



Government of **Western Australia**
Department of **Housing and Works**

OPERATION ENVIRONMENTAL & WASTE ACCEPTANCE PROCEDURES

DISPOSAL OF CHEMICAL WASTE AT THE INTRACTABLE WASTE DISPOSAL FACILITY MT WALTON EAST

Waste Disposal Operation 2026NRT01

Prepared by
Aurora Environmental

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Revision 3**

EXECUTIVE SUMMARY

This Operation Environmental & Waste Acceptance Procedures (OEWP) document describes the way chemical wastes are to be disposed of by shallow land burial at the Intractable Waste Disposal Facility (IWDF), Mt Walton East.

The OEWP applies to the disposal operation 2026NRT01 planned for August to November 2026. Trench excavation is planned to commence in August 2026, and the capping of the trench is expected to be complete by November 2026.

The disposal operation will involve the disposal of defective lithium metal batteries, fire-affected lithium metal and lithium ion batteries and undetermined reaction products. Some soils and other materials may also be contaminated and require disposal at the IWDF. It is proposed that all of these wastes are disposed of by trench burial at the site, since the clay into which the waste will be placed is inert and there will be no co-disposal with any other waste.

Operations at the IWDF must comply with the Ministerial Conditions and Commitments outlined in the Ministerial Statement 562.

Table E1 summarises the compliance of this OEWP with the relevant conditions, commitments and other requirements, as required by Ministerial Statement 562.

Table E1
Audit Table - Compliance of Proposed Disposal Operation 2026NRT01 with Relevant Proponent Commitments and other Requirements

NO	TOPIC	Relevant Commitment	SCOPE	TIMING	COMPLIANCE STATUS	REFERENCE
OPERATION-SPECIFIC (Proponent Commitments)						
1	Operational Procedures	5	Prepare, implement and make publicly available when approved Environmental, Radiation, and Health and Safety Operational Procedures in accordance with the Operational Guidelines.	Prior to each disposal operation. Implement during waste disposal operation.	Completed. This document and other related documents.	This document (OEWPP) Refer Section 1.2 and references therein to Operation Transport Procedures (OTP), Operation Health & Safety & Emergency Response Procedures (OHSERP).
2	Performance and Compliance Report	6	Prepare and make publicly available the Performance and Compliance Report (PCR) at the conclusion of each waste disposal operation.	Within 3 months following completion of operation. Advertise within 4 weeks of obtaining approval for the PCR.	Future Action.	Refer Section 9.
3	Waste	7	Ensure compliance with Waste Acceptance Guidelines. Prepare a waste register data base to be maintained, updated and made publicly available.	Prior to each disposal operation. Update the register within three months of completion of each disposal operation.	Completed. Waste Acceptance Proformas completed and approved by Department and Housing and Works. Future Action.	Refer Section 3.1 & Appendix B. Refer Section 9.
4	Community Liaison	8	Convening an annual IWDF Community Meeting and each time there is a disposal operation (meetings to be combined when reasonable).	Following the Minister's Statement that the proposal may be implemented.	Future Action.	Refer Section 6.

NO	TOPIC	Relevant Commitment	SCOPE	TIMING	COMPLIANCE STATUS	REFERENCE
5	Fencing and Signposting	9	Fence and signpost each discrete disposal cell.	Prior to demobilisation of each waste disposal operation.	Future Action.	Refer Section 4.3.5 and Plate 1.
6	Water	10	Demonstrate that there are at least 5 metres of clay between the base of any disposal cell and bedrock.	Prior to each disposal operation.	Completed. Results of previous geological drilling investigations.	See Section 4.3.2.
7	Transport and Packaging	MC 6.1 and PC 11	Ensure that all third-party carriers, in direct control of hazardous and intractable waste which is being transported to the facility have the appropriate permits or licences required under the relevant national and state legislation, regulation and codes of practice for the transportation and management of chemical waste. Ensure that the packaging and transport requirements specified in the Operational Transport Guidelines and Waste Acceptance Guidelines are adhered to through the use of contracts and other controls as necessary.	Prior to each disposal operation. Prior to the commencement of transportation activities during disposal operation.	Future Action. DHW to obtain verification from DLGIRS for inclusion in the PCR. Completed. Operation Transport Procedure which includes the Packaging and Transport Proformas submitted by the waste owner (or their contractors) and reviewed by DHW.	Refer Section 3.3 and OTP.
8	Decommissioning and Rehabilitation	12	Implement the requirements of the Decommissioning and Rehabilitation Management Plan until the Chief Executive Officer, Department of Water and Environmental Regulation determines that decommissioning and/or rehabilitation is/are complete.	During decommissioning and/or rehabilitation.	Future Action. Determination by the Chief Executive Officer, Department of Water and Environmental Regulation that decommissioning and/or rehabilitation is/are complete.	Refer Section 4.3.5.
OTHER ISSUES						
9	Responsibilities and Acceptance	-	Define key responsibilities for waste packaging, transport and disposal.	Prior to commencement of operation.	Completed.	Refer Section 3.2.
10	Trench Design	-	Specify operation-specific trench design and location.	Prior to commencement of operation.	Completed.	Refer Section 4.3.1, 4.3.2.

NO	TOPIC	Relevant Commitment	SCOPE	TIMING	COMPLIANCE STATUS	REFERENCE
11	Site Operational Activities	-	Summarise operation-specific waste delivery, acceptance, disposal and capping methods Keep enough verification records to be able to demonstrate compliance, including the following: • Trench excavation records • Waste placement records • Waste acceptance for disposal records • Capping thickness records • Capping method records.	Prior to commencement of operation.	Completed. Future Action. Verification documentation is proposed.	Refer Section 4.2, 4.3. Refer Section 4.4.
12	Environmental Management	-	Undertake management of operation in accordance with IWDF Environmental Management System and Program.	Prior to commencement of operation.	Future Action. In accordance with the recently approved IWDF EHS&QMS.	Refer Section 1.2.
13	Environmental Monitoring	-	Undertake environmental monitoring of site operations to determine if there has been any detrimental impact on the environment.	Prior to, during and at end of waste-handling activities.	Future Action. In accordance with Section 5.	Refer Section 5.
14	Auditing and Compliance	-	Submission of periodic Compliance Reports in accordance with an audit program prepared in consultation between the proponent and the Chief Executive Officer, Department of Water and Environmental Regulation (DWER) of the conditions, procedures and commitments.	Prior to, during and at end of operation.	In progress. In accordance with Section 8.	Refer Section 8.
15	Health & Safety and Emergency Response	-	Undertake health & safety and emergency response management in accordance with the IWDF Health & Safety Management Plan and Operation Health & Safety and Emergency Response Procedures (OHSERP) to include: • monitoring (if required); and • training.	Prior to and throughout site activities.	Completed. The OHSERP has been produced describing operation-specific health & safety procedures, training and monitoring, as well as emergency response procedures.	Refer OHSERP

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1. INTRODUCTION

1.1 General

This Operation Environmental and Waste Acceptance Procedures (OEWPA) document describes the way chemical wastes are to be disposed of by shallow land burial at the Intractable Waste Disposal Facility (IWDF), Mt Walton East (Figure1) by the proponent; the Department of Housing and Works (DHW).

This OEWPA applies to the disposal operation (2026NRT01) planned for August to November 2026. Trench excavation is planned to commence in August 2026, waste delivery is also planned to commence in August 2026 and the capping to the trench is planned to be completed in November 2026.

The disposal operation 2026NRT01 will involve the disposal of defective lithium metal batteries (Class 9 dangerous goods of UN 3090), fire-affected batteries, containing a mix of UN 3090 lithium metal batteries, UN 3480 lithium ion batteries, and undetermined reaction products and soil contaminated with these materials. The waste proposed for disposal during this operation are summarised in Table 1 (below).

Table 1
Summary of the chemical waste proposed for disposal at the IWDF, Operation 2026NRT01

Waste Owner	Responsibility for Waste Packaging, Loading, and Transporting to IWDF	Waste Type	Waste Quantity
CHEMICAL WASTE			
DWER	Department of Local Government, Industry Regulation and Safety (DLGIRS) and their consultants and contractors	Defective lithium metal batteries UN (3090) and fire-affected batteries containing a mix of UN 3090 lithium metal batteries, UN 3480 lithium ion batteries, and undetermined reaction products and soil contaminated with this material	18 open-topped half-height sea containers of fire affected Li metal batteries, Li ion batteries, undetermined reaction products and contaminated soil, fitted with lids and vents, and 9 full height open-topped sea containers of defective Li metal batteries, fitted with lids and vents. If additional containers of fire affected Li metal batteries, Li ion batteries, undetermined reaction products and contaminated soil waste material require disposal the size of the trench may be varied. This will not alter the risk profile of the disposal operation.

The OEWP describes the management strategies and monitoring programs that will be employed during the disposal operation, so that the operation is managed in a safe and environmentally acceptable manner, in compliance with regulatory requirements.

1.2 Relationship of OEWP to Other Environmental Management System Documents

An “Environmental, Health and Safety, and Quality Management System” (EHSQMS) has been developed and implemented for the management and operation of the IWDF. The EHSQMS provides general procedures, plans and guidelines for the management and operation of the IWDF, which address specific environmental issues such as waste management, water management, and environmental monitoring. A list of procedures and related documents are given in Appendix A. This OEWP document provides procedures and information specific to the proposed disposal operation 2026NRT01, to be used in conjunction with the general procedures provided in the IWDF EHSQMS.

Other documents that interface with the OEWP and specifically pertain to management of the packaging, transport and disposal activities for the 2026NRT01 disposal operation are as follows:

- Operation Transport Procedures (OTP) which contain the packaging and transport proformas for the wastes supplied by Dangerous Goods Safety at the Department of Local Government, Industry Regulation and Safety (LGIRS) (or their consultants) on behalf of the waste owner, including the transport route and transport emergency response procedures. This document allows DHW to ensure third-party carriers comply with all their obligations;
- Operation Health and Safety and Emergency Response Procedures (OHSERP) specific to the site for the particular waste in this disposal operation; and
- Construction Specifications for the Waste Disposal Trench 2026NRT01 (Aurora Environmental, 2026).

2. LEGAL REQUIREMENTS & APPROVALS PROCESS

Operations at the IWDF must comply with the Ministerial conditions and commitments applied to the site (Ministerial Statement 562). Compliance with these conditions and commitments is a legal requirement and is regulated by the Department of Water and Environmental Regulation (DWER). Approval by the DWER is required for all disposal operation documents prior to commencement of site activities.

Table E1 in the Executive Summary summarises the compliance of this OEWP with relevant Commitments and other aspects.

3. PROPOSED WASTE DISPOSAL OPERATION

3.1 Waste Characteristics

Details of the wastes proposed for disposal at the IWDF are provided in the Waste Acceptance Proforma in Appendix B, including their origin, alternatives to disposal at the IWDF, physical and chemical characteristics, toxicology and packaging.

The acceptance of waste for disposal at the IWDF is conditional upon the compliance with several acceptance criteria. Further details and definitions of the acceptance criteria for disposal of wastes at the IWDF are given in *Waste Acceptance Guidelines* documents (Department of Housing and Works, 2025a and 2025b). DHW sought the advice of the Environmental Protection Authority (EPA) to confirm that the waste material fits the waste acceptance criteria, subject to additional management and mitigation measures outlined in Appendix C. The Minister for the Environment confirmed the appropriateness of the waste for disposal at the IWDF, including some minor amendments to the waste acceptance criteria for the proposal (Appendix D).

Based on the details provided in these proformas and inspections of the waste by representatives of Dangerous Goods Safety at the Department of Local Government, Industry Regulation and Safety (DLGIRS) (refer Appendix B: *Waste Inspection Records*) and the material hazard information contained in Appendix F Material Safety Data sheet for Lithium Metal Batteries, the consignment of chemical waste proposed for this disposal operation have been assessed as being suitable for disposal at the IWDF.

3.2 Responsibility for the Waste

Roles and responsibilities for the different operational aspects of waste disposal at the IWDF are outlined in the EHSQMS Manual.

Responsibilities in relation to the packaging and transport of the proposed wastes are outlined in Table 1. DHW is responsible for the disposal of waste at the IWDF.

Following the placement of each delivery of waste a *Certificate of Acceptance* will be issued by the DHW to the waste owner.

The ownership of (title to) the waste will pass from the waste owner to the State upon the completion of field activities and project close-out. A *Certificate of Disposal* will be issued to the previous waste owner to document this transfer.

3.3 Packaging and Transport

The waste consignments will be packaged and transported in compliance with the requirements of Dangerous Goods Safety (Road and Rail Transport of Non-explosives) Determination (No. 2) 2026 provided in the Operation Transport Procedures (OTP) for the

chemical waste. The OTP was prepared by DHW based on submission of the two proformas from Dangerous Goods Safety at DLGIRS, on behalf of the waste owner. These proformas are included as Appendix A of the OTP.

4. WASTE DISPOSAL ACTIVITIES AT THE IWDF

This section describes the procedures to be followed during on-site disposal activities at the IWDF as part of Operation 2026NRT01 including:

- laydown area construction;
- delivery and acceptance;
- trench excavation and design;
- unloading and placement of waste;
- cover construction; and
- fencing and rehabilitation.

Specific procedures for each of these activities within Operation 2026NRT01 are detailed in the relevant sections below.

4.1 Laydown Area Construction

The laydown area will be constructed according to Operational Procedure *OP-03 Excavation of Disposal Trench*, which contains a description of the methodology to be employed for clearing operations related to disposal activities. Additional measures relevant to construction and use of the laydown area are detailed in Appendix C as follows:

- clearing 10,000m² of vegetation for the laydown area, including allowance for a fire break;
- keeping waste within separate containers with minimum 5m separations;
- protecting waste from moisture by limiting disruption to the sand and tarp covers;
- continual visual monitoring of waste and site conditions during offloading and placement;
- weather conditions will be monitored prior to and during unloading and placement activities, with activities suspended during significant rainfall events or other adverse conditions that may increase the risk of fire;
- standard fire extinguishing capability in place. Note that placement of sand is a recognised fire mitigation method for lithium;
- a 980 wheel loader will be on-site on standby with sand for fire suppression; and
- DFES will be consulted prior to disposal activities regarding emergency response arrangements and on-site attendance during unloading activities as detailed in (Appendix E).

4.2 Delivery and Acceptance

Once the vehicles carrying the waste cross the IWDF boundary they shall be under the direction of DHW, its staff and contractors. All site activities will be undertaken under the direction of the Operations Manager. DHW shall ensure that all waste delivered to the site is

accepted as suitable for disposal, prior to placement in the trench. Acceptance will be documented by the Operations Manager or delegate.

The procedures for delivery and acceptance of waste at the IWDF are given in the IWDF Operational Procedure *OP-06 Waste Delivery, Acceptance and Disposal*.

4.3 Disposal

The wastes are to be disposed of by shallow land burial in a disposal trench. The proposed disposal method has been demonstrated to provide long-term protection of the waste with over 34 years of successful site usage. It is also the preferred method of disposal for such wastes in other jurisdictions around the world (e.g. France).

4.3.1 Trench Location

Currently the IWDF contains two disposal areas, one for low level radioactive wastes only and the other for chemical and radioactive wastes. The layout of the site showing these disposal areas is illustrated in Figure 2.

The chemical waste to be disposed as part of Operation 2026NRT01, will be placed in a single trench in the chemical and radioactive waste disposal area. The proposed location for Disposal Trench 2026NRT01 is shown in Figure 2. The laydown area to be cleared to accept delivery of the waste prior to trench completion is also shown in Figure 2.

The trench will be excavated into the natural, in situ, silcrete and kaolinitic “clay” (Figure 3). It is anticipated, based on previous drilling at the site and adjacent trenches, that the silcrete at this location will be approximately 5.0 to 6.5 m thick and the clay will be greater than 20 m thick. There is no groundwater present in this area.

4.3.2 Trench Design

The trench will be designed and constructed in accordance with Operational Procedure *OP-03 Excavation of Disposal Trench*, to hold the total volume of waste material given in Table 1. It will be approximately 28.0 m long and 12.5 m wide at the base, which will be about 14 m below ground (Figure 3).

Based on likely thickness of clay at the trench location (as identified during previous subsurface drilling (ATA Environmental, 2000) the base of the disposal cell will be greater than five metres above the clay-bedrock interface (see below), in compliance with Relevant Commitment 10 (No. 8) in Table E1.

Further details relating to trench design, construction procedures and validation of trench construction are provided in *Construction Specifications for the Waste Disposal Trench 2026NRT01* (Aurora Environmental, 2026).

4.3.3 Unloading and Placement

The procedures for unloading and placement of waste at the IWDF are given in the IWDF Operational Procedure *OP-06 Waste Delivery, Acceptance and Disposal Procedure* and *Construction Specifications for the Waste Disposal Trench 2026NRT01* (Aurora Environmental, 2026). Activities are to be undertaken in accordance with Environmental Procedures *EP-04 Water Management* and *EP-06 Air Quality and Dust Management*.

Additional risk mitigation measures relevant to the unloading and placement of waste within the trench are detailed below. Refer to Appendix C for the risk mitigation measures identified based on the waste characteristics and volumes considered at the time DHW sought EPA advice regarding acceptance of the waste at the IWDF.

:

- continual visual monitoring during placement;
- keep handling of waste to a minimum (for example, limit double handling);
- keep waste within separate containers with minimum 500mm separation;
- ongoing visual monitoring of site conditions during placement process;
- standard fire extinguishing capability in place. Note that placement of sand is a recognised fire mitigation measure for lithium;
- a 980 wheel loader will be on-site on standby with sand for fire suppression;
- DFES will be consulted prior to disposal activities regarding emergency response arrangements and on-site attendance during unloading activities as detailed in (Appendix E).
- detailed waste characterisation information will be provided prior to disposal. The IWDF site owner reserves the right to reject waste packages that are inconsistent with the approved waste description or disposal criteria;
- no co-disposal of waste;
- buffer period from planned drilling and blasting phase of trench construction to delivery of waste implemented;
- no water table present at site as demonstrated by over 35 years of monitoring; and
- Lower Explosive Limit (LEL), oxygen (O₂) and phosphine (PH₃) monitoring equipment will be used during unloading and placement activities to provide real-time early detection of potential hazardous gas releases and support implementation of appropriate controls.
- High-resolution thermal imaging will be used during waste unloading and waste placement activities within the disposal trench. Thermal monitoring will assist in identifying abnormal temperature increases within waste materials, enabling early intervention and implementation of appropriate controls where required.

