Licence number	L7038/1997/13
Licence holder	Brajkovich Landfill & Recycling Pty Ltd
ACN	161 973 931
Registered business address	Suite 3, 24 Walters Drive OSBORNE PARK WA 6017
DWER file number	DWERVT15738
Duration	01/10/2021 to 15/06/2026
Date of issue	21 September 2021
Date of amendment	21 November 2024
Premises details	Quinns Quarry 220 Hester Avenue NEERABUP WA 6031 Legal description - Part of Lot 11533 on Plan 217813 Certificate of Title Volume LR3096 Folio 207 As defined by the coordinates in Schedule 2

Prescribed premises category description (Schedule 1, Environmental Protection Regulations 1987)	Assessed design capacity
Category 13: Crushing of building material	200,000 tonnes per annual period
Category 62: Solid waste depot	100,000 tonnes per annual period
Category 63: Class 1 inert landfill	500,000 tonnes per annual period
Category 70: Screening, etc. of material	50,000 tonnes per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 21 November 2024, by:

Melissa Chamberlain Digitally signed by Melissa Chamberlain
Date: 2024.11.21 11:21:45 +08'00'

MANGER WASTE INDUSTRIES
REGULATORY SERVICES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
16/06/2011	L7038/1997/12	Licence re-issue
28/04/2016	L7038/1997/12	Amendment to licence expiry date
19/10/2016	L7038/1997/12	Amendment Notice 1: extension of licence expiry date
11/11/2016	L7038/1997/12	Amendment to include prescribed premises category 13 (crushing of building material)
20/12/2016	L7038/1997/12	Amendment Notice 2: amendment to Licence Holder's registered office address
08/03/2017	L7038/1997/12	Amendment Notice 3: amendment to authorise infilling activities within 25 m of premises boundary to stabilise the western boundary wall
01/10/2018	L7038/1997/12	Amendment Notice 4: transfer of licence
26/09/2019	L7038/1997/12	Amendment 5: To accept new waste types under Category 62 and to increase the maximum height of stockpiles from 5 m to 10 m
21/09/2021	L7038/1997/13	Licence re-issue
06/06/2023	L7038/1997/13	Dept. initiated amendment to address fire risk from waste stockpiling and update asbestos management conditions
21/11/2024	L7038/1997/13	Amendment to implement Minister's Determination on Appeal.

Interpretation

In this licence:

(a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;

(b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;

(c) where tables are used in a condition, each row in a table constitutes a separate condition;

(d) any reference to an Australian or other standard, guideline, or code of practice in this licence:

  (i) if dated, refers to that particular version; and

  (ii) if not dated, refers to the latest version and therefore may be subject to change over time;

(e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and

(f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

The licence holder must ensure that the following conditions are complied with:

Waste acceptance

1. The licence holder must only accept onto the premises waste of a type that:

(a) does not exceed the rate at which that waste is received, as set out in Table 1;

(b) meets the corresponding acceptance specification, as set out in Table 1; and

(c) does not exceed the acceptance criteria for an Inert (Class I) landfill.

Table 1: Waste acceptance criteria

Waste type	Rate at which waste is received	Acceptance specification[1]
Clean Fill	475,000 tonnes per annual period	None specified.
Construction and Demolition Waste		(a) Material comprising bricks, concrete and associated unavoidable small quantities of paper, plastics, glass, metal and timber resulting from: (i) the demolition, erection, construction, refurbishment or alteration of buildings; or (ii) the construction, repair or alteration of infrastructure-type developments such as roads, bridges, dams, tunnels, railways, and airports; (b) Must not be mixed with any other type of waste (specifically putrescible waste such as green and food waste); and (c) Must not contain any visible asbestos, ACM, chemically treated timber or PFAS.
Asphalt Waste	5,000 tonnes per annual period	None specified.
Metal Dust	5,000 tonnes per annual period	(a) Only to be accepted from the BCG Premises depicted in Figure 1; and (b) Must be received in a damp state.
Drilling Slurry	5,000 tonnes per annual period	(a) Must be in spadeable form.
Green Waste	2,250 tonnes per annual period	(a) Chemically treated timber must not be accepted.

Waste type	Rate at which waste is received	Acceptance specification[1]
Special Waste Type 1	10,000 tonnes per annual period	(a) Cement bonded asbestos only; (b) Fibrous asbestos must not be accepted; and (c) Must be wrapped, labelled and sealed in heavy duty (200 µm) polythene sheeting or bags.

Note 1: Additional requirements for the acceptance of controlled waste (including asbestos and tyres) are set out in the Environmental Protection (Controlled Waste) Regulations 2004.

Gatehouse inspection

2. Prior to acceptance of waste onto the premises, the licence holder must visually inspect all loads of waste at the gatehouse:

(a) to determine that the waste meets the waste acceptance requirements set out in condition 1;

(b) to determine the risk of a load containing asbestos and/or ACM; and

(c) classify each load as either a 'low risk load' or a 'high risk load', in accordance with the procedure provided in Schedule 3: Asbestos risk classification procedure.

3. Upon acceptance of waste, the licence holder must direct each classified load to an unloading area where the classified load will not mix with other waste prior to further inspection.

Non-conforming waste

4. During pre-inspection of waste loads at the gatehouse, where waste does not meet the waste acceptance requirements set out in condition 1, the licence holder must:

(a) record the details of the:

(i) waste (type, description and volume);

(ii) source of the waste load;

(iii) name of the waste carrier;

(iv) registration number of the delivery vehicle; and

(v) date that the waste load was rejected,

and

(b) reject the waste and have it removed from the premises by the waste supplier's delivery vehicle;

or

(c) where the waste supplier cannot immediately remove the waste in the delivery vehicle, it is stored in the Designated Quarantine Storage Area and removed to an appropriately authorised facility within 14 days of receipt.

