmental Officer; escalate to site management if concern identified.
- Groundwater monitoring results (from existing TSF programme) – Per licence requirements; included in DWER licence reporting.

All inspection records shall be retained by the Environmental Department and made available for regulatory audit on request. Non-conformances identified during inspections shall be logged and tracked to close-out.

10 Record Keeping

The following records shall be maintained for the operation of TSF 3:

- Landfill Register MRT-EN-REG-2909: updated for each disposal event, recording date, waste type, estimated volume or weight, operator name, and load origin.
- Monthly inspection checklists, filed by the Environmental Officer.
- Waste acceptance approvals for any non-standard waste streams.
- Geotechnical and structural assessment reports, held on file by the Environmental Officer.
- Environmental Licence correspondence and reporting, retained in the environmental management system.
- Incident and non-conformance records, logged and tracked to close-out.

All records shall be retained for a minimum of seven (7) years or as required by the Environmental Licence, whichever is greater.

11 Incident and Non-Conformance Response

The following procedure applies in the event of an incident or non-conformance at TSF 3:

- Any personnel observing disposal of prohibited waste, a spill, bund failure, stormwater ingress, or other non-conformance shall immediately report the matter to the Environmental Officer and Site Manager.
- The Environmental Officer shall assess the significance of the incident and initiate immediate containment and corrective actions where required.
- Significant incidents (including any spill of hazardous material or bund structural concern) shall be reported to DWER in accordance with Environmental Licence 6933/1996/142011 and the Environmental Protection Act 1986.
- Prohibited waste found within the landfill shall be removed and redirected to an appropriate waste stream. The source shall be investigated and corrective action applied to prevent recurrence.
- All incidents and non-conformances shall be recorded in the site incident register and tracked to close-out, including root cause analysis and corrective actions.

For hydrocarbon and hazardous substance spills, refer to MRT-EN-WI-2704 Hydrocarbon and Hazardous Substance Work Instruction.

12 Rehabilitation and Closure

When TSF 3 reaches approximately 80% of its design capacity, the Environmental Officer shall initiate closure planning in consultation with the Site Manager and DWER as required. The closure plan shall include:

- Final waste inventory and volume confirmation.
- Capping design – a suitable cap (e.g. compacted clay or engineered equivalent) to minimise rainfall infiltration and prevent access to waste.
- Revegetation – seeding or planting of appropriate native species to stabilise the cap and integrate the closed facility into the surrounding environment.
- Post-closure monitoring – groundwater and surface condition monitoring for a period to be agreed with DWER.

- Reference to and alignment with the Black Swan Mine Closure Plan obligations.

Closure activities shall be conducted in accordance with the Landfill Waste Classification and Waste Definitions 1996, Environmental License 6933/1996/142011, and applicable DWER guidance. A closure completion report shall be prepared upon completion of rehabilitation works.

13 Responsibilities

Personnel	Responsibility
Maintenance	Liaise with site services to arrange for inert, non-recyclable waste to be taken to the industrial landfill. Keep records of the amount of industrial waste transferred to TSF 3 whenever possible
Environmental	Regular inspections, report types, volumes, disposal location and date for each waste stream. Ensure all skips and bins are labelled.
Contractors	Dispose of waste generated into the appropriate skips and/or off-site
Supply Personnel	Ensure skips bins are supplied. Keep records of the amount of industrial waste transferred to TSF 3 whenever possible
Exploration	Disposed of to skip bins, emptied on a weekly basis as part of a site-wide skip bin supply and emptying contract.

All personnel have a duty of care to keep workplaces litter-free. Any suspicious activity or incorrect disposal of waste must be reported to the environmental department.

14 Related Documents

Filename	Name
MRT-EN-WI-2704	Hydrocarbon and Hazardous Substance Work Instruction
MRT-EN-REG-2909	Landfill Register
MRT-EN-PL-2901	Waste Management Plan
MRT-EN-WI-2904	General and Recyclable Waste Management Work Instruction
MRT-EN-WI-2704	Hydrocarbon and Hazardous Substance Work Instruction