It is anticipated that three layers of waste packages will be placed in the trench, as shown in Figure 4.

4.3.4 Capping Construction

The construction of the cover to the trench is a very important part of the disposal operation, since it forms the barrier that confines the waste. The waste will be a minimum of 8.0 m below the surface (Figure 4). Capping construction will be undertaken in accordance with Operational Procedure *OP-03 Excavation of Disposal Trench* and Environmental Procedures *EP-04 Water Management* and *EP-06 Air Quality and Dust Management*.

Additional measures relevant to the backfill are detailed in Appendix C as follows;

- keep waste within separate containers with minimum 500mm separation;
- protect waste from moisture by limiting disruption to the sand and retaining tarp covers during waste burial;
- continual visual monitoring of waste and site conditions during backfill process;
- backfill process continually refined to minimise potential disturbance to the waste once placed in the trench;
- standard fire extinguishing capability in place. Note that placement of sand is a recognised fire mitigation method for lithium;
- a 980 wheel loader will be on-site on standby with sand for fire suppression;
- DFES will be consulted prior to disposal activities regarding emergency response arrangements and on-site attendance during sand/gravel backfill activities;
- site observations from previous disposal operations indicate that water ingress from rainfall directly onto the sand and gravel covering the waste has been limited to about 10mm, suggesting that once the sand and gravel is in place the immediate risk of infiltration is minimal and that once the remainder of the backfill and cap is in place there will be extremely limited potential for water to affect the waste;
- the limited permeability of the sand and gravel backfill is nevertheless expected to facilitate passive dissipation of any gases generated within the waste;
- Once the clay capping is in place the likelihood of water ingress is extremely low and the consequence insignificant – the cap is 2m thick, with the top 1m compacted without water, so that any water infiltration will be absorbed. Additionally, the remaining 7m to 8m of cover contains significant quantities of clay to absorb any water infiltration;
- The clay dome constructed over the trench sheds water away from the trench so that any rainfall has limited opportunity to infiltrate;
- it is expected that the design of the backfill will allow any gases generated to naturally diffuse through the sand, silcrete and clay;
- the completed trench/dome will be subjected to routine inspections to identify any evidence of settlement, cracking, uplift, or other signs of cap distress;
- should material deterioration of the dome be observed through subsequent inspections and monitoring, remediation works will be undertaken; and
- based on past disposal activity, any such deterioration is likely to be superficial.

Further details relating to capping design, construction procedures and validation of capping construction are provided in the *Construction Specifications for the Waste Disposal Trench 2026NRT01* (Aurora Environmental, 2026).

4.3.5 Fencing, Signposting and Rehabilitation

The trench will be fenced as shown in Plate 1. A sign showing the trench identifier (2026NRT01) will be placed on the front gate to the disposal cell. Signs will also be placed on each side of the fence, identifying it as a chemical waste cell and finally a stainless steel plinth will be placed at the front right of the fence, with a plaque noting the depth at which the chemical waste is buried and the approximate dimensions of the disposal cell.

PLATE 1: FENCING AND SIGNAGE FOR DISPOSAL 2020NRT01



The cleared areas of the trench surrounds will be tynd and old vegetation material pulled back over these areas, to enhance natural revegetation.

Rehabilitation and monitoring procedures are outlined in IWDF Operational Procedure *OP-07 Capping, Rehabilitation and Demobilisation* and references therein (see Appendix A) and *Construction Specifications for the Waste Disposal Trench 2026NRT01* (Aurora Environmental, 2026).

4.4 Verification Documentation

Records will be kept in the field to verify the compliance of the disposal activities with the operational procedures described in this document and with general IWDF procedures and plans. Records will be maintained in accordance with the IWDF Management Procedure *Record Management MP-02*.

Verification records will include, but will not necessarily be limited to, the following:

- Trench excavation records.
- Waste inspection records.
- Waste placement records.
- Capping thickness records.
- Capping method records.

5. ENVIRONMENTAL MONITORING PROGRAM

Environmental monitoring will form an integral part of waste disposal operation 2026NRT01 at the IWDF.

Monitoring will comprise the following:

- Chemical monitoring (soil sampling, airborne dust sampling and groundwater monitoring – monitoring bores are always dry); and
- Meteorological monitoring – particularly wind direction.

5.1 Environmental Chemical Monitoring

The program will comprise collection of airborne dust and soil samples and their analysis for key elemental components of the chemical wastes to be disposed, as indicated in Table 2. Monitoring of groundwater will also be undertaken if any groundwater is found in the monitoring bores present at the site. Groundwater monitoring wells are shown on Figure 2.

The procedures for sampling and analysis are given in IWDF Environmental Procedure *EP-03 Environmental Monitoring Management* and Work Instructions referenced therein.

The existing monitoring bores two to nine in the Chemical Disposal Area (Figure 2) will be checked for the presence of water prior to, and after, the disposal operation. If water is found, sampling and analysis will be undertaken in accordance with IWDF Environmental Procedure *EP-03 Environmental Monitoring Management* & Work Instructions referenced therein.

Table 2

Summary of the Key Chemical Components for Environmental Sampling and Analysis

Waste Owner	Waste Type	Key Analytes
DWER	Defective lithium batteries and fire affected Li batteries	Lithium (if identified, then further species based on potential waste composition may be tested)

The soil and groundwater analyses will be interpreted using the relevant values from the document *Assessment and Management of Contaminated Sites* (Department of Water and Environmental Regulation, 2021).

5.2 Meteorological Monitoring

Monitoring of weather conditions, in particular wind direction and temperature, shall be undertaken throughout the disposal operation, particularly during delivery and waste placement.

Procedures for meteorological monitoring are given in IWDF Environmental Procedure *EP-03 Environmental Monitoring Management* and references therein.

6. COMMUNITY LIAISON

The community will be informed of the disposal operation through notification on the IWDF website, the Close-out Report (included in the PCR for the 2027 year), and the IWDF Annual Community Meeting (IACM). Disposal communication will be managed in accordance with the IWDF *Communication and Public Relations Procedure MP-06*.

7. INDUCTION AND TRAINING

All personnel and substitute personnel involved in the disposal operation activities at the IWDF will be required to attend induction training at the IWDF in the relevant requirements of this OEWP and the OHSERP in addition to general requirements of the EHSQMS detailed within Management Procedure *MP-03 Training and Competency*.

The Facility Management Contractor, under the direction of DHW will be responsible for providing induction training and verifying the training of contractor staff.

8. AUDITING

The following audits will be conducted for this operation:

- Assessment of the OEWP, OTP and OHSERP by EPA (normally DWER but they are the waste owner), to verify compliance with regulatory requirements (e.g. the commitments and conditions presented in Table E1 of this OEWP), prior to commencement of the field operation.
- At least one internal operational compliance audit, to be conducted during the disposal operation by a representative of DHW to ensure that provisions described in the OEWP, OTP, OHSERP and the EHSQMS are honoured during the site operations. The internal auditor will inform the Operations Manager of any irregularities, and these will be rectified and documented.
- Assessment of the Performance and Compliance Report (see below) by DWER, to verify compliance of the completed operations with regulatory requirements

9. REPORTING

DHW produces a *Performance & Compliance Report* in accordance with Ministerial Conditions and Commitments (Section 2). The next Performance & Compliance report will include a Close-out Report detailing the disposal operation 2026NRT01 as part of a continuing commitment to fully document all activities at the site. The Close-out Report will be produced within 3 months of the finalisation of the operation and will include details of the following:

- operation scheduling;
- compliance with regulatory requirements (e.g. Ministerial commitments and conditions);
- as-constructed disposal design (including verification documentation); and

- results of the environmental and health & safety monitoring programs.

The Performance & Compliance Report (PCR) will be compiled in accordance with the *IWDF Performance & Compliance (Reporting) Guidelines* (Department of Finance, 2016) and will also include additional information as requested by the DWER after their review of the 2027 PCR and Close-out Report. The PCR will be a public document.

A debriefing meeting between DHW, the waste owner(s), and Facility Management Contractor will be held after the completion of the report to review the operation and discuss any improvements required for future disposal operations.

All wastes delivered to the site during the disposal operation described in this OEWP will be added to the register, which lists the location and type of all wastes disposed of at the IWDF. This register, which is maintained by the DHW is accessible to members of the public on request to the DHW.

REFERENCES

ATA Environmental (2000) Geological Assessment, Chemical Waste Disposal Area, Intractable Waste Disposal Facility Mt Walton East, Western Australia. ATA Report 2000/051. Report prepared for Waste Management (WA) (unpublished).

Aurora Environmental (2026) *Construction Specifications for the Waste Disposal Trench 2026NRT01*. Version 1. Report prepared for the Department of Housing and Works, July 2026 (unpublished).

Department of Housing and Works (2025a) Waste Acceptance Guidelines and Waste Acceptance Proforma. July 2025.

Department of Housing and Works (2025b) Environmental and Waste Acceptance (Reporting) Guidelines. December 2025.

Department of Finance (2016) *Performance and Compliance (Reporting) Guidelines—Disposal of Wastes at the Intractable Waste Disposal Facility, Mt Walton East*. July 2016.

Department of Water and Environmental Regulation (2021) *Assessment and Management of Contaminated Sites. Contaminated sites guidelines, November 2021*.

10. GLOSSARY

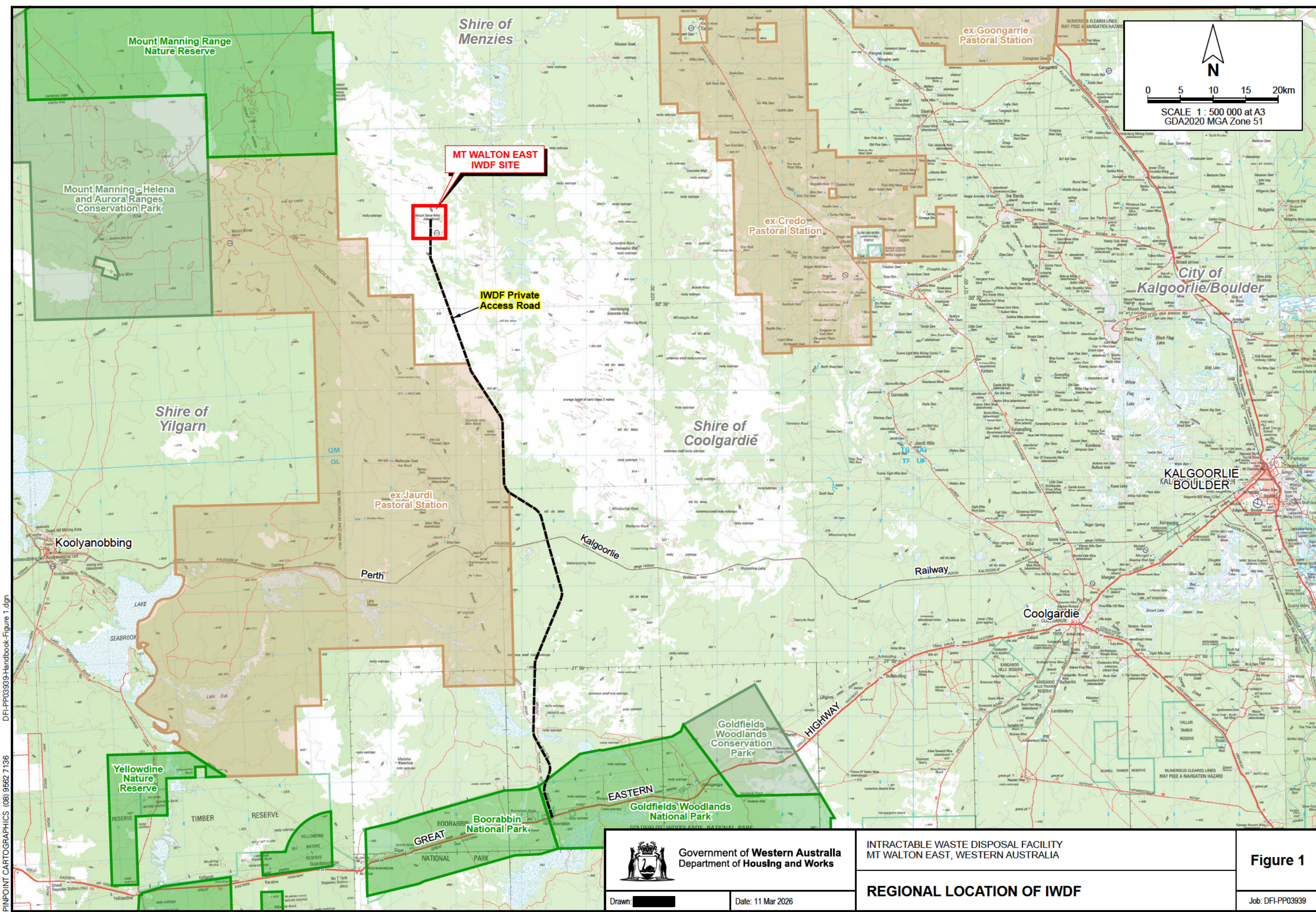
Acceptance Criteria	Criteria which describe the properties and characteristics of waste and packaging, which must be complied with for waste to be accepted for disposal at the IWDF
Client	Any natural person, body or corporation who proposes to dispose of intractable waste at the IWDF as part of a specific waste disposal operation (waste owner)
DHW	Department of Housing and Works – responsible for operating the IWDF (the proponent)
DWER	Department of Water and Environment Regulation
EMP	Environmental Management Program
EPA	Environmental Protection Authority (Western Australia)
Guideline	Documents which give guidance on aspects such as waste acceptance for disposal, waste packaging, and transport of waste to the IWDF
Intractable Waste	Waste that is a management problem by virtue of its toxicity or chemical or physical characteristics which make it difficult to dispose or treat safely and is not suitable for disposal in Class I, II, III or IV landfill facilities (<i>Landfill Waste Classifications and Waste Definitions 1996</i> (as amended December 2019), Western Australia: Department of Water and Environmental Regulation 2019)
IWDF	Intractable Waste Disposal Facility, located at Mt Walton East, Western Australia
Packaging	Primary form of containment for the waste
OWEP	Operation Environmental and Waste Acceptance Procedures (procedures for the environmental management of a specific disposal operation at the IWDF)
OHSERP	Operation Health & Safety and Emergency Response Procedures
OTP	Operation Transport Procedures (procedures for the transport of wastes related to a specific disposal operation at the IWDF)
PCR	Performance and Compliance Report

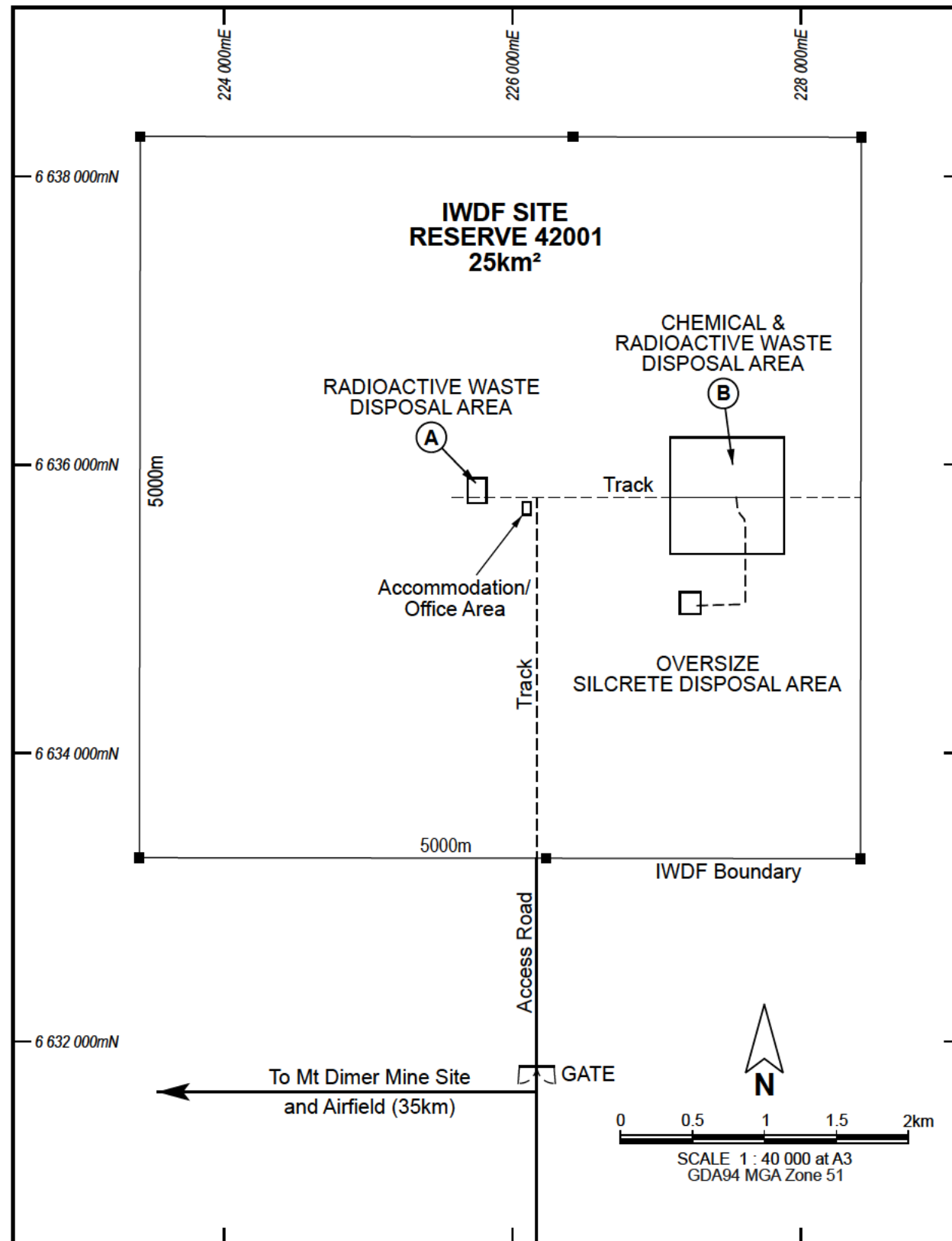
PPE	Personal Protective Equipment
Transporter	Any natural person, body or corporation who has possession of intractable waste and is transporting it for disposal at the IWDF
Waste Owner	Any natural person, body or corporation, including an authorised delegate, who may be the original waste producer, or may have subsequently assumed ownership of waste, who proposes to dispose of their waste at the IWDF
Waste Package	The waste and any packaging that will be disposed at the IWDF (disposal unit)

UNITS/ABBREVIATIONS

L	litre
m	metre
mg/kg	milligram per kilogram (10^{-3}g/kg).