Infrastructure and equipment

5. The licence holder must ensure that the infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

Table 2: Infrastructure and equipment requirements

Infrastructure and equipment		Operational requirements	Infrastructure location
1.	Landfill Compactor	(a) Must be maintained in good working order.	N/A
2.	2 x Front End Loader	(a) Must be maintained in good working order.	N/A
3.	Excavators	(a) Must be maintained in good working order.	N/A
4.	Water Truck/s	(a) Must provide a minimum total capacity of 20 kL; (b) Must be fitted with high volume side and rear spray bars and hose; (c) Must be fitted with a high-volume water cannon; and (d) Must be operational and available for use at all times.	N/A
5.	300 mm Grizzly Screen	(a) Must only be operated at least 17 m below natural ground level; (b) Must be fitted with water spray nozzles for dust control that are functioning when the equipment is in operation; and (c) The spray reach and rate of flow of water spray nozzles must be maintained in good working order to ensure complete coverage.	Crusher/Screener Location depicted in Figure 1
6.	Terex Finlay Jaw Crusher (or similar model)	(a) Must only be operated at least 17 m below natural ground level; (b) Must be fitted with a dust cover on the discharge conveyor that is maintained in good working order to ensure dust emissions from the discharge conveyor are minimised; (c) Must be fitted with water spray nozzles for dust control that are functioning when the equipment is in operation; and (d) The spray reach and rate of flow of water spray nozzles must be maintained in good working order to ensure complete coverage.	Crusher/Screener Location depicted in Figure 1

Infrastructure and equipment		Operational requirements	Infrastructure location
7.	Screening Plant	(a) Must only be operated at least 17 m below natural ground level; (b) Must be fitted with water spray nozzles for dust control that are functioning when the equipment is in operation; and (c) The spray reach and rate of flow of water spray nozzles must be maintained in good working order to ensure complete coverage.	Crusher/Screener Location depicted in Figure 1
8.	Abstraction Bore	(a) Must be maintained in good working order to ensure that an adequate water supply is available at all times.	N/A
9.	Water Pipeline	(a) Must be maintained in good working order and provide water supply to the Crusher and Screener depicted in Figure 1 and the fire water storage tanks and distribution system.	N/A
10.	Green Waste Storage Pad	(a) Must comprise a bunded pad with the following properties: (i) a maximum coefficient of permeability of 1 x 10^{-8} m/s; and (ii) capable of preventing surface run-off of leachate and subsurface infiltration of leachate; (b) A 5 m wide buffer must be maintained around the Green Waste Storage Pad; and (c) Storage areas must be kept clean in between deliveries of loads.	Green Waste area depicted in Figure 2
11.	Designated Quarantine Storage Area	(a) Must comprise a pad of low permeability, for example compacted crushed limestone to a minimum thickness of 300 mm and free from plant roots and reactive, soluble and organic matter and/or a sealed-bottom container designed to temporarily hold non-conforming waste and prevent the release to the environment of any emissions that may arise from the waste; (b) Must be identified clearly on the premises site map; (c) Must be signed and marked Designated Quarantine Area; and (d) A 5 m wide buffer free from combustible materials must be maintained around the Designated Quarantine Storage Area.	Quarantine Area depicted in Figure 2

Infrastructure and equipment		Operational requirements	Infrastructure location
12.	Drying Beds	(a) Must comprise a temporary or permanent bunded hardstand with the following properties: (i) 200 mm limestone base and 200 mm limestone bunds; (ii) a maximum coefficient of permeability of 1 x 10^{-8} m/s; (iii) capable of preventing surface run-off of leachate and slurry; and (iv) includes a leachate collection system; and (b) Must be located more than 25 m from the premises boundary.	Drill Slurry Drying Bed depicted in Figure 1
13.	Fencing and Security Gates	(a) Suitable fencing must be erected and maintained to prevent unauthorised access to the premises; (b) Entrance gates to the premises must be securely locked when the premises is unattended; and (c) Weekly inspections of all security measures must be undertaken and any damage must be repaired within five working days of its discovery.	Premises boundary
14.	Stockpile height markers	(a) Height markers must be installed and maintained adjacent to all stockpiles that provide a clear visual reference to the relevant stockpile height restrictions in Table 4; and (b) Each height marker must clearly indicate the relevant numerical limit for the adjacent stockpile.	Adjacent to all stockpiles
15.	Fire water storage tanks and distribution system	(a) Must provide a total storage capacity of at least 522 kL; (b) A minimum water volume of 450 kL must be maintained in the storage tanks and be available for use during a fire event; (c) Pumps must be maintained to achieve a system operating pressure of 700 kpa and tank suction flowrate of 2.5 kL/min; (d) Connecting pipelines must be maintained free from leaks and defects; and (e) Storz hard suction and British Instantaneous Coupling connections must be maintained on all water storage tanks.	As depicted in Figure 3, Figure 4 and Figure 5

Waste processing and operations

6. The licence holder must ensure that the waste types specified in Table 3 are only subjected to the corresponding processes, subject to the corresponding process limits and/or specifications.

Table 3: Waste processing limits and specifications

Waste type		Processes	Process limits and/or specifications[1]
1.	Clean Fill Asphalt Waste Construction and Demolition Waste	Acceptance, handling, sorting and storage	(a) Must be wet down prior to unloading and loading; (b) Must be stored in accordance with the requirements of Table 4; (c) Residual waste such as paper, plastics, glass, metal and timber that are separated prior to mechanical treatment must be stored in accordance with the requirements of Table 4; and (d) Residual waste must be removed from the premises to an appropriately authorised facility within 14 days of separation; and (e) No more than 330 m^3 of residual waste shall be stored on the premises at any one time.
2.	Green Waste	Acceptance, handling, and storage prior to reuse or final disposal offsite	(a) Must be stored in accordance with the requirements of Table 4; and (b) No more than 1,000 m^3 shall be stored on the premises at any one time.
3.	Metal Dust	Acceptance, handling and storage	(a) Must be maintained in a damp state at all times or otherwise stabilised to minimise dust emissions.
4.	Clean Fill Construction and Demolition Waste	Mechanical treatment via crushing and/or screening, to produce recycled products	(a) Only bricks, concrete, masonry material, sand and Clean Fill shall be subject to crushing processes; (b) Special Waste Type 1 must not be subject to crushing and/or screening processes; (c) Authorised materials must be maintained in a damp state during mechanical treatment; (d) Residual waste such as paper, plastics, glass, metal and timber that are separated during mechanical treatment must be stored in accordance with the requirements of Table 4; (e) Residual waste must be removed from the premises to an appropriately authorised facility within 14 days of separation; and (f) No more than 330 m^3 of residual waste shall be stored on the premises at any one time.
5.	Clean Fill Inert Waste Type 1	Disposal by landfilling	(a) Must only occur: (i) in the Current Landfill Area depicted in Figure 1 unless undertaken for the purposes specified in condition 8; and (ii) more than 25 m from the premises boundary unless undertaken for the purposes specified in condition 8.