FIGURES



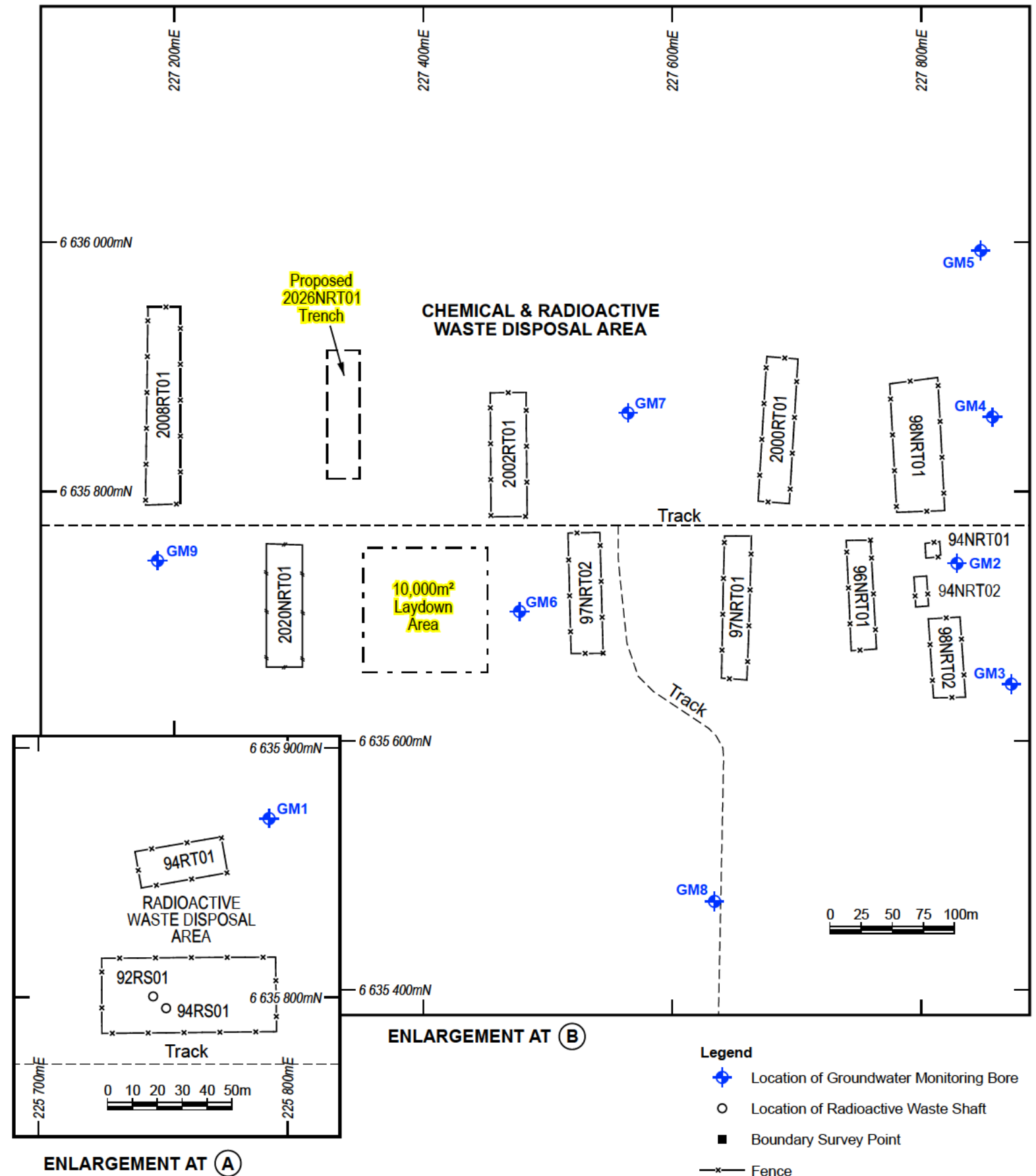


BURIAL CODES

- 92RS01 = 1992, Radioactive waste shaft, Number 1
- 94RT01 = 1994, Radioactive waste trench, Number 1
- 94NRT01 = 1994, Non-radioactive waste trench, Number 1
- 2000RT01 = 2000, Radioactive and chemical waste trench, Number 1

DISPOSAL LEGEND

- 92RS01 Low level radioactive waste
- 94RS01 Low level radioactive waste
- 94RT01 Low level radioactive industrial equipment
- 94NRT01 Pesticide / household hazardous waste
- 94NRT02 Arsenical sheep dip waste
- 96NRT01 Pesticide contaminated soil
- 97NRT01 Arsenic trioxide powder
- 97NRT02 Arsenic waste
- 98NRT01 Arsenic trioxide powder
- 98NRT02 PCB contaminated soil
- 2000RT01 Low level radioactive and chemical waste
- 2002RT01 Low level radioactive and chemical waste
- 2008RT01 Low level radioactive and chemical waste
- 2020NRT01 Bituminous Waste



Government of **Western Australia**
Department of **Housing and Works**

Drawn: [Redacted]

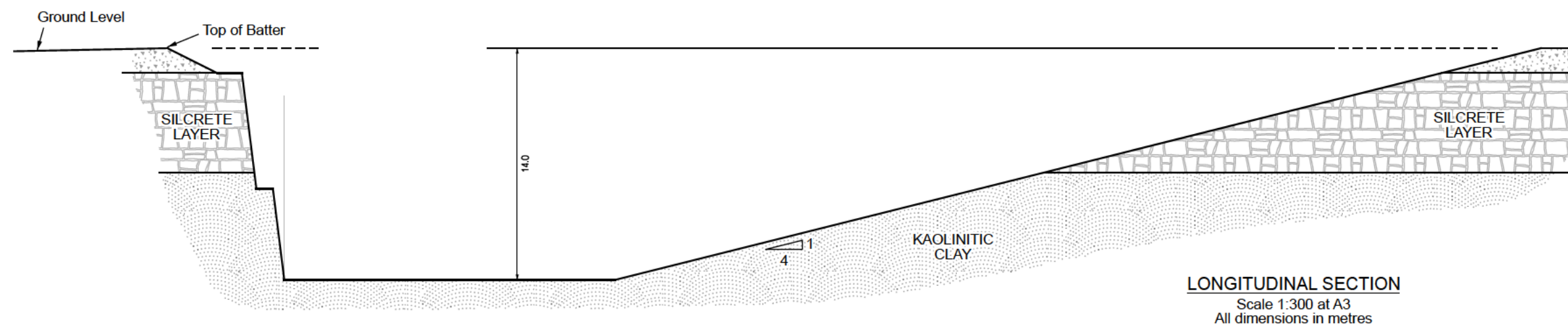
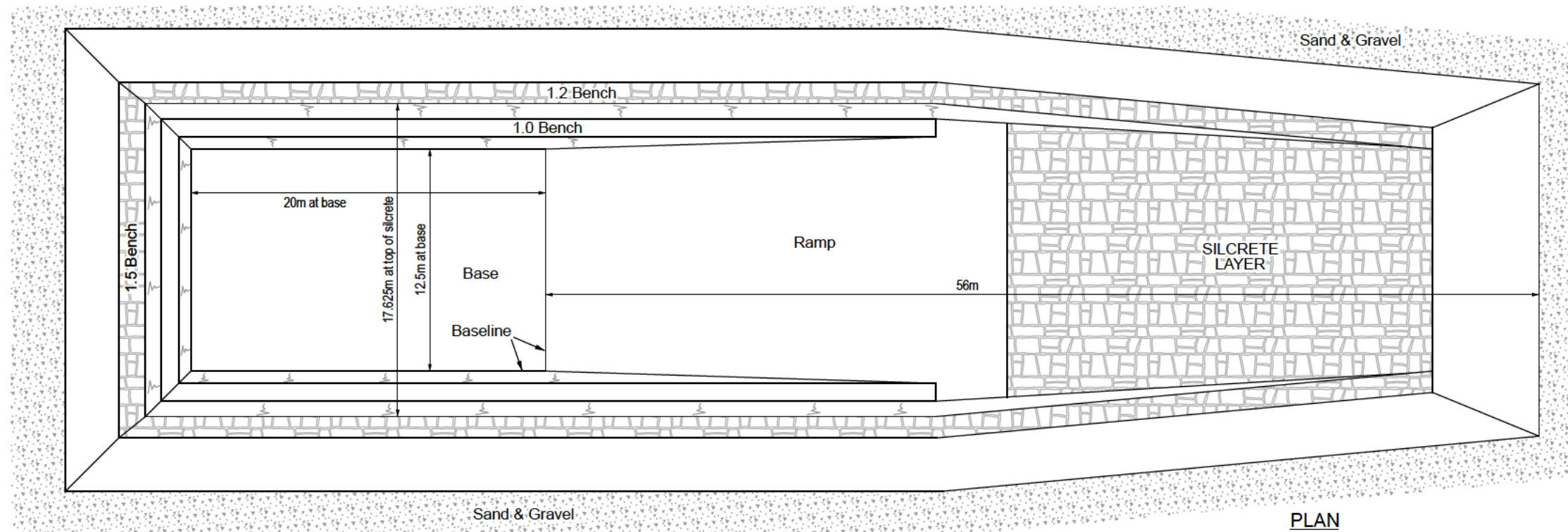
Date: 22 Jul 2026

Department of Housing and Works
DISPOSAL OF BATTERY WASTES AT THE INTRACTABLE WASTE DISPOSAL
FACILITY - MT WALTON EAST WASTE DISPOSAL TRENCH 2026NRT01

**GENERAL LAYOUT OF WASTE DISPOSAL CELL LOCATIONS
AT THE IWDF & PROPOSED NEW CELL AND LAYDOWN AREA**

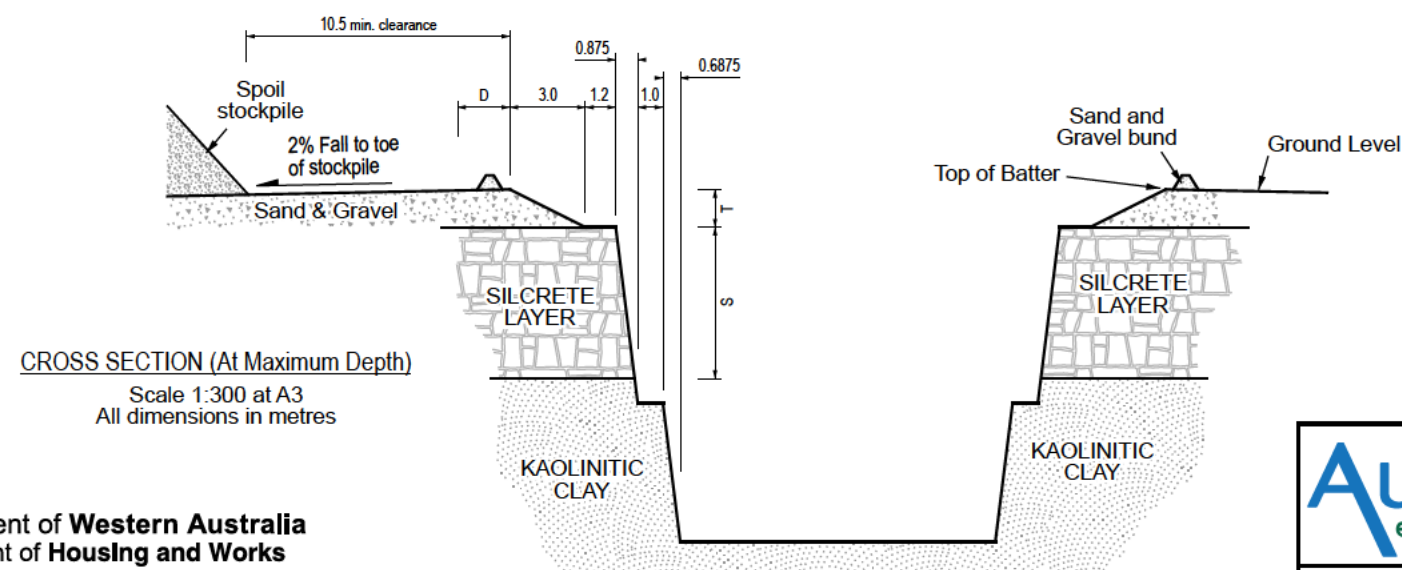
Figure 2

Job: DFI-PP03939



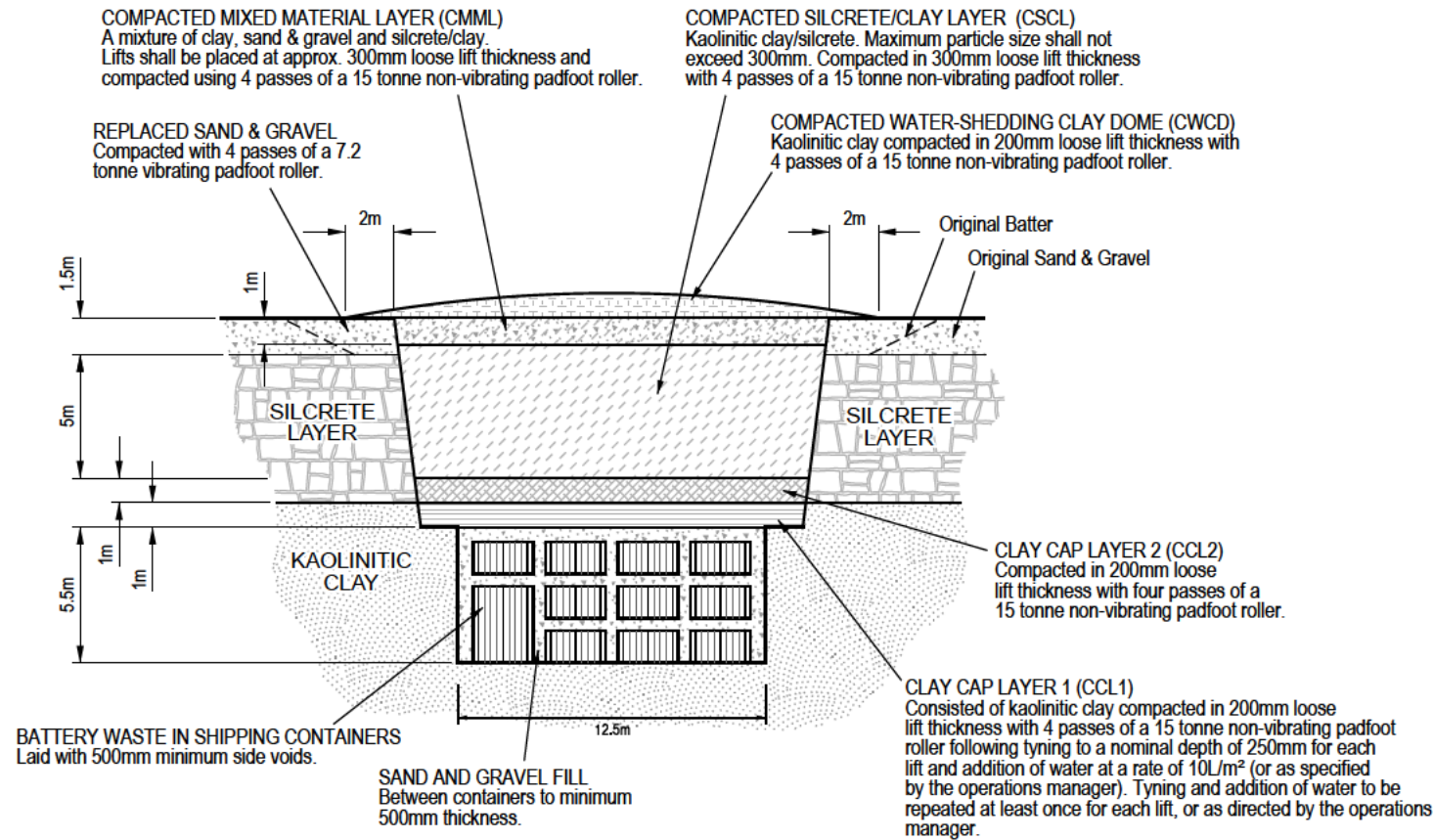
HEAVY MACHINERY EXCLUSION ZONE

D = Distance from edge of excavation
D = S/4 or T/2 whichever is greater

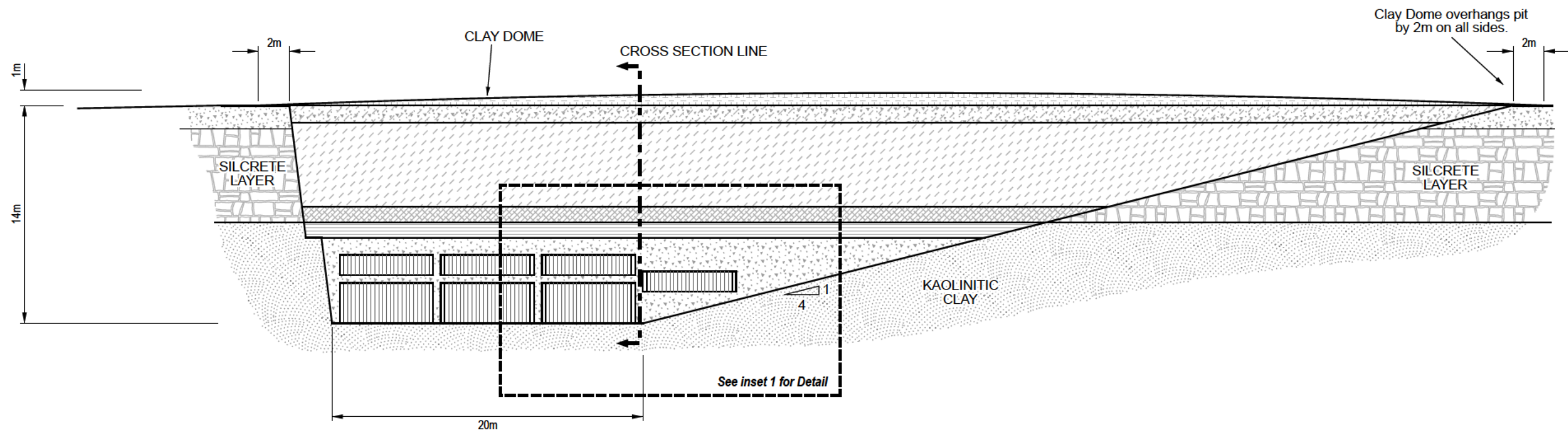


- NOTES:

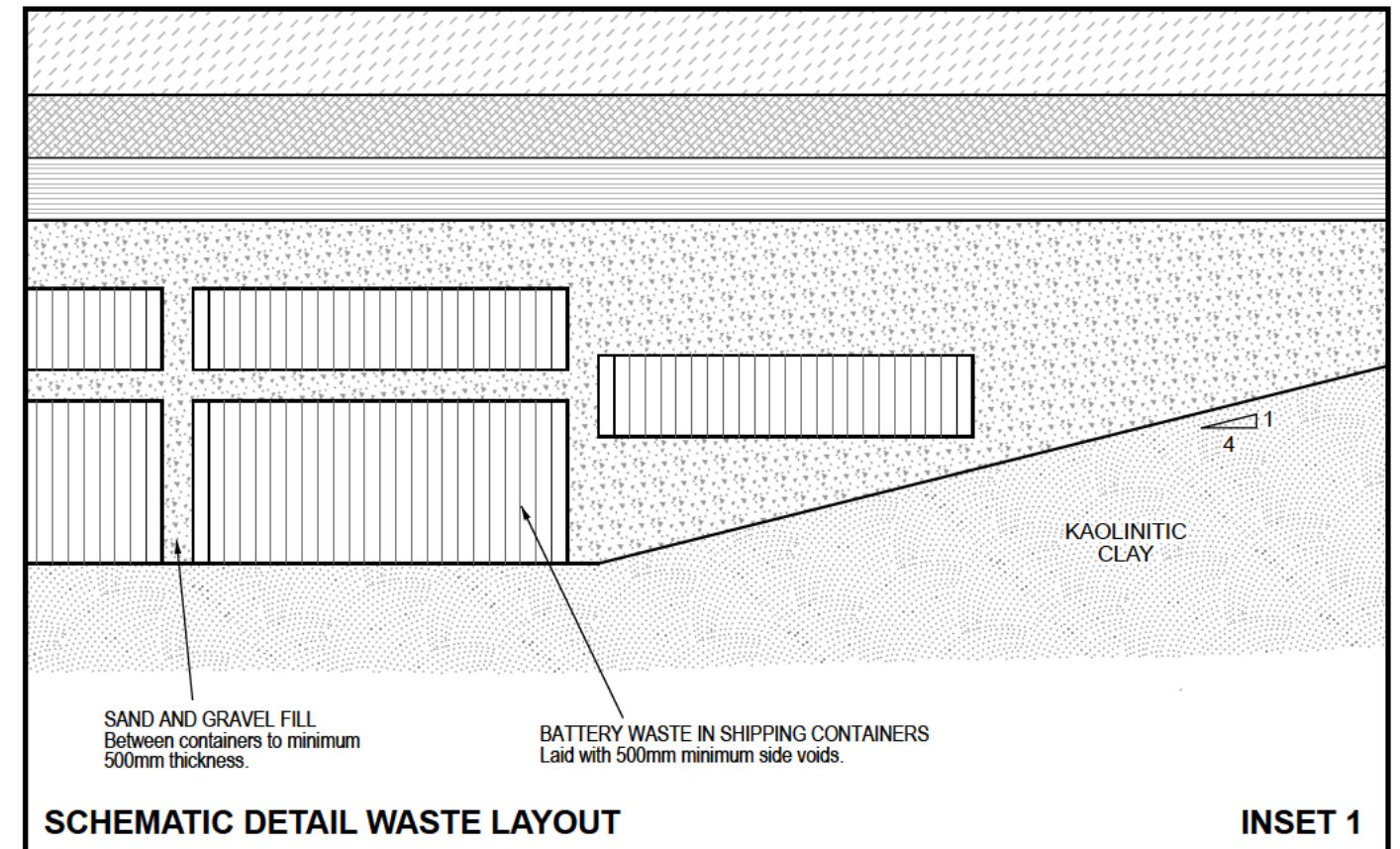
1. All work shall be carried out in dry weather conditions.
2. Machinery shall observe a heavy machinery exclusion zone adjacent to edge of excavation.
3. Visual examination by Geotechnical Engineer or Geologist to confirm exclusion zone.
4. Loading of waste to be undertaken by contractor.
5. Sand and gravel, silcrete rubble and kaolinic clay to be stockpiled separately.
6. Final location and alignment of trench to be determined on site in consultation with site manager.
7. Final location and alignment of trench to be determined on site in consultation with site manager.
8. Exact dimensions of trench may vary based on the dimensions of the silcrete layer.
Exact dimensions shall be confirmed on site by the site manager.
9. Open joints, fractures and other discontinuities exposed in the silcrete layer during excavation shall be removed to the site managers satisfaction.



SCHEMATIC CROSS SECTION



LONGITUDINAL SECTION



INSET 1



Government of Western Australia
Department of Housing and Works



Drawn: [Redacted] Date: 3 Aug 2026

Department of Housing and Works
CONSTRUCTION SPECIFICATION DISPOSAL OF BATTERY WASTES AT THE INTRACTABLE
WASTE DISPOSAL FACILITY MT WALTON EAST WASTE DISPOSAL TRENCH 2026NRT01

**CAPPING AND PROPOSED
WASTE PLACEMENT DETAILS**

Figure 4

Job: DFI-PP03939

APPENDICES

APPENDIX A

Environmental Management System Documentation

FIGURE 1 Principal Environmental, Health and Safety Management System Documents

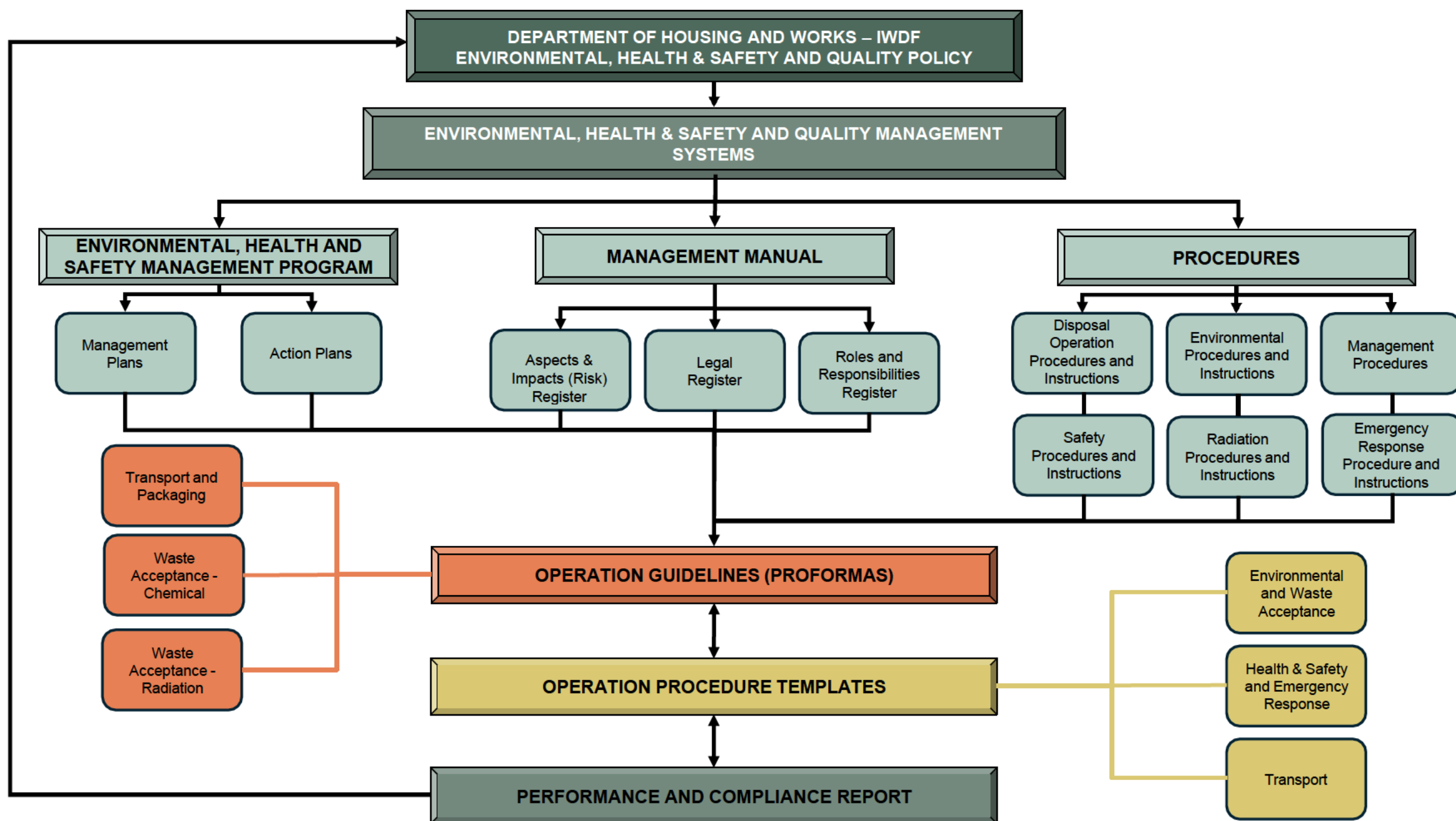
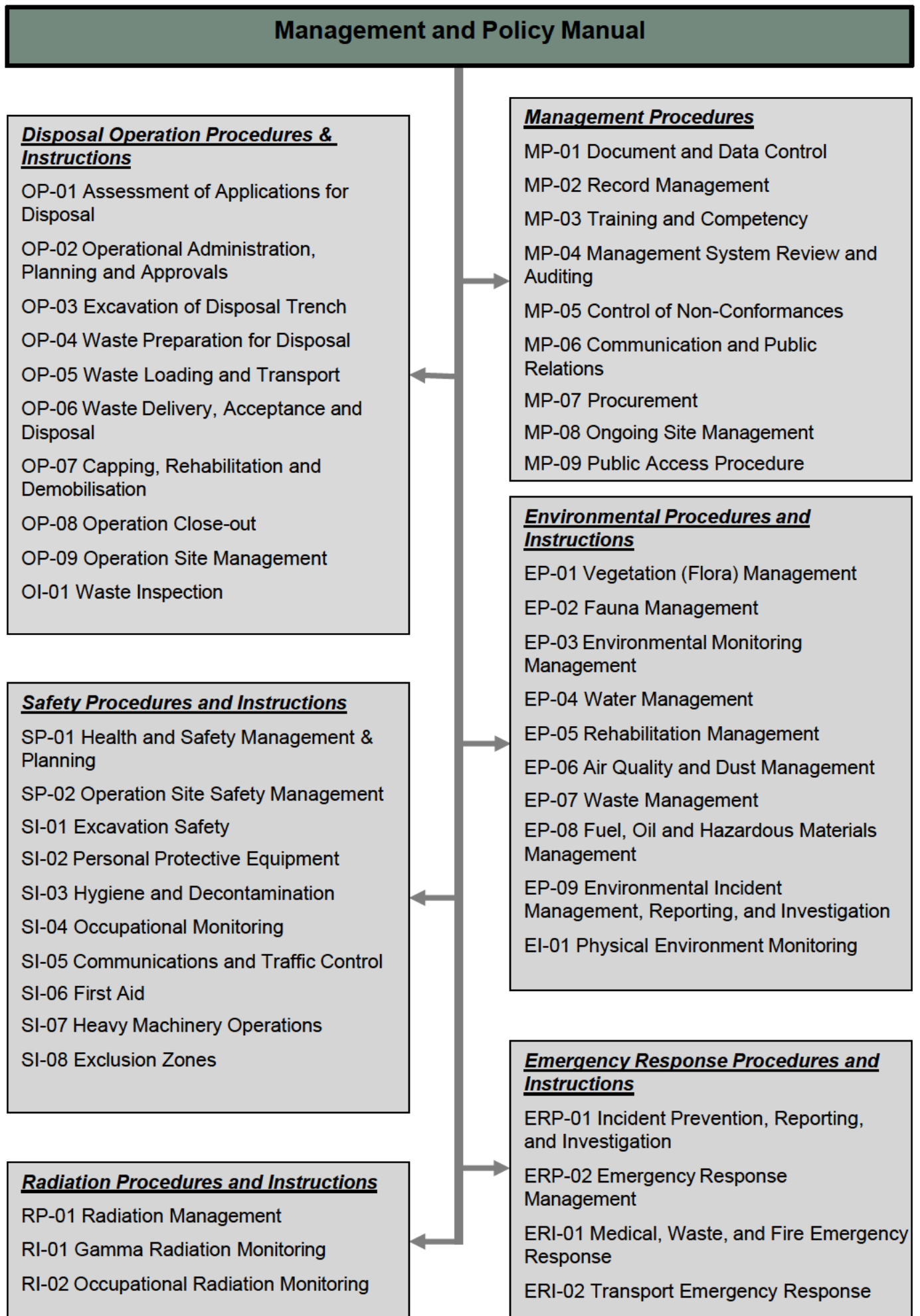


FIGURE 2 IWDF PROCEDURE STRUCTURE



APPENDIX B

Waste Acceptance Proformas

Waste acceptance proforma from DWER (including chemical description of waste and information on alternatives to disposal at the IWDF)

Waste Inspection Record (Form 53)



Government of **Western Australia**
Department of **Housing and Works**

**DISPOSAL OF CHEMICAL WASTES AT THE
INTRACTABLE WASTE DISPOSAL FACILITY,
MT WALTON EAST**

**WASTE ACCEPTANCE GUIDELINES
AND
WASTE ACCEPTANCE PROFORMA**

JULY 2026

PROFORMA REVISION 19

1. GUIDE TO ACCEPTANCE OF WASTE AT THE IWDF

The acceptances of waste for disposal at the Intractable Waste Disposal Facility (IWDF) is dependent upon compliance with waste acceptance criteria and the approval of operational procedures by the Environmental Protection Authority (EPA) and, where appropriate, the Radiological Council. This document outlines the waste acceptance criteria and introduces the Waste Acceptance Proforma. The Waste Acceptance Proforma must be completed by waste owners to enable an assessment of the suitability of the waste for disposal at the IWDF.

The IWDF waste **acceptance criteria** detail the properties and characteristics that deem wastes **unsuitable** for disposal at the IWDF. As such, wastes that are in the following categories are **not acceptable** for disposal at the IWDF:

- Waste for which there are alternative, readily available, and practicable, reuse, recycling, treatment, destruction, or disposal options in Australia.
- Waste generated outside Western Australia.
- Liquids.
- Explosive materials.
- Highly flammable materials.
- Highly reactive materials.
- Gases.
- Materials that decompose.
- Intermediate (or High) Level radioactive material.

These criteria are further defined and discussed in *Notes to the Waste Acceptance Proforma*.

Waste that is proposed for disposal at the IWDF must be packaged in accordance with the IWDF packaging requirements. Details of the packaging requirements are contained within the *Notes to the Waste Acceptance Proforma*. Preliminary information on packaging is required at this stage; however, further details will be requested at a later stage.

To allow an assessment of the suitability of your waste for disposal at the IWDF, please complete the *Waste Acceptance Proforma*. If the Department of Housing and Works (DHW) is not satisfied that the waste proposed for disposal complies with the acceptance criteria the waste will not be accepted for disposal at the IWDF. DHW approval will be subject to the requirements of the EPA.

Further information can be obtained by contacting:

[REDACTED]
Project Manager, IWDF Facility Management Contractor
Aurora Environmental
Phone: [REDACTED]
Email: [REDACTED]@auroraenvironmental.com.au

PROPOSAL FOR THE DISPOSAL OF LITHIUM BATTERY AND OTHER FIRE WASTE

The Mt Walton Intractable Waste Disposal Facility (IWDF) has been identified as the most appropriate disposal location for the lithium metal polymer (LMP) battery waste that was generated from a fire that occurred at a Maddington battery recycling facility in April and June 2026.

Most of the arising fire debris and battery waste (about 150 tonnes) has been containerised and transported to a facility in Wattleup. The waste proposed for disposal at the IWDF that is remaining at the Maddington site comprises approximately 100 tonnes of LMP batteries and damaged LMP batteries and 600 tonnes of contaminated soil and material.

The contaminated soil at the Maddington site is a result of firefighting efforts; while most material was removed to Wattleup, there is a significant remainder mixed into soil with buried battery cells, lithium metal pieces and other contaminants.

The Department of Water and Environmental Regulation (DWER) is leading a joint response by government of the Maddington Lithium Fire incident and will act on behalf of the State of Western Australia as the Waste Owner.

The proposal includes two stages of waste delivery to the IWDF for disposal:

- **Stage 1: Packaged Lithium metal polymer (LMP) battery waste**
Once prepared, the packaged LMP battery waste will be removed from the Maddington site and transported to a laydown area at Mt Walton IWDF, ahead of finalisation of the cell construction and burial for the proposed wastes.
- **Stage 2: Waste generated by fire and contaminated soil**
The remaining reactive contaminated fire debris located at an interim storage site in Wattleup and contaminated soil (with some entrained waste from the fire) from the Maddington site will be prepared and then transported to the IWDF once the relevant cell is constructed at the IWDF. Testing of this waste is underway to determine whether it is intractable waste; if some or all the waste is found suitable for acceptance at a class IV (or lower) landfill, that waste will be disposed of at an alternative premises and will no longer form part of this proposal for disposal at the IWDF.

Some sections of the proforma below have been replicated to allow each stage of waste delivery to be addressed separately.

WASTE ACCEPTANCE PROFORMA**DETAILS OF CHEMICAL WASTE PROPOSED FOR DISPOSAL AT THE
INTRACTABLE WASTE DISPOSAL FACILITY****DHW REFERENCE NUMBER:****WASTE DETAILS****1.0 CLIENT (WASTE OWNER) DETAILS**

Client's Name:	Department of Water and Environmental Regulation (DWER)
Address:	Prime House, 8 Davidson Terrace, Joondalup WA 6027
Telephone: (08)	██████████
Contact:	██████████
Telephone:	██████████
After hours contact number:	██████████
Email:	██████████@dwer.wa.gov.au

2.0(A) PRESENT LOCATION OF WASTE – MADDINGTON FACILITY

Approximately 100 tonnes of LMP batteries and damaged LMP batteries, and 600 tonnes of contaminated soil and material is stored at the Maddington facility.

2.1 Address:	Li-ion Energy 5 Burwash Place Maddington WA
2.2 Location at Site:	5 Burwash Place Maddington WA
2.3 Contact Person at address:	██████████ Director WorkSafe Petroleum Safety and Dangerous Goods Department of Local Government, Industry Regulation and Safety (LGIRS) ██████████ @lgirs.wa.gov.au Tel: ██████████ Mob: ██████████

2.0(B) PRESENT LOCATION OF WASTE – WATTLEUP FACILITY

150 tonnes of reactive contaminated fire waste remains at the Wattleup facility.

2.1 Address:

Hazrad Australia
Eastern third of Lot 4, Plan 18018; Volume 117; Folio 833
WATTLEUP WA 6166

2.2 Location at Site:

Eastern third of Lot 4, Plan 18018; Volume 117; Folio 833
WATTLEUP WA 6166

2.3 Contact Person at address:

██████████
Director Projects – Senior Hazardous Materials Supervisor
██████████@[hazrad.com.au](mailto:██████████@hazrad.com.au)
██████████

3.0 ORIGIN OF WASTE**3.1 Type of Waste:**

Packaged LMP battery waste (stage 1 waste) and waste arising from fire, including fire debris and contaminated soil (stage 2 waste).

The Stage 2 waste, currently at Maddington and at Wattleup, will be moved once the cell is constructed at the IWDF, subject to confirmation that it is intractable.

3.2 Date of Origin of Waste:

12 April 2026 and 4 June 2026

3.3 Location of Waste Generation:

Maddington facility, as above.

3.4 Process Generating Waste:

A fire occurred on 12 April 2026 at a lithium battery recycling facility operated by Li-ion Energy Pty Ltd in Maddington. Most of the fire debris and waste from the fire was containerised and transported to a facility in Wattleup, however, some debris, including soil exposed to fire water run-off, remains on the site.

Another, smaller, fire involving two LMP batteries occurred on 4 June 2026, which was extinguished quickly.

The contaminated soil at the Maddington site is a result of firefighting efforts; while most material was removed to Wattleup, there is a significant remainder mixed into soil with buried battery cells, lithium metal pieces and other contaminants.

The LMP batteries (stage 1 waste) remaining at the Maddington site are waste that was created before DWER, on behalf of the State of Western Australia, took ownership of the waste, and have no known treatment or recovery pathway.

3.5 Frequency of Disposal Requirements: Once only.

4.0(A) WASTE DESCRIPTION: PACKAGED LMP BATTERY WASTE (STAGE 1)

4.1 Description/Name of Waste: Packaged Lithium metal polymer (LMP) battery waste		
4.2 Physical Form: Solid; 161 packaged LMP batteries		
4.3 Intractable Component(s) of Waste: The entire waste mass is considered to be intractable. The key hazardous component is the high lithium metal content of the LMP batteries.		
4.4 Chemical Analysis of Waste Attached	Yes ☐	No ☒
4.5 Toxicology/ Material Safety Data Sheets (MSDS) attached:	Yes ☒	No ☐

4.0(B) WASTE DESCRIPTION: FIRE WASTE AND CONTAMINATED SOIL (STAGE 2)

4.1 Description/Name of Waste: Contaminated fire waste and contaminated soil		
4.2 Physical Form: Solid waste mass comprised of fire damaged battery components, fire debris and contaminated soil.		
4.3 Intractable Component(s) of Waste: As the wastes proposed for acceptance have arisen from fire and include damaged battery components, fire debris and contaminated soil, the entire waste mass is considered to be intractable.		
4.4 Chemical Analysis of Waste Attached Testing is underway; results will be provided when available (on/after 20/7/26)	Yes ☐	No ☒
4.5 Toxicology/ Material Safety Data Sheets (MSDS) attached:	Yes ☐	No ☒

5.0 PACKAGING AND WASTE QUANTITY

These details will be provided separately in the packaging, transport and handling risk assessments and plans for the removal and transport of the material, as prepared by the Department of Local Government, Industry Regulation and Safety (LGIRS).

Stage 1 waste will be transported in accordance with Packing Instruction P911 (batteries) or LP906 (battery modules removed from the batteries) – or alternative packaging and transport arrangements as approved by the Chief Dangerous Goods Officer.

		Yes	No
5.1 Current packaging (type): Sea containers of various heights		☒	☐
5.2 Does the current packaging satisfy IWDF transport and handling requirements?		☒	☐
If not, how will this be addressed?			
5.3 Are the packages compliant with the Australian Dangerous Goods Code:		☒	☐
5.4 Number of Waste Packages: 27 to 29			
5.5 Waste Package Weight: Variable up to 10 t		Volume: 18.9m ³ and 23.5m ³	
5.6 Waste Package Dimensions: Half height sea containers are 6.06m long, 2.44m wide and 1.28m high. Three quarter height sea containers are 6.06m long, 2.44m wide and 1.59m high.			
5.7 Proposed method of 'double' containment during transport: N/A			
If double containment is not proposed, please justify: Bulk waste is surrounded by sand in various sized sea containers. There is no viable way to double contain the waste, and it is necessary during transport to allow for any potential off-gassing to occur, unhindered by a secondary container.			
5.8 If re-packaging is required describe how this may affect the volume and quantity of waste for disposal:			

6.0 ALTERNATIVES TO DISPOSAL AT IWDF

NOTE: Supporting information regarding alternatives must be attached.

6.1 Waste Avoidance: Could not be avoided**Discussion:**

Stage 1 waste: As the waste was already created before DWER, on behalf of the State of Western Australia, took ownership of the waste, the waste could not be avoided.

Stage 2 waste: As the fire at the Maddington site already occurred before the DWER, on behalf of the State of Western Australia, took ownership of the waste, the waste could not be avoided.

6.2 Waste Reduction: Could not be reduced**Discussion:**

Stage 1 waste: As the waste was already created before DWER, on behalf of the State of Western Australia, took ownership of the waste, waste reduction could not be applied.

Stage 2 waste: As the fire at the Maddington site already occurred before DWER, on behalf of the State of Western Australia, took ownership of the waste, waste reduction could not be applied.

6.3 Waste Recycling: No viable recycling options identified for the waste subject to this proposal.**Discussion:**

Stage 1 waste: As the waste was already created before DWER, on behalf of the State of Western Australia, took ownership of the waste, waste recycling opportunities were limited, as the risks with these wastes were too high to use regular pathways for recycling (if any were available in Western Australia).

Stage 2 waste: As the fire at the Maddington site already occurred before DWER, on behalf of the State of Western Australia, took ownership of the waste, waste recycling could not be applied (as the material had become mixed and contaminated during the fire).

Other product wastes:

Other materials from the Maddington recycling facility that were not affected by the fire, including e-waste and normal alkaline, nickel cadmium and lithium-ion batteries will be managed using existing recovery and disposal pathways. Disposal of these other product wastes is not included in the IWDF disposal proposal.

6.4 Waste Treatment: No viable treatment options		
Discussion: <u>Stage 1 waste</u>: No viable treatment options have been identified to render the waste suitable for disposal at a lower class of landfill. <u>Stage 2 waste</u>: So far, no viable treatment options have been identified to render the waste suitable for disposal at a lower class of landfill. However, if a suitable treatment pathway is identified for some (or all) of the Stage 2 wastes before those wastes are due to be transported to the IWDF, then the documentation supporting the IWDF disposal proposal will be adjusted accordingly.		
6.5 Waste Destruction: No viable destruction options		
Discussion: <u>Stage 1 waste</u>: No viable destruction options have been identified for the Stage 1 waste. <u>Stage 2 waste</u>: The waste currently located at Wattleup will be transported to IWDF, however should the outcome of the laboratory analysis for the contaminated soil located at Maddington indicate disposal options other than IWDF then the documentation supporting the IWDF disposal proposal will be adjusted accordingly.		
6.6 Disposal at Class I-IV landfill (or other): Any Class I-IV waste that can be separated will be disposed to alternative premises		
Discussion: <u>Stage 1 waste</u>: LMP batteries, as part of the <i>packaged LMP battery waste</i>, are not suitable for disposal to landfill, other than Class V due to fire risk and potential environmental and human health and safety impacts. Isolation and containment by burial is an accepted method of disposal for this material in other jurisdictions around the world. <u>Stage 2 waste</u>: Disposal to a Class V landfill facility was determined to be the most assured option, as the solid waste mass was comprised of fire damaged battery components, fire debris and contaminated soil. Any waste identified through chemical analysis (results pending) as meeting waste acceptance criteria for landfills of a lower class than Class V landfill (such as for disposal of contaminated soils), then the relevant Stage 2 wastes will be disposed of at alternative suitable facilities.		
6.7 Supporting documentation attached (including costs):	Yes ☐	No ☒
Where relevant, this information will be provided separately.		
6.8 Disposal at IWDF is the only currently available method for dealing with the waste:	Yes ☒	No ☐

**7.0 (A) COMPATIBILITY WITH IWDF WASTE ACCEPTANCE CRITERIA:
PACKAGED LMP BATTERY WASTE (STAGE 1)**

	YES	NO
7.1 Free liquid or sludge (with potential for separation of free liquid) present:	☐	☒
7.2 Explosive:	☐	☒
7.3 Highly flammable:	☐	☒
7.4 Highly reactive:	☐	☒
7.5 Gaseous (or greater than 5% volume gas):	☐	☒
7.6 Decomposable material:	☐	☒
7.7 Intermediate (or High) Level radioactive waste:	☐	☒
7.8 Waste Compatible (all “No” answers above)?	☒	☐
7.9 If “No”, how will non-compatibility be addressed? <u>Added information regarding Stage 1 waste (packaged LMP battery waste):</u> In its original condition at the Maddington recycling facility, the LMP battery waste has reactive and flammable characteristics. Before transport, risk controls are applied in discharging, packaging and preparing the waste to preclude contact with substances that could trigger ignition or chemical reaction, particularly oxygen and water. At the time of acceptance at the IWDF, the flammable and reactive characteristics of the packaged LMP battery waste will have been controlled sufficiently to meet the waste acceptance criteria (WAC). The combination of the packaging and disposal controls is expected to suitably manage all risks derived from the characteristics of the original LMP battery waste materials. The recommended approach represents the only currently identified disposal pathway within WA for the Stage 1 wastes and is considered necessary to manage ongoing public safety and environmental risks.		

7.0(B) COMPATIBILITY WITH IWDF WASTE ACCEPTANCE CRITERIA: FIRE WASTE AND CONTAMINATED SOIL (STAGE 2)

	YES	NO
7.1 Free liquid or sludge (with potential for separation of free liquid) present:	☐	☒
7.2 Explosive:	☐	☒
7.3 Highly flammable:	☐	☒
7.4 Highly reactive:	☐	☒
7.6 Gaseous (or greater than 5% volume gas):	☐	☒
7.6 Decomposable material:	☐	☒
7.7 Intermediate (or High) Level radioactive waste:	☐	☒
7.8 Waste Compatible (all "No" answers above)?	☒	☐
7.10 If "No", how will non-compatibility be addressed?		

8.0 OTHER DETAILS

8.1 Any additional comments:

Additional information regarding Stage 2 waste (contaminated fire waste and contaminated soil):

The proposed disposal of stage 2 waste is expected to meet the waste acceptance criteria for the IWDF. So far, the disposal of stage 2 waste at the IWDF has been identified as the best pathway within WA to manage ongoing environmental and human health risks, as the waste includes contamination from a battery fire at the Maddington site that are expected to exceed Class IV acceptance criteria.

However, if subsequent laboratory analysis determines that an alternative pathway for managing the contaminated soil of the stage 2 wastes exists before those wastes are due to be transported to the IWDF, then the documentation supporting the IWDF disposal proposal will be adjusted accordingly.

ATTACHMENTS

A. Chemical Description of your waste	Yes	No	
Will be provided once available	☐	☒	
B. Safety Data Sheets (SDS)			
	☒	☐	
C. Information on alternatives to disposal at IWDF Mt Walton East			
No acceptable alternatives exist in Western Australia.	☐	☒	

I certify that all sections of the Waste Acceptance Proforma have been completed (unless not applicable). I understand that should any section of the Proforma be incomplete, no further consideration of the waste for disposal at the IWDF can be made by the Department of Housing and Works.

Completed by Authorised Client Representative:	
Name: 	Position: A/Executive Director Circular Economy Department of Water and Environmental Regulation
Signature: 	Date: 17 July 2026

NOTES TO THE WASTE ACCEPTANCE PROFORMA

1.0 CLIENT (WASTE OWNER) DETAILS

Insert details of the current owner of the waste (waste owner) and key personnel.

2.0 PRESENT LOCATION OF WASTE

Insert details of the location of the waste. It must be noted if the waste is to be transferred to another location prior to transport to the IWDF.

3.0 ORIGIN OF WASTE

3.1 Give a brief description of the waste (e.g. arsenic trioxide powder).

3.2/3 Insert the date and location of the generation of the waste (if known). **The IWDF will only receive wastes for disposal that originated (were produced) in Western Australia.**

3.4 Detail the process(es) by which the waste was generated (e.g. waste product of manufacturing process, etc.).

3.5 Details of the likely frequency at which waste may be accumulated to the point where disposal is required (e.g. one-off, yearly, 5-yearly, etc.).

4.0 WASTE DESCRIPTION

4.1 Detail the type of waste (e.g. contaminated soil, residue, additive, etc.).

4.2 Detail the physical form of the material (e.g. solid, liquid, gas, powder, sludge, grain size, colour, density, etc.).

4.3 Detail the intractable component(s) of the waste (e.g. arsenic, vanadium, PCB, etc.).

4.4 Where applicable chemical analysis of the waste must accompany the Proforma submitted (i.e., if the waste is a contaminated soil, sediment or residue, etc.). Representative analyses of samples from the waste consignment are to be taken according to a proposed sampling and analysis program by the waste owner, which also meets the requirements of the *Landfill Waste Classifications and Waste Definitions 1996 (as amended December 2019)* (DWER, 2019).

Analyses are to be reported for:

- The dominant intractable (i.e. radioactive or other) component(s) as total weight % (or mg/kg) or the activity concentration in Bq/kg, for every sample.
- The general chemical composition of the waste (including moisture content), for representative (e.g. selected or composite) samples.

The number of analyses required will be assessed by DHW on a case by case basis, based on the variability in the waste consignment as indicated by information supplied by the waste owner and the process(es) by which the waste was generated. It is likely that a minimum of 10% of waste packages will require sampling and analysis. Additional guidance for the sampling of solid waste is provided in *Landfill Waste Classifications and Waste Definitions 1996 (as amended December 2019)* (DWER, 2019), although DHW requirements may exceed those defined in this document.

In situations where chemical characterisation data is already available (e.g. standard operational analysis or where the waste material comprises raw products, which have original, clearly identifiable labels providing chemical component data), additional sampling may not be necessary, upon agreement with DHW. However, additional sampling and analysis must be undertaken if any waste material is not clearly identifiable.

This information shall be presented as a *Technical (Chemical) Description* of the waste, which is to be attached to the submitted Proforma (Attachment A).

- 4.5 Attach one (or more) Safety Data Sheet(s) (SDS – previously MSDS Material Safety Data Sheets), where applicable. SDS should contain information to the requirements of WorkSafe (i.e. National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC: 2011(2003)]).

5.0 PACKAGING AND WASTE QUANTITY

- 5.1 Provide details of current packaging types e.g. UN rated bulka bags, UN rated 205L steel drums etc.

5.2 To satisfy IWDF packaging requirements the packaging should fulfil the following criteria:

- Each filled container must not have a total measured weight of more than the Safe Working Load;
- Be disposed of with the waste;
- Be filled so as to contain no significant voids;
- Be free of ruptures at the point of delivery;
- Be free of external contamination at the point of delivery;
- Not significantly deteriorate during storage, transport and handling as a result of contact with the waste;
- Remain intact during normal transport and handling procedures;
- Be strong enough to be walked on if required;
- Be clearly labelled with the waste owners name and identification number on opposite sides of the waste package;
- Allow no leakage during normal transport and handling operations; and
- Be capable of containing all the waste whatever the orientation of the package.