Waste type		Processes	Process limits and/or specifications[1]
6.	Asphalt Waste Metal Dust	Disposal by landfilling	(a) Must only occur: (i) in the Current Landfill Area depicted in Figure 1; and (ii) more than 25 m from the premises boundary.
7.	Drilling Slurry	Acceptance, handling, storage, and disposal by landfilling	(a) Must be stored in the Drying Beds specified in Table 2; and (b) Must only be landfilled: (i) once it has dried; (ii) in the Current Landfill Area depicted in Figure 1; and (iii) more than 25 m from the premises boundary.
8.	Special Waste Type 1	Acceptance, storage and disposal by landfilling	(a) Must not be subjected to crushing and screening; (b) Must only be stored and landfilled: (i) in the Asbestos Cell depicted in Figure 1; (ii) more than 25 m from the premises boundary; and (iii) deeper than 2 m from the final tipping surface of the landfill.

Note 1: Additional requirements for the landfilling of controlled waste (including asbestos) are set out in the Environmental Protection (Controlled Waste) Regulations 2004.

7. The licence holder must ensure that the materials specified in Table 4 are only stored:

(a) according to the corresponding stockpile specifications; and

(b) at the corresponding storage location,

as set out in Table 4.

Table 4: Material storage requirements

Material		Stockpile specifications	Storage location
1.	Clean Fill Asphalt Waste Recycled products	(a) Must be stored in stockpiles that do not exceed 10 m in height or the level of permanent shielding landforms at the premises boundary.	- In the Current Landfill Area depicted in Figure 1 unless undertaken for the purposes specified in condition 8; and - More than 25 m from the premises boundary unless undertaken for the purposes specified in condition 8.

Material		Stockpile specifications	Storage location
2.	Green Waste	(a) Must be stored in stockpiles that do not exceed the following maximum dimensions: (i) 10 m in length; (ii) 10 m in width; and (iii) 5 m in height; and (b) Each stockpile must have a minimum separation distance from all other combustible waste materials and stockpiles in accordance with Table 5.	- In the Green Waste area depicted in Figure 2; - More than 25 m from the premises boundary; and - On a Green Waste Storage Pad as specified in Table 2.
3.	Construction and Demolition Waste	(a) Must be stored in stockpiles that do not exceed the following maximum dimensions: (i) 50 m in length; (ii) 20 m in width where a fire brigade vehicle has access down both sides of the stockpile or 10 m in width where access is only down one side of the stockpile; and (iii) 10 m in height or less such that the top of the stockpile remains beneath the level of adjacent landform levels at the premises boundary; and (b) Each stockpile must have a minimum separation distance from all other combustible waste materials and stockpiles in accordance with Table 5.	- In the Current Landfill Area depicted in Figure 1 unless undertaken for the purposes specified in condition 8; and - More than 25 m from the premises boundary unless undertaken for the purposes specified in condition 8.
4.	Residual waste Non-conforming waste	(a) Must be stored in no more than two stockpiles that do not exceed the following maximum dimensions: (i) 10 m in length; (ii) 5 m in width; and (iii) 5 m in height; and (b) Each stockpile must have a minimum separation distance from all other combustible waste materials and stockpiles in accordance with Table 5.	- In the Designated Quarantine Storage Area specified in Table 2; and - More than 25 m from the premises boundary.
5.	Metal Dust	(a) Must be stored in stockpiles that do not exceed 5 m in height.	- In the Current Landfill Area depicted in Figure 1; and - More than 25 m from the premises boundary.

Table 5: Minimum stockpile separation distances

Length of stockpile (m)	Separation distance (m)			
	Green Waste	Construction and Demolition Waste[1]	Residual Waste	Non-conforming waste
5	5 m	10 m		
10	7 m	15 m		
15		18 m		
20		23 m		
30		26 m		
50		31 m		

Note 1: Construction and Demolition Waste where combustible material is present.

Landfill management

8. The licence holder is only authorised to undertake infilling of Clean Fill and Inert Waste Type 1 for the purposes of western boundary wall stabilisation in accordance with the following requirements:

(a) Infilling must only occur within the area identified as the Extent of Proposed Batter in Figure 8; and

(b) A maximum of 325,000 tonnes of waste is used for infill.

9. The licence holder must ensure that the separation distance between the base of the landfill and the highest groundwater level is no less than 2 m.

10. The licence holder must manage the landfilling activities to ensure:

(a) waste is levelled and compacted by the end of the working day in which it was deposited;

(b) waste is placed and compacted to ensure all faces are stable and capable of retaining rehabilitation material; and

(c) rehabilitation of a cell or phase takes place within 6 months after disposal in that cell or phase has been completed.

11. The licence holder must ensure that cover is applied and maintained on landfilled wastes in accordance with Table 6 and that sufficient stockpiles of cover are maintained on site at all times.

Table 6: Cover requirements

Waste type	Material	Depth	Timescales
Special Waste Type 1	Clean Fill, Inert Waste Type 1 or validated spadeable Drilling Slurry	300 mm	Immediately after deposit
		1,000 mm	By the end of the working day in which the asbestos waste was deposited

Waste type	Material	Depth	Timescales
Clean Fill, Inert Waste Type 1, Asphalt Waste, Metal Dust, spadeable Drilling Slurry	No cover required		

Asbestos management (load inspection)

12. The licence holder must dampen all classified loads prior to unloading and maintain the waste in a damp state throughout the inspection process using appropriate dust suppression measures.

13. The licence holder must:

(a) visually inspect each low-risk load' while the material is being unloaded, and continue to do so at all stages of the storage, sorting, and screening process, to determine whether any asbestos and/or ACM can be identified;

(b) where asbestos and/or ACM is suspected or identified in a 'low risk load', reclassify that load as a 'high risk load'; and

(c) visually inspect and handle each 'high risk load' in accordance with the procedure provided in Schedule 4: High risk load procedure.