5.3 Please contact the Department of Energy, Mines, Industry Regulation and Safety to discuss your transport requirements under the Australian Dangerous Goods Code.

5.4 Specify the number of waste packages (waste package = waste + packaging to be disposed; e.g. filled bulk bag, filled steel drum), the weight, volume and dimensions of each waste package and the weight/volume of the entire consignment of waste.

5.5/6 Provide details of waste package weight and dimensions.

5.7 Double containment is defined as a system of waste containment used during transport that provides both a primary and secondary level of protection against spillage of the waste in case of a traffic accident. The double containment of waste is a standard requirement for all waste transported to the IWDF.

The objectives of double containment are to:

- keep the risk of emission to the environment of waste spilt or emitted from the primary package in the event of a traffic accident, as low as reasonably achievable; and
- keep the risk of the primary package falling from the transport in case of a traffic accident, as low as reasonably achievable.

The secondary container should be capable of containing the waste itself, with no leakage whatsoever, if any primary containers are breached.

The necessity for double containment is, however, dependent on the physical and toxicological characteristics of the waste. It is necessary, for example, to double contain powdery toxic materials while it is unnecessary and impractical to double contain bulk concrete blocks contaminated with heavy metals held within the concrete matrix.

Justification on why double containment may not be required must be detailed in this section by the waste owner.

- 5.8 If it is anticipated that significant re-packaging is likely to be required, the estimated quantity of waste packages to be disposed should be given in addition to the existing quantity.
- 5.9 Please estimate the percentage increase in volume if the waste packaging is to change.

6.0 IWDF DISPOSAL ALTERNATIVES

- 6.1-5 Please provide details on alternatives to technology that have been adopted to avoid the disposal of waste at the IWDF. Each alternative **must** be addressed. Detail needs to be provided on the waste treatment options that have been investigated.

The disposal of waste at the IWDF is regarded as an option of last resort. Thus, for waste to be accepted at the IWDF, **it must be proven that there is no alternative, readily available, and practicable, reuse, recycling, treatment, and destruction or disposal options in Australia (other than similar burial options).**

The Department of Housing and Works requires a strict adherence to the “waste hierarchy”, in that waste reduction, and recycling, reuse or treatment, will be preferred over the disposal option. The alternative options to disposal of waste at the IWDF, Mt Walton East are:

- waste avoidance - practices which prevent the generation of waste altogether;
- waste minimisation - practices which reduce waste;
- waste reuse - direct reuse of waste materials for the same grade of use;

- waste recycling and reclamation - using valuable components of waste in other processes;
- waste treatment - to reduce hazard or nuisance, preferably at the site of generation;
- treatment to change the chemical and physical form of the waste to permit the implementation of alternative disposal options; and
- destruction – e.g. incineration.

Waste that is acceptable at Class I, II, III or IV landfills will not be accepted for disposal at the IWDF, which is a Class V landfill. Acceptance Criteria for Class I, II, III and IV landfills are given in the *Landfill Waste Classifications and Waste Definitions 1996 (as amended December 2019)* (DWER, 2019).

7.0 COMPATIBILITY WITH WASTE ACCEPTANCE CRITERIA

Using the description below as a guide, please assess the properties of your waste against the Waste Acceptance Criteria.

Waste types **not acceptable** for disposal at the IWDF, are listed below.

- 7.1 **Liquids – Not Accepted.** Liquids (except in very small volumes) are unacceptable for burial at the IWDF since it is assumed that they will ultimately escape from their containers and seep into the surrounding clay formation that acts to confine the waste. While this would not result in off-site contamination, if the volume of liquid is significant, the loss of volume could potentially cause slumping and cracking in the capping structure and result in rainwater infiltration into the waste cell.

Appropriate measures must therefore be implemented by the waste owner to prevent the presence of any free liquid within the waste or within the containers. Proposed measures should be approved by DHW **BEFORE** being implemented to ensure that the outcome satisfies the requirements of the IWDF operators.

Sludge must have any free liquid removed prior to transport and should have sufficient absorbent material added to the container to absorb any liquid that may be separated during transport to the IWDF. Conservative quantities of absorbent material (e.g. 30-40% of waste volume) may have to be added to waste packages containing sludge waste unless specific vibration testing is undertaken to determine the potential for liquid separation (tests may include laboratory vibration table testing or transport trials).

7.2 Explosive materials – Not Accepted. The following classes of materials, as defined by the *Australian Code for the Transport of Dangerous Goods by Road and Rail* (2024), are not accepted at the IWDF:

- *Class 1.1 – substances and articles that have a mass explosion hazard.* A mass explosion is one that affects almost the entire load virtually instantaneously.
- *Class 1.2 – substances and articles that have a projection hazard but not a mass explosion hazard.*
- *Class 1.3 – substances and articles that have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard.* This includes substances and articles that give rise to considerable radiant heat, or that burn one after another, producing minor blast or projection effects or both.

Materials that are not themselves explosive, but which have the potential to form or generate an explosive atmosphere of gas or vapour may not be suitable for disposal at the IWDF. This would depend on several factors such as the rapidity of vapour or gas generation and the reactions involved. For example, soil contaminated with a mixture of DDT and toluene has been accepted for disposal.

7.3 Highly flammable materials – Not Accepted. *Australian Code for the Transport of Dangerous Goods by Road and Rail* (2024) defines flammable solids in the following manner:

1. *flammable solids* comprise:
 - solids that, under conditions encountered in transport, are readily combustible or may cause or contribute to fire through friction;
 - self-reactive and related substances that are liable to undergo a strongly exothermic reaction; and
 - desensitised explosives that may explode if not diluted sufficiently.
2. *substances liable to spontaneous combustion* comprises substances that are liable to spontaneous heating under normal conditions encountered in transport, or to heating up in contact with air, and then being liable to catch fire;

3. *substances that, in contact with water, emit flammable gases* comprises substances that, by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities.

Some substances that are flammable, such as wood and synthetic materials (e.g. contaminated PPE), may be acceptable for burial if they require an open flame and oxygen for combustion since they will be buried in an environment essentially devoid of both these characteristics.

7.4 Highly reactive materials – Not Accepted. The following classes of materials, as defined in the *Australian Code for the Transport of Dangerous Goods by Road and Rail* (2024), are not accepted:

- *Class 5 - Oxidising Substances.* Substances that, while in themselves not necessarily combustible, may, generally by yielding oxygen, cause, or contribute to, the combustion of other materials.
- *Class 8 - Corrosive substances.* Substances that, by chemical action, will cause severe damage when in contact with living tissue, or, in the case of leakage, will materially damage or even destroy, other goods or the means of transport; and may cause other hazards.

For waste disposal operations at the IWDF involving the co-disposal of more than one type of waste, DHW will consider the compatibility of the waste consignments and reserves the right to exclude a particular waste consignment from a specific disposal trench on this basis.

Verification of the corrosive or oxidising nature of the material may be required, by a combination of chemical (pH) and other corrosivity testing (see below).

7.5 Gases – Not Accepted. Gases are defined, for the purposes of the *Australian Code for the Transport of Dangerous Goods by Road and Rail* (2024), as substances that at 50°C have a vapour pressure greater than 300kPa; or completely gaseous at 20°C and a standard pressure of 101.3kPa.

Gases are therefore precisely defined and will not be accepted at the IWDF for disposal. However, uncompressed gas comprising less than 5% of the waste volume (or as otherwise specified by the Department of Housing and Works) that is deemed to be satisfactorily contained may be accepted.

Compressed gases will not be accepted for disposal.

7.6 Materials that may decompose – Not Accepted. Materials that are likely to decompose and produce combustible hazardous gases or wastes that decompose and become compressible are not suitable for burial at the IWDF. Any significant volume reduction resulting from decomposition could compromise the integrity of a capping system. In addition, gases generated within a waste cell have the potential to create subsurface pathways, which could provide a route for subsequent rainwater ingress to the cell. Such materials include organic, domestic wastes.

7.7 Intermediate Level Waste (ILW) or High Level Radioactive Waste – Not Accepted. The *Code for Disposal Facilities for Solid Radioactive Waste (2018)* states that ILW radioactive material is unacceptable for near-surface disposal and should be disposed of at depths of 10s or 100s of metres. Such disposal is not currently available at the IWDF.

Separate Guidelines for Radioactive Waste Acceptance, including further definitions and requirements related to radioactive waste disposal at the IWDF, are available from DHW.

7.8 Please provide details on how non-compatibilities will be addressed.

Examples of Wastes Previously Disposed at the IWDF

Past disposal operations at the IWDF from 1992 to 2020 have included the following:

- Soil contaminated with pesticides.
- Soil contaminated with DDT and toluene.
- Soil contaminated with PCBs.
- Pipes contaminated with PCBs.
- Low level radioactive wastes including depleted “Exit” signs, sources from industrial/agricultural gauges, radioactive medical waste, and smoke detectors.
- Industrial equipment contaminated with low levels of naturally occurring radioactive materials (NORMs).
- Arsenical sheep dip chemicals.
- Arsenic trioxide powder from the processing of gold ore.
- Arsenic trioxide fumes from the processing of tantalum.
- Arsenic waste from industrial processes.

8.0 OTHER DETAILS

Any further details, which the waste owner may wish to provide or comment upon.

REFERENCES

Australian Radiation Protection and Nuclear Safety Agency (2018). *Code for Disposal Facilities for Solid Radioactive Waste, Radiation Protection Series C-3*. Released October 2018.

Department of Water and Environmental Regulation (2019) *Landfill Waste Classifications and Waste Definitions 1996 (as amended December 2019)*.

Ministerial Statement No 562 (2001) *Statement to Amend Conditions Applying to Proposals (Pursuant to the Provisions of Section 46 of the Environmental Protection Act, 1986) Intractable Waste Disposal Facility, Mt Walton East, Shire of Coolgardie*, Published on 1 February 2001. As per Notice of amendment to implementation conditions approved under section 45C of the Environmental Protection Act 1986.

National Transport Commission (2024) *Australian Code for the Transport of Dangerous Goods by Road and Rail*. Edition 7.9 (released July 2024).

GLOSSARY

Acceptance Criteria	Criteria which describe the properties and characteristics of waste and packaging, which must be complied with for waste to be accepted for disposal at the IWDF.
Client	Any natural person, body or corporation who proposes to dispose of intractable waste at the IWDF as part of a specific waste disposal operation (waste owner).
DHW	Department of Housing and Works
Double Containment	A system of waste containment used during transport that provides both a primary and secondary level of protection against spillage of the waste in the event of a traffic accident.
FMC	Facility Management Contractor for the Intractable Waste Disposal Facility, Mt Walton East.
Guideline	Documents which give guidance on aspects such as waste acceptance for disposal, waste packaging, and transport of waste to the IWDF.
Intractable Waste	Waste that is a management problem by virtue of its toxicity or chemical or physical characteristics which make it difficult to dispose or treat safely and is not suitable for disposal in Class I, II, III or IV landfill facilities (Landfill Waste Classifications and Waste Definitions 1996 (as amended December 2019), Western Australia: Department of Water and Environmental Regulation 2019).
IWDF	Intractable Waste Disposal Facility, located at Mt Walton East, Western Australia.
LLRW	Low level radioactive waste that conforms to the <i>Code for Disposal Facilities for Solid Radioactive Waste (2018)</i> .
LMP	Lithium metal polymer.
Packaging	Primary form of containment for the waste.
OEWP	Operation Environmental and Waste Acceptance Procedures (procedures for the environmental management of a specific disposal operation at the IWDF).

OHS&ERP	Operation Health & Safety and Emergency Response Procedures (procedures for the health & safety and emergency response of a specific disposal operation at the IWDF).
OTP	Operation Transport Procedures (procedures for the transport of wastes related to a specific disposal operation at the IWDF).
PPE	Personal Protective Equipment.
Transporter	Any natural person, body or corporation who has possession of intractable waste and is transporting it for disposal at the IWDF.
Waste Owner	Any natural person, body, or corporation, including an authorised delegate, who may be the original waste producer, or may have subsequently assumed ownership of waste, who proposes to dispose of their waste at the IWDF.
Waste Package	The waste and any packaging that will be disposed at the IWDF (disposal unit).

UNITS/ABBREVIATIONS

L	litre
m	metre
mg/kg	milligram per kilogram (10^{-3}g/kg).

INTRACTABLE WASTE DISPOSAL FACILITY
MT WALTON EAST, WESTERN AUSTRALIA
WASTE INSPECTION RECORD
IWDF-FORM-53

Inspector: [REDACTED]	Date: 15/07/.2026
Site Location: Maddington and Wattleup	
Waste Owner: DWER	
Site Contact: [REDACTED]	
Waste Description: Defective lithium metal batteries and fire-affected batteries	
Disposal Operation: 2026NRT01	

Phase of Inspection:		
☒ Preliminary assessment	☐ Post-packaging	☐ Arrival at IWDF
☐ Treatment/Packaging of waste	☐ Loading for transport	☐ Other (specify)

Issue/Criteria	Checked (tick)	Comments (Details regarding nature of waste, filling material, type of packaging, type of seal, specific packages that are not compliant, etc.)
Waste is solid, with no potential for separation of free liquid	Yes ☒ No ☐ n/a ☐	
The waste is double contained (primary and secondary packaging)	Yes ☐ No ☐ n/a ☒	See appropriate justification in WAC
The primary packaging:		
Is intact	Yes ☒ No ☐ n/a ☐	
Is sealed	Yes ☐ No ☐ n/a ☒	See reasons in WAC
Is free of external contamination	Yes ☒ No ☐ n/a ☐	
Is numbered	Yes ☐ No ☐ n/a ☒	Not yet but will be
Has a suitable dangerous goods label	Yes ☐ No ☐ n/a ☒	Not yet but will do
Each package is filled so as to contain no significant void space	Yes ☒ No ☐ n/a ☐	Will be topped up on site, if necessary, as transport weight cannot be exceeded
The secondary container:		
Is intact	Yes ☐ No ☐ n/a ☒	
Is sealed	Yes ☐ No ☐ n/a ☒	
Is free of external contamination	Yes ☐ No ☐ n/a ☒	
Is numbered	Yes ☐ No ☐ n/a ☒	
Has a suitable dangerous goods label	Yes ☐ No ☐ n/a ☒	
The waste has appropriate chain of custody documentation:		
Loading Checklist	Yes ☐ No ☐ n/a ☒	Prior to loading
Chain of Custody Record	Yes ☐ No ☐ n/a ☒	At loading
Certificate of Identification	Yes ☐ No ☐ n/a ☒	In OTP
Controlled Waste Tracking Form	Yes ☐ No ☐ n/a ☒	In OTP if necessary
Weight of waste packages given?	Yes ☐ No ☐ n/a ☒	In OTP
Photographs taken?	Yes ☒ No ☐ n/a ☐	Included in OTP
If radioactive material - has an assessment against the Safety Case been completed by the RSO?	Yes ☐ No ☐ n/a ☒	

Original to FMC Operations Manager (or IWDF Waste Delivery File if at IWDF site). Copy to DHW IWDF Project Manager.

APPENDIX C

DHW IWDF – Lithium-Ion Battery Disposal Waste Acceptance Criteria EPA Submission



Our Ref: 2013/12355 (08722700)
Enquiries: [REDACTED]
Telephone: [REDACTED]

Chair
Environmental Protection Authority
Department of Water and Environmental Regulation
Locked Bag 10
Joondalup DC WA 6919
Via email: [REDACTED]@dwer.wa.gov.au

Dear Sir/Madam

INTRACTABLE WASTE DISPOSAL FACILITY MOUNT WALTON EAST - LITHIUM-ION BATTERY ACCEPTANCE CRITERIA SUBMISSION

1. The Proposal

It is proposed that the battery waste of approximately 850 tonnes (t), that resulted from a warehouse fire and the subsequent suppression of the fire using sand, be disposed of at the Intractable Waste Disposal Facility (IWDF) Mount Walton East by trench burial. Trench burial in the normal manner, consistent with the requirements of Ministerial Statement (MS) 562 will result in the waste being placed in a trench 14 metres deep within a thick kaolinitic clay profile. The waste will be surrounded and covered by over 1,800 cubic metres of sand and gravel, with a two-metre-thick clay cap and then up to another eight metres of silcrete and clay. The material overlying the waste, in addition to the sand and gravel, will amount to another 12,000 cubic metres.

As per previous disposals at the IWDF, waste is usually delivered to the site as the trench is being constructed and is temporarily located opposite to the ramp, ready for placement once construction is finalised. It is proposed to do the same with this disposal, with the only modification being to allow a clearance of 5 metres around each package of waste (i.e. half height sea containers) to provide access for a loader to be able to place sand over any waste, should it reignite due to vibrations associated with the unloading process. Such reignition is considered low-risk and unlikely, as the waste is already covered with sand, which should largely prevent oxygenation of any potential ignition source and/or fire.

All the usual protocols associated with disposal activities at the site, as required by the comprehensive IWDF Environmental, Health and Safety, and Quality Management System under MS 562, which was recently updated and approved by the Department of Water and Environment Regulation (DWER) in June 2026, will be followed.

These protocols are identified and presented in the Operational Environmental Waste Acceptance Procedures (OEWP) that will be produced and submitted for review in the usual manner as required under MS 562, Schedule 2, Proponent Commitment 4. The OEWP provides greater detail on the method of disposal, handling and monitoring undertaken during the operation and describes compliance of the proposed disposal with the relevant Proponent Commitments.



2. Waste Acceptance

Acceptance of the waste for disposal is guided by the Chemical Waste Acceptance Criteria for the IWDF which states that highly flammable wastes are not accepted for disposal, but that they may be accepted “if they require an open flame and oxygen for combustion since they will be buried in an environment, essentially devoid of both these characteristics”. Given that the battery waste will be buried under thousands of cubic metres of material that precludes oxygen and an ignition source, it is claimed that the material fits the current waste acceptance criteria, subject to the management and mitigation measures set out in Table 1 below.

It should also be noted that the sole purpose of the IWDF site is to accept wastes for which there is no viable alternative and that no viable alternative has been found, particularly as the IWDF option provides for the waste to be housed in a purpose constructed cell without any other material present. The other feature of disposal within the clay profile at the IWDF and the subsequent capping of the waste, is that the whole system is designed to preclude any water ingress.

3. Key Hazards, Potential Impacts and Management / Mitigation Measures

Waste composition and key hazards

While quantitative data on the waste composition for the battery waste is not available, the key hazard identified on the known composition is the high lithium metal content, resulting in a high flammability risk. The risk is caused by the reaction that occurs when lithium metal is in contact with water or moisture, with release of flammable hydrogen gas. Exposure to air increases the risk of secondary reactions, such as hydrogen gas ignition or explosion or hot lithium reactions with air resulting in the release of gases. The key mitigation measure is therefore to protect lithium metal from contact with water.

Damaged lithium batteries are managed as hazardous waste in Australia, which precludes management through options within the waste hierarchy, leaving only landfill. Disposal to landfill is precluded, other than to Class IV (secure landfill) or Class V (intractable landfill) sites. The IWDF facility provides for disposal of the battery waste without co-disposal or mixing with other waste types.

The formally recognised risks and mitigation measures for lithium metal are in the attached Sigma-Aldrich Material Safety Data Sheet (MSDS). These risks and mitigation measures have been considered in the context of the proposed battery waste disposal at the IWDF, as outlined in Table 1 below.

The Department of Housing and Works (DHW), on behalf of the Minister for Works, also notes the significant and growing community concern around the current storage location of the battery waste and the consequential risks it poses to surrounding properties and neighbourhoods. While this is a matter for the waste owner to consider, DHW is mindful of these risks relative to those associated with transportation and disposal.



Table 1: Operational elements, key risks / potential impacts and residual risk / impacts after proposed mitigation measure

Operational Element	Risk / Potential Impact	Management / Mitigation Measure	Revised Probability and Consequence	Residual Risk / Potential Impact
Unloading of waste and placement of waste in laydown area.	Agitation / rainfall leading to release of flammable gas / fire. Spread of fire to surrounding native vegetation.	Clearing 10,000m² of vegetation for laydown area, including an additional fire break area. Keep waste within separate containers with minimum five metre separations. Protect waste from moisture by limiting disruption to the sand and tarp covers. Continual visual monitoring of waste and site conditions during offloading and placement. Weather conditions will be monitored prior to and during unloading and placement activities, with activities suspended during significant rainfall events or other adverse conditions that may increase the risk of fire. Standard fire extinguishing capability in place. Note that placement of sand is a recognised fire mitigation method for lithium (refer to attached MSDS, section 5). A 980 Wheel Loader will be onsite on standby with sand for fire suppression. DFES will be consulted prior to disposal activities regarding emergency response arrangements and on-site attendance during unloading activities.	Proposed mitigation measures reduce the likelihood and consequence of identified risks to a level that is considered acceptable and manageable.	Residual risk is considered low, with potential impacts limited to localised and manageable fire incidents that can be controlled using site emergency response procedures. Small-scale fire incidents will be mitigated through standard fire extinguishing methods to prevent any spread into native vegetation and large-scale release of smoke and gas.



Operational Element	Risk / Potential Impact	Management / Mitigation Measure	Revised Probability and Consequence	Residual Risk / Potential Impact
Placement of waste in trench.	Agitation / rainfall leading to release of flammable gas / fire. Potential increase in risk due to: - Placement of incompatible materials. - Delay in disposal readiness (for example, trench preparation). Spread of fire to surrounding native vegetation. Release of hazardous decomposition products (Note MSDS section 10 – incompatible material) resulting from interaction with water table.	Continual visual monitoring during placement. Keep handling of waste to a minimum (for example, limited double handling). Keep waste within separate containers with minimum five hundred millimetre separations. Continual visual monitoring of waste and site conditions during placement process. Standard fire extinguishing capability in place. Note that placement of sand is a recognised fire mitigation method for lithium (refer to attached MSDS, section 5). A 980 Wheel Loader will be onsite on standby with sand for fire suppression DFES will be consulted prior to disposal activities regarding emergency response arrangements and on-site attendance during placement activities. Detailed waste characterisation information will be provided prior to disposal. IWDF site owner reserves the right to reject waste packages that are inconsistent with the approved waste description or disposal criteria. No co-disposal of waste.	Proposed mitigation measures reduce the likelihood and consequence of identified risks to a level that is considered acceptable and manageable.	Residual risk is considered low, with potential impacts limited to localised and manageable fire incidents that can be controlled using site emergency response procedures. Small-scale fire incidents will be mitigated through standard fire extinguishing methods to prevent any spread into native vegetation and large-scale release of smoke and gas. Placement of incompatible materials / release of hazardous decomposition products mitigated by understanding of waste composition prior to disposal and gas monitoring during placement of waste in trench and no co-disposal of waste. Risk of delay in disposal readiness mitigated by implementation of buffer period from planned drilling and blasting phase of trench construction to delivery of waste.



Operational Element	Risk / Potential Impact	Management / Mitigation Measure	Revised Probability and Consequence	Residual Risk / Potential Impact
		Buffer period from planned drilling and blasting phase of trench construction to delivery of waste implemented. No water table present at the site as demonstrated by over 35 years of monitoring. Photoionization Detector (PID) and Hydrogen Fluoride (HF) monitoring equipment will be used during placement activities to provide real-time early detection of potential hazardous gas releases.		
Sand / gravel backfill around waste	Agitation / rainfall leading to release of flammable gas / fire. Ingress of water resulting in heating of large volumes of waste and potential ignition / explosion.	Keep waste within separate containers with minimum five hundred millimetre separations. Protect waste from moisture by limiting disruption to the sand and retaining tarp covers during waste package burial. Continual visual monitoring of waste and site conditions during backfill process. Backfill process continually refined to minimise potential disturbance to waste once placed in the trench. Standard fire extinguishing capability in place. Note that placement of sand is a recognised fire mitigation method for lithium (refer to attached MSDS, section 5). A 980 Wheel Loader will be onsite on standby with sand for fire suppression.	Proposed mitigation measures reduce the likelihood and consequence of identified risks to a level that is considered acceptable and manageable.	Residual risk is considered low, with potential impacts limited to localised and manageable fire incidents that can be controlled using site emergency response procedures. Noting that once covered by sand / gravel backfill, the risk of fire is significantly reduced. Passive gas dissipation through the surrounding backfill materials is expected to minimise the potential for accumulation of combustible gases. Consequently, the likelihood of pressure build-up sufficient to create ignition / explosion hazards is considered low.



Operational Element	Risk / Potential Impact	Management / Mitigation Measure	Revised Probability and Consequence	Residual Risk / Potential Impact
		DFES will be consulted prior to disposal activities regarding emergency response arrangements and on-site attendance during sand / gravel backfill activities. Site observations from previous disposal operations indicate that water ingress has been limited to approximately 10 mm into the sand and gravel layer. This suggests limited potential for water infiltration into the waste at a depth of nine metres. The permeability of the sand / gravel backfill is expected to facilitate passive dissipation of gases generated within the waste.		
Clay capping and backfilling of silcrete / clay	Agitation / rainfall leading to release of flammable gas / fire. Ingress of water resulting in heating of large volumes of waste and potential ignition / explosion.	Standard fire extinguishing capability in place. Note that placement of sand is a recognised fire mitigation method for lithium (refer to attached MSDS, section 5). A 980 Wheel Loader will be onsite on standby with sand for fire suppression. Once the clay capping is in place the likelihood of water ingress is rare and the consequence insignificant – the cap is two metres thick with the top one metre compacted without water so that any water infiltration will be adsorbed. Additionally, the remaining seven to eight metres of cover contains significant quantities of clay to adsorb any water infiltration. The clay dome constructed over the trench sheds water away from	Proposed mitigation measures reduce the likelihood and consequence of identified risks to a level that is considered acceptable and manageable.	The residual risk / potential impacts are expected to be very low, given the absence of the conditions required for ignition. Once the waste is covered by sand / gravel, the risk of fire is greatly reduced due to the lack of oxygen. Risks are further reduced once covered by the clay capping and silcrete / clay backfill. Based on the permeability characteristics of the surrounding materials and the disposal design, gas accumulation sufficient to create a significant ignition / explosion hazard is considered unlikely.



Operational Element	Risk / Potential Impact	Management / Mitigation Measure	Revised Probability and Consequence	Residual Risk / Potential Impact
		the trench so that any rainfall has limited opportunity to infiltrate. Natural diffusion of gases through sand and silcrete / clay.		
Dome construction	Localised uplift, cracking, or loss of integrity of the dome due to gas generation, or heavy / sustained rainfall events.	The disposal design allows the passive dissipation of gas. The completed trench / dome will be subject to routine inspections to identify any evidence of settlement, cracking, uplift, or other signs of cap distress. Should material deterioration of the dome capping be observed through subsequent inspections and monitoring, remediation works will be undertaken. Based on past disposal activity, any such deterioration is likely to be superficial.	Proposed mitigation measures reduce the likelihood and consequence of identified risks to a level that is considered acceptable and manageable.	Risk of damage to capping from gas pressure unlikely given geology / materials surrounding the waste which allow for natural diffusion of gases.

4. Environmental Management Plans

The Environmental Management System and existing environmental management plans required under proponent commitments in MS 562 for the IWDF Mt Walton East includes the following environmental management plans, which are in place:

- Flora and fauna management plan;
- Water management plan;
- Air quality management plan;
- Radiation management plan; and
- Decommissioning and Rehabilitation management plan.

While gathering of more comprehensive information for the proposed battery waste consignment is underway, an initial review of environmental management plans has indicated no revision to the plans would likely be required. Should the requirement for any revisions be identified, they will be submitted with the Disposal Operation Environmental and Waste Acceptance Procedures.

5. Management and Monitoring

The extensive management systems that govern the operation of the IWDF and which have recently been reviewed and approved by DWER, will be followed throughout the disposal operation and it is not considered necessary to apply any additional management requirements to the handling of this waste. Some additional health and safety activities and monitoring will occur on the site during the proposed operation but will not be required subsequent to the disposal. The only addition to the normal monitoring undertaken at the site during or after a disposal will be the monthly inspection and monitoring of the trench for a period of three months to ensure there is no subsidence in the various backfill materials or deterioration of water-shedding clay dome.

Based on the information available and in light of the matters set out above, DHW considers the disposal of lithium-ion battery waste at the IWDF to fall within the normal operations at the site, with the only modification to its existing and past practices being the provision of additional space around the waste packages once they are unloaded on-site (but prior to being placed into the trench) and additional site monitoring immediately following the completion of the disposal operation.

Thank you for your consideration of this matter. Given the importance of the Waste Acceptance Criteria to the progression of the project, I would appreciate advice on the Environmental Protection Agency's final determination at the earliest opportunity.

Should additional information or clarification be required, I would be pleased to assist.

Yours sincerely



GENERAL MANAGER, OPERATIONS
BUILDINGS AND CONTRACTS

For and on behalf of the
MINISTER FOR WORKS

10 July 2026

Att. Sigma-Aldrich MSDS Lithium-220914-Version 6.6

SAFETY DATA SHEET

Version 6.6
Revision Date 18.11.2025
Print Date 30.06.2026

SECTION 1: IDENTIFICATION 1.1

Product identifiers

Product name : Lithium

Product Number : 220914

Brand : Aldrich

1.2 Other means of identification

No data available

1.3 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : For R&D use only. Not for pharmaceutical, household or other uses.

1.4 Details of the supplier of the safety data sheet

Company : Merck Life Science Pty Ltd
Ground Floor, Building 1, 885 Mountain Highway
BAYSWATER VIC 3153
AUSTRALIA

Telephone : +61 1800 800 097

E-mail address : customersupport.anz@merckgroup.com

1.5 Emergency telephone number

Emergency Phone # : Free call (24/7): 1800 862 115
Int'l (24/7): +61 2 9037 2994
(CHEMTREC)

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Substances and mixtures, : Category 1
which in contact with wa-
ter, emit flammable gases

Skin corrosion/irritation : Sub-category 1B

Serious eye damage/eye : Category 1
irritation

GHS label elements

Hazard pictograms

:



Signal word

: Danger

Hazard statements

: H260 In contact with water releases flammable gases which may ignite spontaneously.
H314 Causes severe skin burns and eye damage.

Supplemental Hazard Statements

: AUH014 Reacts violently with water.

Precautionary statements

:

Prevention:

P223 Do not allow contact with water.

P231 + P232 Handle and store contents under inert gas. Protect from moisture.

P260 Do not breathe dust.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302 + P335 + P334 IF ON SKIN: Brush off loose particles from skin. Immerse in cool water.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

P363 Wash contaminated clothing before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P402 + P404 Store in a dry place. Store in a closed container.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture
CAS-No. : Not Assigned

Components

Chemical name	CAS-No.	Concentration (% w/w)
lithium	7439-93-2	$\geq 60 - \leq 100$
paraffin oils	8012-95-1	$\geq 10 - < 30$

SECTION 4. FIRST AID MEASURES

Most important symptoms and effects, both acute and delayed : The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Protection of first-aiders : For personal protection see section 8.
Notes to physician : No data available

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use approved class D extinguishers or smother with dry sand, dry ground limestone, or dry clay.
Unsuitable extinguishing media : Do not use water, foam, or carbon dioxide.
Specific hazards during fire fighting : Mixture with combustible ingredients.
Hazardous combustion products : Lithium oxides
Specific extinguishing methods : No data available
Special protective equipment for fire-fighters : No data available
Hazchem Code : 4W

SECTION 6. ACCIDENTAL RELEASE MEASURES

SECTION 7. HANDLING AND STORAGE

For precautions see section 2.2.

- Conditions for safe storage : Store under argon.
Handle under argon.
- Storage class : 4.3, Hazardous materials, which set free flammable gases upon contact with water
- Recommended storage temperature : Recommended storage temperature see product label.
- Further information on storage stability : Handle and store under inert gas.
Air sensitive.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
paraffin oils	8012-95-1	TWA (Mist)	5 mg/m ³	AU OEL
		TWA (Inhalable particulate matter)	5 mg/m ³	ACGIH

Engineering measures : No data available

Personal protective equipment

Hand protection

Material : Nitrile rubber
Break through time : 480 min
Glove thickness : 0.11 mm
Protective index : Full contact
Manufacturer : Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Material : Nitrile rubber
Break through time : 480 min
Glove thickness : 0.11 mm

Protective index	: Splash contact
Manufacturer	: Dermatril® (KCL 740 / Aldrich Z677272, Size M)
Manufacturer	: data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
Remarks	: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Wire
Color	: silver
Odor	: No data available
Odor Threshold	: No data available
pH	: No data available
Melting point/ range	: 180 °C Method: lit.
Boiling point/boiling range	: 1,342 °C Method: lit.
Flash point	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Flammability (liquids)	: No data available

Burning rate	: No data available
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: No data available
Vapor pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: 0.534 g/cm ³ (25 °C) Method: lit.
Water solubility	: No data available
Partition coefficient: n- octanol/water	: No data available
Autoignition temperature	: No data available
Decomposition tempera- ture	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Flow time	: No data available
Explosive properties	: Not classified as explosive.
Oxidizing properties	: none
Molecular weight	: 6.94 g/mol
Particle characteristics Particle size	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No data available
Chemical stability	: No data available
Possibility of hazardous reactions	: No data available

Conditions to avoid	: No data available
Incompatible materials	: Nitrogen Iron and iron salts. Heavy metals Phosphorus Oxygen Nickel Acids Chlorinated solvents Water
Hazardous decomposition products	: In the event of fire: see section 5

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Mixture

Acute toxicity

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Additional Information

Large doses of lithium ion have caused dizziness and prostration, and can cause kidney damage if sodium intake is limited. Dehydration, weight loss, dermatological effects, and thyroid disturbances have been reported. Central nervous system effects that include slurred speech, blurred vision, sensory loss, ataxia, and convulsions may occur. Diarrhea, vomiting, and neuromuscular effects such as tremor,

clonus, and hyperactive reflexes may occur as a result of repeated exposure to lithium ion., Cough, Shortness of breath, Headache, Nausea

Components

lithium

Acute toxicity

Oral: No data available

Inhalation: No data available

Dermal: No data available

LD50 Intraperitoneal - Mouse - 1,000 mg/kg

Skin corrosion/irritation

Remarks: No data available

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

paraffin oils

Acute toxicity

LD50 Oral - Rat - > 5,000 mg/kg

LC0 Inhalation - Rat - 4 h - 200 mg/m³

LD50 Dermal - Rabbit - > 2,000 mg/kg

Skin corrosion/irritation

Remarks: Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin.

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

Remarks: Information taken from reference works and the literature.

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure**Aspiration hazard**

May be fatal if swallowed and enters airways.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****lithium:**

Toxicity to fish : Remarks: No data available

Persistence and degradability**Components:****lithium:**

Biodegradability : Remarks: No data available

Bioaccumulative potential**Components:****lithium:**

Bioaccumulation : Remarks: No data available

paraffin oils:

Partition coefficient: n-octanol/water : log Pow: > 4
Remarks: The value / statement given is based on a (Q)SAR approach (ECHA)

Mobility in soil**Components:****lithium:**

Stability in soil : Remarks: No data available

Other adverse effects

Components:

lithium:

Additional ecological information : No data available

paraffin oils:

Additional ecological information : Discharge into the environment must be avoided.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No. : UN 1415
Proper shipping name : Lithium
Class : 4.3
Packing group : I
Labels : Division 4.3 - Substances which in contact with water emit flammable gases
Packing instruction (cargo aircraft) : 487
Packing instruction (passenger aircraft) : Not permitted for transport

IMDG-Code

UN number : UN 1415
Proper shipping name : LITHIUM

Class : 4.3
Packing group : I
Labels : 4.3
EmS Code : F-G, S-N
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

ADG

UN number : UN 1415
Proper shipping name : LITHIUM
Class : 4.3

Packing group : I
Labels : 4.3
Hazchem Code : 4W
Environmentally hazardous : no

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Therapeutic Goods (Poisons Standard) Instrument : No poison schedule number allocated
(Please use the original publication to check for specific uses, specific conditions or threshold limits that might apply for this chemical)

Prohibition/Licensing Requirements : There is no applicable prohibition, authorisation and restricted use requirements, including for carcinogens referred to in Schedule 10 of the model WHS Act and Regulations.