14. The licence holder must continue to visually inspect waste on the premises at all stages of the storage, sorting and screening process. Suspect asbestos or ACM identified at any stage of the process must be handled in accordance with the procedure outlined in Schedule 4: High risk load procedure.

Asbestos management (stockpiles)

15. The licence holder must ensure that:

(a) materials are maintained in at least three separate stockpiles for unprocessed waste, recycled products tested for asbestos or ACM, and processed waste awaiting testing for asbestos or ACM;

(b) unprocessed waste is kept clearly separated from tested recycled products and processed waste awaiting testing, by a minimum 3 m distance from the base of the stockpile or separated by impermeable barriers;

(c) recycled products tested for asbestos or ACM and processed waste awaiting testing for asbestos or ACM are clearly separated by a minimum 3 m distance from the base of the stockpile or separated by impermeable barriers; and

(d) clearly visible and legible signage is erected on individual stockpiles to clearly identify and delineate tested recycled products, processed waste awaiting testing and unprocessed waste.

Asbestos management (recycled product specification)

16. The licence holder must ensure that recycled products generated from Construction and Demolition Waste are only supplied to customers or used in the construction of infrastructure on the premises if they have been tested in accordance with condition 24 and must not exceed the product specification of 0.001% asbestos weight for weight (w/w) for asbestos content (in any form) within any products.

Emissions and discharges

Fire related emissions

17. The licence holder must ensure:

(a) that fire-fighting equipment and systems are in good working order and capable of controlling a waste material fire within the premises;

(b) that all-weather trafficable ring roads are provided around stockpile areas that allow for access by fire brigade appliances[1];

(c) all new staff working onsite complete an induction regarding fire management safety before commencing work on-site;

(d) that water and other waste that may result from firefighting on the premises is captured[2] and contained[2] within the premises to prevent fire water run-off from entering the ground or any surface watercourse;

(e) that any recoverable fire-fighting water is removed from the premises by a carrier licensed under the Environmental Protection (Controlled Waste) Regulations 2004 and disposed of to a suitably licensed premises; and

(f) that any fire on the premises is extinguished.

Note 1: Requirements for fire brigade appliance access are set out in *GL-11: DFES Site Planning and Fire Appliance Specifications*.

Note 2: Capture and containment may be achieved using bunding, stormwater drain cut-off valves, drain blocks and/or other equipment or infrastructure capable of retaining fire-fighting waters and debris on the premises.

Dust emissions

18. All loads must be wet down prior to unloading, loading, and processing.

19. The licence holder must operate the Water Truck infrastructure and equipment specified in Table 2 to ensure that stockpiles and unsealed access roads are maintained in a damp state to prevent dust lift-off.

20. The licence holder must cease activities:

(a) on failure of the Water Truck infrastructure and equipment or fitted water spray nozzles for dust control specified in Table 2; or

(b) during weather conditions where dust emissions cannot be effectively controlled.

Noise emissions

21. The licence holder must only operate the crushing and screening infrastructure and equipment specified in Table 2 between the hours of 7am to 5pm Monday to Friday and from 7am to 1pm on Saturday.

Windblown waste

22. The licence holder must collect all windblown waste from the premises boundary to prevent windblown waste from escaping the premises.

Monitoring

Waste inputs and outputs

23. The licence holder must undertake the monitoring in Table 7 according to the specifications in that table.

Table 7: Monitoring of waste accepted onto and removed from the premises

Input/Output	Parameter	Unit	Frequency
Waste inputs	Clean Fill; Construction and Demolition Waste; Metal Dust; Drilling Slurry; Special Waste Type 1; Asphalt Waste; Green Waste	tonnes	Each load arriving at the premises
Waste Inputs	Clean Fill and Inert Waste Type 1 infilled in accordance with condition 8	tonnes	Each load being filled
Waste outputs	Waste type as defined in the Landfill Definitions	tonnes	Each load leaving or rejected from the premises
Product outputs	Crushed and screened products	tonnes	Each load leaving the premises

Asbestos management (recycled product monitoring)

24. The licence holder must ensure that testing of all recycled products generated from Construction and Demolition Waste is undertaken in accordance with the product testing procedures specified in Schedule 5: Asbestos monitoring and testing.

Ambient groundwater monitoring

25. The licence holder must monitor groundwater for concentrations of the identified parameters in accordance with Table 8.

Table 8: Monitoring of ambient groundwater quality

Monitoring point reference and location	Parameter	Units	Frequency	Method
MB1 Well depicted in Figure 1; and Two monitoring bores installed according to condition 45 and IC2	Standing water level[1]	mAHD	Quarterly	AS/NZS 5667.1 and AS/NZS 5667.11
	pH[1]	-		
	Electrical conductivity[1]	µS/cm		
	Aluminium	mg/L		
	Arsenic			
	Cadmium			
	Chromium			
	Copper			
	Iron			
	Mercury			
	Lead			

Monitoring point reference and location	Parameter	Units	Frequency	Method
MB1 Well depicted in Figure 1; and Two monitoring bores installed according to condition 45 and IC2	Manganese	mg/L	Quarterly	AS/NZS 5667.1 and AS/NZS 5667.11
	Nickel			
	Zinc			
	Potassium			
	Selenium			
	Chloride			
	Sulphate			
	Total acidity			
	Total alkalinity			
	Total aluminium			
	Total iron			
	Total nitrogen			
	Total phosphorus			
	Total Dissolved Solids (TDS)			
	Organochlorine pesticides			
	BTEX (benzene, toluene, ethylbenzene, xylene)			
	Polycyclic aromatic hydrocarbons (PAHs)			
	Polychlorinated biphenyls (PCBs)			
	Total petroleum hydrocarbons (TPH)			
	Nitrate			
	Nitrite			
	Colour	HU		
	Turbidity	NTU		
	Ionic Balance	percent		
	Total coliforms	cfu/100 mL		
	Thermotolerant coliforms			
	E. coli			

Note 1: In-field non-NATA accredited analysis permitted.

26. The licence holder must ensure that all monitoring pursuant to condition 25 is undertaken in each quarterly period such that there are at least 45 days in between the days on which samples are taken in successive quarters.