SECTION 16: ANY OTHER RELEVANT INFORMATION

Revision Date : 18.11.2025

Date format : dd.mm.yyyy

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
AU OEL : Australia. Workplace Exposure Standards for Airborne Contaminants.

ACGIH / TWA : 8-hour, time-weighted average
AU OEL / TWA : Exposure standard - time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate

response; ERG - Emergency Response Guide; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MERCOSUR - The Agreement for the Facilitation of the Transport of Dangerous Goods; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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AU / EN

APPENDIX D

Minister for the Environment Approval



Minister for the Environment; Community Services; Homelessness

Our Ref: 87-07225
Your Ref: 2013/12355 (08722700)

Mr [REDACTED]
General Manager, Operations
Buildings and Contracts
Department of Housing and Works
Djookanup, 16 Parkland Road
Osborne Park WA 6017
By Email: [REDACTED]@dohw.wa.gov.au

Dear Mr [REDACTED]

INTRACTABLE WASTE DISPOSAL FACILITY, MT WALTON EAST, SHIRE OF COOLGARDIE – MINISTERIAL STATEMENT 562 – AMENDMENT TO PROPOSAL APPROVED AFTER MINISTERIAL DETERMINATION UNDER CONDITION 1-3 OF MS 562

Thank you for your letter of 10 July 2026 requesting approval of amendments to the Intractable Waste Disposal Facility, Mt Walton East, Shire of Coolgardie, which is the subject of Ministerial statement 562 (the proposal).

I am satisfied that the requested amendment to the approved Waste Acceptance Criteria for the proposal, to allow for the disposal of lithium metal polymer battery waste, is not a significant amendment as defined in section 3(1) of the *Environmental Protection Act 1986*. This approval is subject to the enclosed recommendations to this letter and does not affect any responsibilities you may have to obtain approvals from other government agencies to implement the amendments.

Please note that implementation of the proposal, including the approved amendment, is subject to the conditions of Ministerial statement 562. The Chief Executive Officer of the Department of Water and Environmental Regulation will consider submissions under proponent commitments in MS 562 and may monitor the implementation of the proposal for the purpose of determining whether the implementation conditions are being complied with.

Yours sincerely

Hon Matthew Swinbourn MLC

MINISTER FOR THE ENVIRONMENT; COMMUNITY SERVICES; HOMELESSNESS

Encl: Amendment subject to recommendations

15 JUL 2026

APPENDIX E

DFES Correspondence

[REDACTED]

From: [REDACTED]@dfes.wa.gov.au>
Sent: Friday, 31 July 2026 10:00 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: IWDF Transport and Unloading

Morning [REDACTED],

It was good catching up on site on Wednesday.

Following further discussion within DFES and based on the information currently available regarding the LMP batteries and associated waste, DFES does not currently anticipate the need for personnel to remain on site while the containers are placed into the excavation and covered with sand.

Based on the controls discussed during the site inspection, including the availability of plant to place sand over affected material and the ability to establish or expand mineral earth breaks if required, the current risk profile appears manageable through the site's existing emergency response arrangements. The remoteness of the location and limited surrounding exposures were also considered as part of this assessment.

Notwithstanding the above, responsibility for site safety and emergency management remains with the site operator. Should conditions change, or should an incident occur during transport or disposal activities that alters the risk profile, DFES can review and reassess its involvement as required.

For planning purposes, in the event of fire, smoke, or other indications of thermal runaway, DFES recommends the following:

1. Activate your organisation's Emergency Response Plan.
2. Raise the alarm and call 000, providing details of the incident and requesting emergency assistance.
3. Prioritise the preservation of life over protection of property or equipment.
4. Undertake an appropriate risk assessment before committing personnel or plant to any response actions.
5. Where it is safe and consistent with your procedures:
 - Consider using machinery to separate affected material from other loads.
 - Consider placing sand over the affected area to help limit fire spread.
 - Take into account wind conditions, visibility, heat exposure, and operator safety.
6. If response activities become unsafe, withdraw personnel to a place of safety, continue implementing your Emergency Response Plan, and provide information and assistance to responding emergency services on arrival.

If there are any concerns during the transfer process, please feel free to contact me. In the event of an emergency, calling 000 should remain the first priority.

I am still confirming DFES personnel requirements and accommodation arrangements and will provide an update separately.

Thank you again for your assistance and cooperation throughout the planning process. Please contact me if you would like to discuss any aspect of the above.

Kind regards,

**District Officer HAZMAT/CBRN
Metropolitan Central Operations**

Department of Fire and Emergency Services
20 Stockton Bend, Cockburn Central WA 6164

E:dohazmat@dfes.wa.gov.au or @dfes.wa.gov



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ADVICE



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AND ACT**



**EMERGENCY
WARNING**

Get to know it

From: @auroraenvironmental.com.au>

Sent: Tuesday, 28 July 2026 11:33 AM

To: @dfes.wa.gov.au>

Cc: @dohw.wa.gov.au>

Subject: IWDF Transport and Unloading

You don't often get email from @auroraenvironmental.com.au. [Learn why this is important](#)

CAUTION: This email originated from outside of DFES. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi

Thank you for the discussion yesterday, I would just like to confirm on behalf of DHW that DFES will be accompanying the defective battery waste to the IWDF site and will remain on-site for the unloading. As discussed, we will have a 980 loader on site to place sand on any of the waste should it ignite, at your direction. We will also have a D10 or D11 available to clear additional vegetation should you require the fire

break to be larger. When you get a chance – if you could confirm that you will require accommodation for your crew (and the numbers) I will make the necessary arrangements.

Kind regards



[Follow us on LinkedIn](#)

Principal Environmental Scientist (Director)

Dilhorn House, 2 Bulwer Street, Perth 6000
Boorloo Whadjuk Country
T (08) 9227 2600 F (08) 9227 2699

E

[\[redacted\]@auroraenvironmental.com.au](mailto: [redacted]@auroraenvironmental.com.au)

www.auroraenvironmental.com.au



Aurora Environmental acknowledges the traditional custodians throughout Western Australia and their continuing connection to the land, waters and culture. We pay our respects to all Aboriginal peoples; Elders past, present and emerging.

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[REDACTED]

From: [REDACTED]@dohw.wa.gov.au>
Sent: Friday, 24 July 2026 5:15 PM
To: [REDACTED]@dfes.wa.gov.au
Cc: [REDACTED]
Subject: Request for DFES Advice and Attendance – IWDF Lithium-Ion Battery Waste Disposal

OFFICIAL

Hello [REDACTED]

Thanks for the chat earlier.

As part of the proposed disposal of lithium-ion battery waste at the Intractable Waste Disposal Facility (IWDF) Mt Walton East, the Department of Housing and Works is seeking DFES advice regarding emergency response arrangements associated with the transport, unloading, placement, and backfilling of the waste and on-site attendance during these activities.

We would appreciate DFES advice on emergency response requirements of this particular waste disposal and confirmation of whether DFES is able to provide:

- An escort during transport of the waste to the IWDF.
- On-site attendance during waste unloading activities.
- On-site attendance during placement of the waste within the disposal trench; and
- On-site attendance during sand/gravel backfill activities.

To assist DFES in understanding the proposed disposal operation and associated controls, I would also like to introduce [REDACTED] Environmental Consultant to the IWDF project (copied in).

[REDACTED] has developed the Disposal Methodology, Operation Safety and Health Management arrangements, and Emergency Response Procedures for the waste disposal, and is best placed to discuss the proposed controls, risk mitigation measures, and emergency response planning in detail.

Please let me know if you would like to arrange a meeting or briefing with [REDACTED] and the project team. Alternatively, please refer to the contact details below for you to discuss independently.

[REDACTED]@auroraenvironmental.com.au	[REDACTED]@dfes.wa.gov.au
[REDACTED]	[REDACTED]

Thank you for consideration and support with this matter.

Kind regards

[REDACTED]
Assistant Director Business Improvement and Coordination | Buildings and Contracts

IWDF Project Director | Buildings and Contracts
Djoekanup, 16 parkland Road, Osborne Park WA 6017
[REDACTED] | WA.gov.au



Government of **Western Australia**
Department of **Housing and Works**



The Department of Housing and Works acknowledges the traditional custodians of Western Australia and their continuing connection to the land, waters and community. We pay our respects to all members of Aboriginal communities and their cultures; and to Elders both past and present.

Mon	Tue	Wed	Thu	Fri
Office	Office	WFH	Office	WFH

APPENDIX F

Material Safety Data Sheet Lithium Metal Batteries

Safety Data

Battery LMP[®] **Pack** **Blue *Solutions***

Blue *Solutions*

Odet – Ergué Gabéric
29556 QUIMPER CEDEX 09
FRANCE

1- IDENTIFICATION

Product

Commercial Name: Battery LMP®
Description: Packs IT2: 27 / 37 kWh
Packs IT3: 42 / 63 kWh
Packs IT2-3: 42 kWh

Supplier:

Name: BLUE SOLUTIONS
Mail : Qualite.client.mobilite@blue-solutions.fr
Adresse: Odet - Ergué-Gabéric
29556 QUIMPER Cedex 9
France
Mobile (Customer service): +33 (0)6 23 75 14 07
Phone (Standard): +33 (0)2 98 66 78 00

2- IDENTIFICATION OF DANGERS

Physical and Chemical Hazard :

The battery is a manufactured product that does not pose any chemical or electrical hazards if its integrity is maintained.
In the event of a short circuit due to a piercing or a violent impact, there is a possibility of self-heat leading to a delayed ignition.

Health Hazards : Not applicable.

3- COMPONENT INFORMATION

Components	CAS Numbers	Proportion (% of mass)	Risk Symbole	Hazard Statement
Metallic Lithium	7439.93.2	< 10	 	H260/ H314/EUH014
Lithium Salt	90076-65-6	< 5	  	H290/ H301/ H311/ H314/H373/H412

4- FIRST AID

The Lithium Metal Polymer Battery is a dry battery that does not present any risk related to chemical exposure.

5- FIRE-FIGHTING MEASURES

Specific case: LMP battery damaged or lost its integrity during transport or handling operations.

1. If a battery is damaged, there is a risk of a short circuit and fire initiation.
Proceed immediately to the quarantine of the battery concerned:
 1. For a minimum of 24 hours
 2. In the open air and under supervision
 3. At 10 m from any building or storage
 4. Packaged in the original packaging
 5. Covered with a tarp to prevent water ingress.
 6. On a horizontal surface or on the BMS side in high point, never the other way around

7. The quarantine can be done in an empty container.
8. Blue Solutions must be contacted to diagnose the battery. Before transporting, we recommend freezing for a minimum of 12 hours before shipping in a refrigerated container (-20°C).

Specific risks in case of fire :

- The LMP battery contains Metallic lithium: Metal fire (class D), risk of exothermic reaction in case of direct contact of lithium metal with water.
- Release of toxic and corrosive fumes (see Chapter 10)
- Energetic fire with projection of incandescent particles and molten metals

An exothermic reaction is the direct contact between a Lithium metal battery and a water retention which is a violent and dangerous chemical reaction.

In special cases, the reaction can be so intense that they can lead to a rapid increase in temperature and an increase in flammable gas.

- Battery potentially charged up to:
 - 432 V for IT2 Pack 27 à 37 kWh
 - 422 V for IT3 Pack 42 kWh and IT2-3 Pack 42 kWh
 - 634 V for IT3 Pack 63 kWh

Fire Extinguishing Method:

In case of a battery fire:

To prevent a spread, it is possible to use water resources in the vicinity of the burning battery.

↳ To protect against the risks of projection, and exothermic reaction and electricity, the following precautions must be taken during the intervention:

- ✓ Cutting off energies
- ✓ In any case, the use of a water extinguisher is prohibited.
- ✓ The intervention with a water hose must be carried out:
 - more than 20 m from the burning battery
 - without direct jet on the battery, to avoid drowning the battery to avoid an exothermic reaction.
 - in the diffused jet position, to prevent the spread of fire.

In case of a fire around the battery:

Considering the electrical risk, the usual means can be used to extinguish the fire, but also to cool the battery.

Specific protective equipment for firefighting:

Wear self-contained breathing equipment and protective clothing to prevent contact with the respiratory tract, skin and eyes.

If incandescent particles come into contact during a fire, remove the particles by washing thoroughly with water. Consult a doctor or specialist.

6- MEASURES TO BE TAKEN IN THE EVENT OF ACCIDENTAL DISPERSAL

1. The battery does not contain any acids or solvents and cannot cause any liquid flow or ATEX.
2. The solids contained inside Lithium Metal Polymer batteries cannot be dispersed into the environment until the physical integrity of the Battery is impaired.
3. If physical integrity is impaired (shock, puncture, etc.), there is an immediate or delayed electrical and/or fire risk depending on the nature of the short circuit. Set up a security perimeter and contact BLUE SOLUTIONS. In case of emergency and in any case as soon as smoke appears, evacuate the area, and call the fire brigade specifying that it is a Lithium Metal Polymer battery.

7- HANDLING, STORAGE AND CONDITIONS OF USE

Handling :

1. Do not crush, puncture, deform.
2. Use the appropriate handling equipment.

3. Do not heat directly or weld on the ends.
4. Do not put on fire.

Packaging / Storage :

1. Keep batteries in their original packaging.
1. For wooden packaging, do not stack more than 4 wooden boxes.
2. For other packaging, do not stack beyond 5 pallets.
3. The outdoor T° range for transport and storage should be between -40 and +85°C. Except for damaged batteries, they must be stored and transported frozen at -20°C.
4. Batteries should be stored in a dedicated 2h00 fire compartment equipped with fire detection and smoke evacuation device. In all cases, do not store combustible liquids in the vicinity.

Usage :

1. Refer to BLUE SOLUTIONS instruction.

8- EXPOSURE CONTROL/PERSONAL PROTECTION

Not applicable for a manufactured product.

9- PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Rectangular steel housing with 2 connectors

Product	Energy	Tension	Dimension	Max Weight
IT2	27 / 37 kWh	432 V max	Length 1420 mm width 1066 mm height 266 mm	330 kg
IT3	42 kWh	422 V max	Length 1414 mm width 870 mm height 311 mm	320 kg
IT3	63 kWh	634 V max	Length 2010 mm width 870 mm height 311 mm	459 kg
IT2-3	42 kWh	422 V max	Length 1431 mm width 910 mm height 271 mm	337 kg

10- STABILITY AND REACTIVITY

Conditions to avoid:

Anyone who disassembles the Lithium Metal Polymer Battery is exposed to electrical hazards.

Decomposition Products:

Under normal conditions of use and up to temperatures of 150°C, the Lithium Metal Polymer battery is stable.

In case of fire:

- Smoke primarily contains CO₂, CO and NO as well as SO₂, HF, H₂, CH₄, C₃H₈, C₆H₆ in smaller quantities. In case of rain or watering, there is a possibility of phosphine PH₃ formation.
- Soot contains metallic oxides and hydroxides, particularly lithium.
- Fire extinguishing water may be basic (pH 11 to 12) and contain phosphorus, sulfur, fluorine, carbon, and metals such as iron, copper, aluminum, lithium. In this case, take appropriate measures should be taken depending on the site's configuration. Firefighting water must be disposed of in accordance with the regulations on hazardous waste treatment.
- Residues from combustion are sensitive to moisture. Under certain conditions of temperature and humidity, residues may heat up, release smoke, phosphine PH₃ and acetylene C₂H₂. Combustion residues must be destroyed by incineration. It is mandatory to wear an SCBA type respirator or mask with a P3R A2B2E2K2 filter during presence around the residues.

11- TOXICOLOGICAL INFORMATION

The Lithium Metal Polymer Battery is a manufactured product that does not present a toxicological risk as long as its integrity is maintained.

12- ECOLOGICAL INFORMATION

The Lithium Metal Polymer Battery pose no danger to the environment if it is used or disposed of as waste in an appropriate manner.

13- DISPOSAL CONSIDERATIONS

Lithium Metal Polymer Batteries must be disposed of in accordance with the regulations governing batteries and accumulators.

Blue Solutions offers a disposal route. Depending on the contractual provisions agreed upon, Lithium Metal Polymer Batteries can be either handed over to Blue Solutions for treatment or disposed of directly by the customer in strict compliance with the applicable regulations.

Any compacting operation of Lithium Metal Polymer batteries is prohibited due to the risk of fire.

14- TRANSPORT INFORMATION

International Conventions:

RID: no information

ADR:

- UN 3090
- Lithium Metal Batteries
- Class 9
- Code Tunnel: (E)

IMDG:

- UN 3090
- Lithium metal batteries
- Class 9
- Safety Data: (F-A, S-I)

IATA:

Transport by Passenger & Cargo Aircraft is Prohibited.

15- REGULATORY INFORMATION

Regulations for chemicals products and preparations do not apply to manufactured products such as Lithium Metal Polymer Batteries

16- OTHER INFORMATION

H260: In contact with water releases flammable gases which may ignite spontaneously

H314: Causes severe skin burns and eye damage

EUH014: Reacts violently with water

H290: May be corrosive to metals

H301: Toxic if swallowed

H311: Toxic in contact with skin

H373: May cause damage to organs through prolonged or repeated exposure

H412: Harmful to aquatic life with long lasting effects.