27. The licence holder must ensure that all sample analysis pursuant to condition 25 is undertaken by laboratories with current accreditation from the National Association of Testing Authorities for the relevant parameters, unless otherwise specified in Table 8.

Management Plans

Asbestos Management Plan

28. The licence holder must maintain and implement an Asbestos Management Plan that is consistent with the conditions of this licence and sets out in prescriptive detail:

(a) where asbestos or ACM may be present on the premises at each stage of operations for:

(i) waste acceptance;

(ii) waste processing; and

(iii) recycled products generated from Construction and Demolition Waste.

(b) operating procedures and management practices to mitigate the risks from asbestos or ACM at each stage of operations as set out it condition 28(a)

(c) monitoring (including visual inspections), sampling and analysis to identify asbestos contamination at each stage of operations as set out it condition 28(a);

(d) actions to control any asbestos or ACM detected at each stage of operations as set out it condition 28(a);

(e) procedures for annually reviewing and revising the AMP, and in response to any matters arising from compliance and process audits;

(f) procedures for responding to incidents or emergencies where any asbestos is detected at the premises or within products;

(g) identification of each person with responsibilities under the Asbestos Management Plan, the person's responsibilities and the training, qualifications and/or experience required for their role; and

(h) recordkeeping requirements in accordance with the conditions of this licence.

Fire Management Plan

29. The licence holder must maintain and implement a Fire Management Plan prepared by a suitably qualified fire safety engineer that is consistent with the conditions of this licence and sets out in prescriptive detail:

(a) the relevant and current emergency contact details for site personnel and emergency service operators;

(b) credible emergency scenarios and clear procedures to manage them, including initial intervention measures, personnel responsibilities, notification and escalation procedures;

(c) identifies all required fire prevention and management infrastructure and equipment to be maintained on-site for the scenarios identified in condition 29(b) above, including details on the distribution and operation of installed fire safety systems and water access requirements for fire-fighting purposes;

(d) written details and a corresponding site-plan of all fire prevention and management infrastructure and equipment maintained on-site;

(e) written details of the procedures for managing and containing fire washwaters from combustible waste storage areas;

(f) the intended disposal facility or mechanism for fire washwater generated on the premises during a fire event. The turnaround time for disposal must be listed and considered in response procedures requiring the removal of fire washwater;

(g) a list of contingency actions to be undertaken in the event that fire washwater discharge occurs off-site;

(h) post fire management procedures for smouldering waste;

(i) post fire management procedures for the removal and appropriate disposal of fire-impacted waste off-site;

(j) training requirements and schedule for delivery of training to operational staff on emergency response procedures and the requirements of the Fire Management Plan;

(k) a schedule and process for reviewing, updating and testing the emergency response procedures and Fire Management Plan;

(l) identification of each person with responsibilities under the Fire Management Plan, the person's responsibilities and the training, qualifications and/or experience required for their role;

(m) recordkeeping requirements in accordance with the conditions of this licence; and

(n) a process to notify and provide the CEO and DFES with any updates to the Fire Management Plan.

30. The Fire Management Plan pursuant to condition 29 must be:

(a) housed in an emergency services information container in a conspicuous location in the vicinity of the gatehouse;

(b) reviewed annually to ensure currency with legislation, site operations and emergency contact details for site personnel and emergency service operators; and

(c) provided to the CEO and DFES following any updates or revisions to the Fire Management Plan.

Staff training and competency

31. The licence holder must ensure personnel involved with the handling, processing, inspection and sampling of waste on the premises undergo training when commencing a role at the premises, and refresher training at least every two years following the initial training.

32. The training pursuant to condition 31 must cover:

(a) the health hazards associated with asbestos;

(b) the controls used to minimise dust emissions and exposure to asbestos dust;

(c) how to visually inspect waste and recognise different types of asbestos and ACM;

(d) procedures relevant to the person's role, such as processes for rejecting loads, classifying loads, unloading and inspecting low risk and high-risk loads, segregating and storing asbestos and ACM, recycled product quality monitoring and sampling, and record keeping;

(e) the use of fire-fighting equipment and fire management safety;

(f) emergency response procedures; and

(g) the requirements specified in the conditions of this licence, the Fire Management Plan, the Asbestos Management Plan and the DWER Asbestos Guidelines.

Records, audits and reporting

Records

33. The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:

(a) the name and contact details of the complainant, (if provided);

(b) the time and date of the complaint;

(c) the complete details of the complaint and any other concerns or other issues raised; and

(d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.

34. The licence holder must keep the following records for non-conforming waste and residual waste stored in the Designated Quarantine Storage Area:

(a) the date that the material was received;

(b) the volume and type of waste material that was received; and

(c) the date that the waste material was removed from the premises.

35. The licence holder must maintain accurate and auditable records of all asbestos product testing undertaken in accordance with condition 24, including:

(a) findings from the visual inspection of product stockpiles;

(b) details of the field and laboratory sample sizes;

(c) a statement of limit of detection for the laboratory analysis;

(d) results in relation to asbestos detected (positive result exceeding the 0.001% w/w limit) or not;

(e) a description of any asbestos detected;

(f) an estimate of the concentration of asbestos detected; and

(g) actions taken to address any processed waste stockpiles that do not conform to the product specification.

36. The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:

(a) the calculation of fees payable in respect of this licence;

(b) records of rejected, residual and non-conforming waste in accordance with condition 4 and 34 of this licence;

(c) incoming waste loads that have been inspected and suspected or found to contain asbestos and/or ACM showing the source (person) and originating site (location), and actions taken to address the issue;

(d) the works conducted in accordance with condition 8, 45 and 47 of this licence;

(e) any inspections and/or maintenance of infrastructure that is performed in the course of complying with condition 5 of this licence;

(f) monitoring undertaken in accordance with conditions 23 and 25 of this licence;

(g) inductions, training, qualifications and experience of site personnel in accordance with conditions 17, 31 and 32, such as records of inductions, in-house training courses or external accredited training courses; and

(h) complaints received under condition 33 of this licence.

37. The books specified under condition 36 must:

(a) be legible;

(b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;

(c) be retained by the licence holder for the duration of the licence; and

(d) be available to be produced to an inspector or the CEO as required.

Process audit

38. The licence holder must retain the services of a suitably qualified and independent person to:

(a) undertake a process audit of compliance with the conditions of this licence, the Asbestos Management Plan and the DWER Asbestos Guidelines during the preceding annual period; and

(b) prepare and submit to the licence holder by no later than 31 August in each year an annual Process Audit Report in accordance with condition 39.

39. A Process Audit Report pursuant to condition 38 must include:

(a) an assessment of the following during the preceding annual period:

(i) compliance with the conditions of this licence, the Asbestos Management Plan and the DWER Asbestos Guidelines;

(ii) the effectiveness and implementation of pre-acceptance, acceptance, classification, unloading, inspection, sampling and testing procedures;

(iii) the effectiveness and results of product testing, including interpretation of results;

(iv) the effectiveness of staff training, including their ability to recognise asbestos or ACM;

(v) the adequacy of recordkeeping practices; and

(vi) the effectiveness of the Asbestos Management Plan and degree to which it reflects site operations, and

(b) a summary of the qualifications and experience of the suitably qualified and independent person.

Reporting

40. The licence holder must:

(a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and

(b) prepare and submit to the CEO by no later than 30 September after the end of that annual period an Annual Audit Compliance Report in the approved form.

41. The licence holder must submit to the CEO by no later than 30 September after the end of each annual period, an Environmental Report for that annual period containing the information listed in Table 9.

Table 9: Environmental Report

Condition	Requirement
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken
4 and 36(b)	A summary of rejected loads and residual waste movement during the annual period
13, 14 and 36(c)	A summary of any loads that were inspected and suspected or found to contain asbestos or ACM.
23 and 36(f)	Summary of monitored and recorded inputs and outputs
24 and 35	A summary of product monitoring results, including the following information: (a) the total number of samples collected; (b) the number of samples that conformed to the product specification; (c) the number of samples that did not conform to the product specification; (d) the outcome of any investigations or actions taken to address any processed waste stockpiles that did not conform to the product specification; and (e) field sampling records and laboratory certificates for any samples that did not conform to the product specification.
25 and 36(f)	Monitoring results of ambient groundwater quality: (a) An interpretive summary and assessment of ambient groundwater quality monitoring results against relevant assessment levels for water as published in the Contaminated Sites Guideline; (b) A summary of the results should be presented in tabulated form within the body of the report as well as onto site drawings, where appropriate; and (c) An interpretive summary and assessment of ambient groundwater quality monitoring results against previous monitoring results. Trend graphs must be provided in support of this assessment.
33	Complaints summary
38 and 39	A complete copy of the Process Audit Report. A summary of improvement strategies identified to address the findings of the Process Audit Report and a summary of any related revisions to the Asbestos Management Plan.

42. The licence holder must submit the information in Table 10 to the CEO according to the specifications in that table.

Table 10: Non-annual reporting requirements

Condition or table	Parameter	Reporting period	Format
Table 7	Waste infill records demonstrating compliance with condition 8	Not applicable	None specified

43. The licence holder must comply with a Department Request, within 14 days from the date of the Department Request or such other period as agreed to by the Inspector or the CEO.

Notifications

44. The licence holder must ensure that the parameters listed in Table 11 are notified to the CEO in accordance with the notification requirements of the table.

Table 11: Notification requirements

Condition or table	Parameter	Notification requirement	Format
-	Breach of any limit specified in the licence	No later than 5 pm of the next usual working day	None specified
8 and 10	Commencement of infilling activities	Not later than ten business days prior to infilling commencing	Report including map, list of GPS coordinates or electronic shapefile defining the detailed design of the wall stabilisation area
8 and 10	Cessation of infilling activities	Within three business days of infilling ceasing.	None specified
-	Any: (a) fire on the premises; or (b) accident, malfunction or emergency which could result in the discharge of fire-fighting washwater or other wastes from the premises	Immediately	To the Environment Watch hotline, via: - environmentwatch@dwer.wa.gov.au; and - 1300 784 782

Specified Actions

45. The licence holder must complete the specified actions:

(a) meeting the corresponding action requirements; and

(b) by the corresponding date of completion,

as set out in Table 12.

Table 12: Specified action requirements

Specified action	Action requirements	Date of completion
IC1	The licence holder must submit to the CEO a report that assesses the permeability of the Drying Beds specified in Table 2. If the Drying Beds do not achieve a maximum coefficient of permeability of 1 x 10^{-8} m/s, representative across the respective infrastructure, the licence holder is required to provide a report outlining the steps and timeframes involved in meeting that specification.	31 August 2023
IC2	The licence holder must install a minimum of two groundwater monitoring bores down hydraulic gradient of the premises activities. The bores must be constructed according to the ASTM D5092M. The bores must be logged in accordance with AS 1726 for the unified classification system for soils.	31 August 2023
IC3	The licence holder must provide to the CEO, a construction quality and assurance report from an independent third party to certify that the groundwater monitoring bores specified in IC2, have been installed as per the requirements of IC2, including bore logs required under IC2.	Within 1 month of the bores being installed
IC4	The licence holder must provide to the CEO a report that assesses the permeability of the Green Waste bunded storage area. If the area does not achieve a maximum coefficient of permeability of 1 x 10^{-8} m/s, representative across the respective infrastructure, the Licence Holder is required to provide a report outlining the steps and timeframes involved in meeting that specification.	Within 3 months of the Green Waste bunded storage area being constructed
IC5	The licence holder must submit to the CEO the Fire Management Plan prepared by a suitably qualified fire safety engineer as required by condition 29.	31 August 2023

46. The licence holder must write to the CEO stating whether and how the licence holder is compliant with the specified actions within one week of the completion dates specified in Table 12.

47. The licence holder must:

(a) engage a suitably qualified fire safety engineer to design a fire water storage tank and distribution system in accordance with the minimum requirements set out in Table 13;

(b) construct and install the fire water storage tank and distribution system;

(i) in accordance with the minimum requirements set out in Table 13;

(ii) at the infrastructure locations set out in Table 13; and

(iii) within the timeframe set out in Table 13.

Table 13: Fire water storage and distribution system requirements

Minimum requirements	Infrastructure locations	Timeframe
(a) Provision for a total water storage capacity of at least 522 kL; (b) A water and pump supply system suitable for at least 5 hours of firefighting operations at 2.5 kL/min when considering an existing bore water supply of 1 kL/min; (c) All water tanks being sited at an accessible location; (d) A booster, hydrant and hose reel system connected to the storage tanks so that stockpiles within the Designated Quarantine Storage Area are within reach of a 10 m hose stream issuing from a nozzle at the end of a length of hose; (e) At least three designated hardstands suitable for a fire appliance with one located adjacent to the tank supply and two adjacent to hydrants; (f) Pump system and storage tank pipework and connections meeting the typical details contained in Figure 6 and Figure 7; and (g) All water supply offtakes being provided with Storz hard suction and British Instantaneous Coupling connections.	As shown in Figure 3, Figure 4 and Figure 5	31 August 2023

48. The licence holder must within 30 calendar days of the infrastructure required by condition 47 being installed:

(a) undertake an audit of their compliance with the requirements of condition 47; and

(b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.

49. The Environmental Compliance Report required by condition 48, must include as a minimum the following:

(a) certification by a suitably qualified fire safety engineer that the infrastructure and components thereof have been installed in accordance with the minimum requirements specified in condition 47;

(b) certification by a suitably qualified fire safety engineer that the infrastructure and components thereof, have been tested to confirm they are fit for purpose and operate in accordance with the requirements specified in condition 47;

(c) as constructed plans and a detailed site plan for the infrastructure; and

(d) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person.

Definitions

In this licence, the terms in Table 14 have the meanings defined.

Table 14: Definitions

Term	Definition
µS/cm	microsiemens per centimetre
acceptance criteria for an Inert (Class I) landfill	means the concentration and leachate criteria published in the Landfill Definitions for a Class 1 landfill
ACM	means Asbestos Containing Material
ACN	Australian Company Number
AF	asbestos fines
Amendment Notice	means an amendment granted under s.59 of the EP Act in accordance with the procedure set out in s.59B of the EP Act
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO, available via the Department's external website
Annual Period	means a 12-month period commencing from 1 July until 30 June in the following year
Asbestos	means the asbestiform variety of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals and includes actinolite, amosite, anthophyllite, chrysotile, crocidolite, tremolite and any mixture containing 2 or more of those
Asbestos Containing Material	has the meaning defined in the *Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia* published by the Department of Health
asbestos fines	has the meaning defined in the *Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia* published by the Department of Health
Asbestos Guidelines	means the document titled *Guidelines for managing asbestos at construction and demolition waste recycling facilities*, published by the department
Asbestos Management Plan	means the plan specified in condition 28 of this licence
AS 1726	means the Australian Standard AS 1726 *Geotechnical site investigations*
AS 4964	means the Australian Standard AS 4964 *Method for the qualitative identification of asbestos in bulk samples*
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples*

Term	Definition
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 *Water Quality – Sampling – Guidance on sampling of groundwaters*
Asphalt Waste	means bituminous waste resulting from road construction, demolition and waterproofing works
ASTM D5092M	means the ASTM International Standard *D5092M Standard practice for design and installation of groundwater monitoring wells*
Books	has the same meaning given to that term under the EP Act
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
cfu	colony forming units
chemically treated timber	means timber treated with compounds such as copper chrome arsenate (CCA), high temperature creosote (HTC), pigment emulsified creosote (PEC) and light organic solvent preservative (LSOP)
classified load	means the classification of waste loads during acceptance and post acceptance based on the risk of waste material containing asbestos or ACM and through visual inspection, undertaken in accordance with Schedule 3: Asbestos risk classification procedure
Clean Fill	has the meaning defined in Landfill Definitions
condition	means a condition to which this licence is subject under s.62 of the EP Act
Construction and Demolition Waste	has the meaning defined in Landfill Definitions
Contaminated Sites Guideline	means the document titled *Assessment and management of contaminated sites, Contaminated sites guidelines*, published by the department
Damp	means wet enough that dust cannot be visibly generated
Department	means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the EP Act

Term	Definition
Department Request	means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the licence holder in writing and sent to the licence holder 's address for notifications, as described at the front of this licence, in relation to: (a) compliance with the EP Act or this licence; (b) the Books or other sources of information maintained in accordance with this licence; or (c) the Books or other sources of information relating to emissions from the premises.
Designated Quarantine Storage Area	means the Designated Quarantine Storage Area listed in Table 2 of this licence
DFES	Department of Fire and Emergency Services
Drilling Slurry	means the solid and liquids abstracted from underground drilling works, meeting the acceptance criteria for an Inert (Class I) landfill
emission	has the same meaning given to that term under the EP Act
EP Act	means the *Environmental Protection Act 1986* (WA)
FA	fibrous asbestos
fibrous asbestos	has the meaning defined in the *Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia* published by the Department of Health
Fire Management Plan	means the plan specified in condition 29 of this licence
Green Waste	means solid waste that originated from flora and which does not contain or has not been treated or coated with preserving agents, biocides, fire retardants, paint, adhesives or binders
high risk load	means loads classified as high risk in accordance with the risk classification procedure provided in Schedule 3
HU	Hazen units
Inert Waste Type 1	has the meaning defined in Landfill Definitions
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act
L	litres
Landfill Definitions	*Landfill Waste Classification and Waste Definitions 1996*, as amended from time to time
licence	refers to this document, which evidences the grant of a licence by the CEO under s.57 of the EP Act, subject to the conditions

Term	Definition
licence holder	refers to the occupier of the premises being the person to whom this licence has been granted, as specified at the front of this licence
low risk load	means loads classified as low risk in accordance with the risk classification procedure provided in Schedule 3
Metal Dust	means the fine and small particles of waste concrete generated during concrete crushing operations, meeting the acceptance criteria for an Inert (Class I) landfill
m	metres
mAHD	metres Australian Height Datum
mg/L	milligrams per litre
mL	millilitres
mm	millimetres
NATA	means the National Association of Testing Authorities, Australia
NATA Accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis
National Engineering Register	means the National Engineering Register provided by Engineers Australia
non-conforming waste	means waste that does not comply with the waste acceptance requirements set out in condition 1
NTU	nephelometric turbidity units
PFAS	Per- and polyfluoroalkyl substances. Refer also to the *PFAS National Environmental Management Plan* V2.0, January 2020 (as amended from time to time) (PFAS NEMP) (National Chemicals Working Group of the Heads of EPAs Australia and New Zealand)
pollution	has the same meaning given to that term under the EP Act
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the map in Schedule 1 to this Licence
prescribed premises	has the same meaning given to that term under the EP Act
product specification	means the specification set out in condition 16
quarterly	means the four inclusive periods from 1 January to 31 March, 1 April to 30 June, 1 July to 30 September and 1 October to 31 December
recycled product	means bricks, concrete, masonry material, sand and Clean Fill which have undergone processing via crushing and/or screening to create a fit-for-purpose recycled product which has been tested and conforms to the product specification in this licence

Term	Definition
residual waste	means physical contaminants such as timber, glass, plastic and metals which have been separated, screened or otherwise removed during the processing of Construction and Demolition Waste
Schedule 1	means Schedule 1 of this licence unless otherwise stated
Schedule 2	means Schedule 2 of this licence unless otherwise stated
Schedule 3	means Schedule 3 of this licence unless otherwise stated
Schedule 4	means Schedule 4 of this licence unless otherwise stated
Schedule 5	means Schedule 5 of this licence unless otherwise stated
spadeable	has the meaning defined in Landfill Definitions
Special Waste Type 1	has the meaning defined in Landfill Definitions
suitably qualified and independent person	means a person who: (a) holds a tertiary qualification in occupational health and safety, industrial hygiene, science, building construction, or environmental health; (b) has a minimum of three years of relevant industry experience such as working on managing asbestos risks in the waste industry or contaminated site assessment; and (c) is employed by an independent third party external to the licence holder's business.
suitably qualified fire safety engineer	means a person who: (a) holds a tertiary level fire engineering qualification; (b) is currently registered on the National Engineering Register under the Fire Safety Engineering area of practice; and (c) is employed by an independent third party external to the licence holder's business.
usual working day	means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia
waste	has the same meaning given to that term under the EP Act

END OF CONDITIONS

Schedule 1: Maps

Premises map

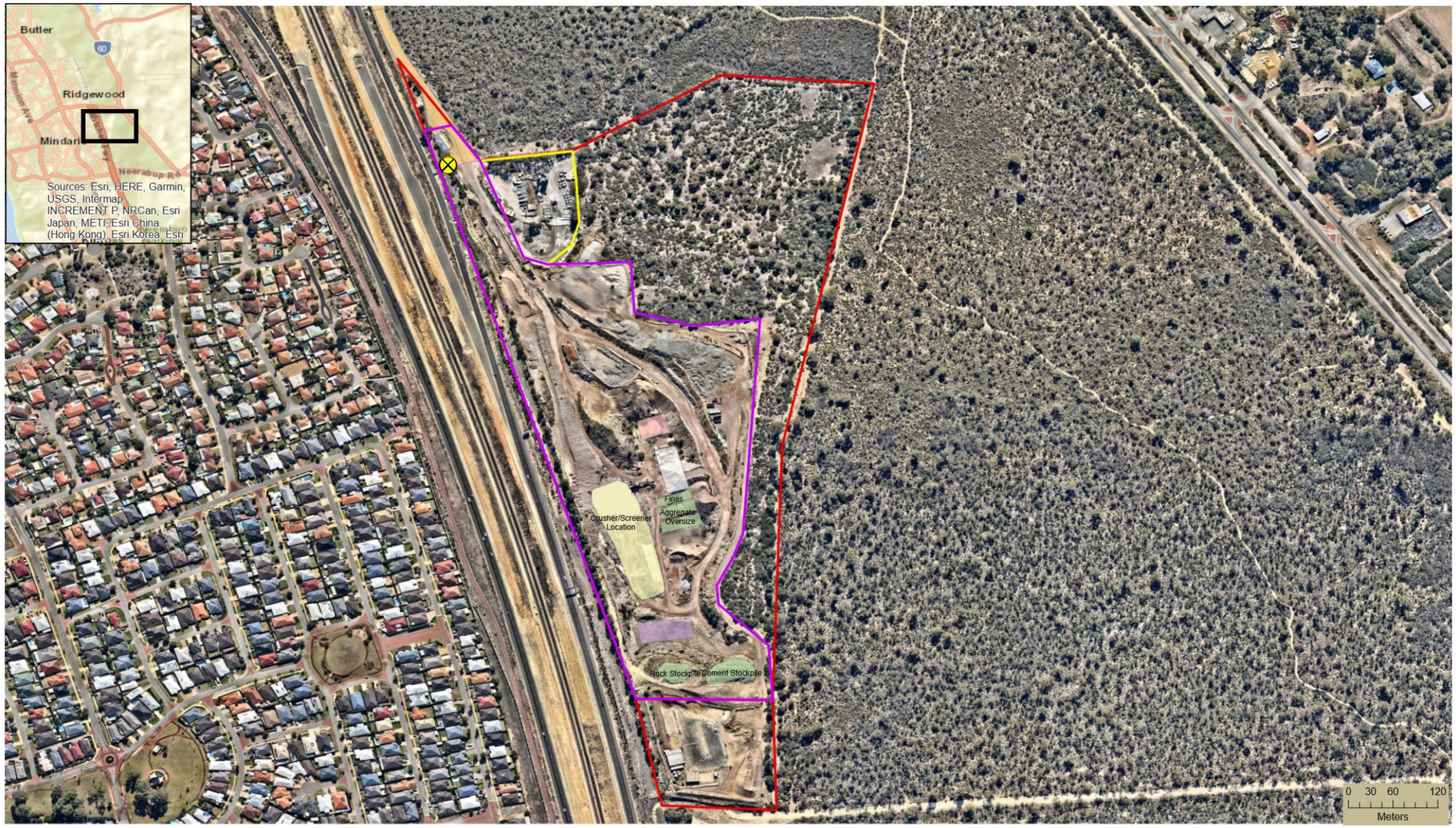


Figure 1: Map of the boundary of the prescribed premises

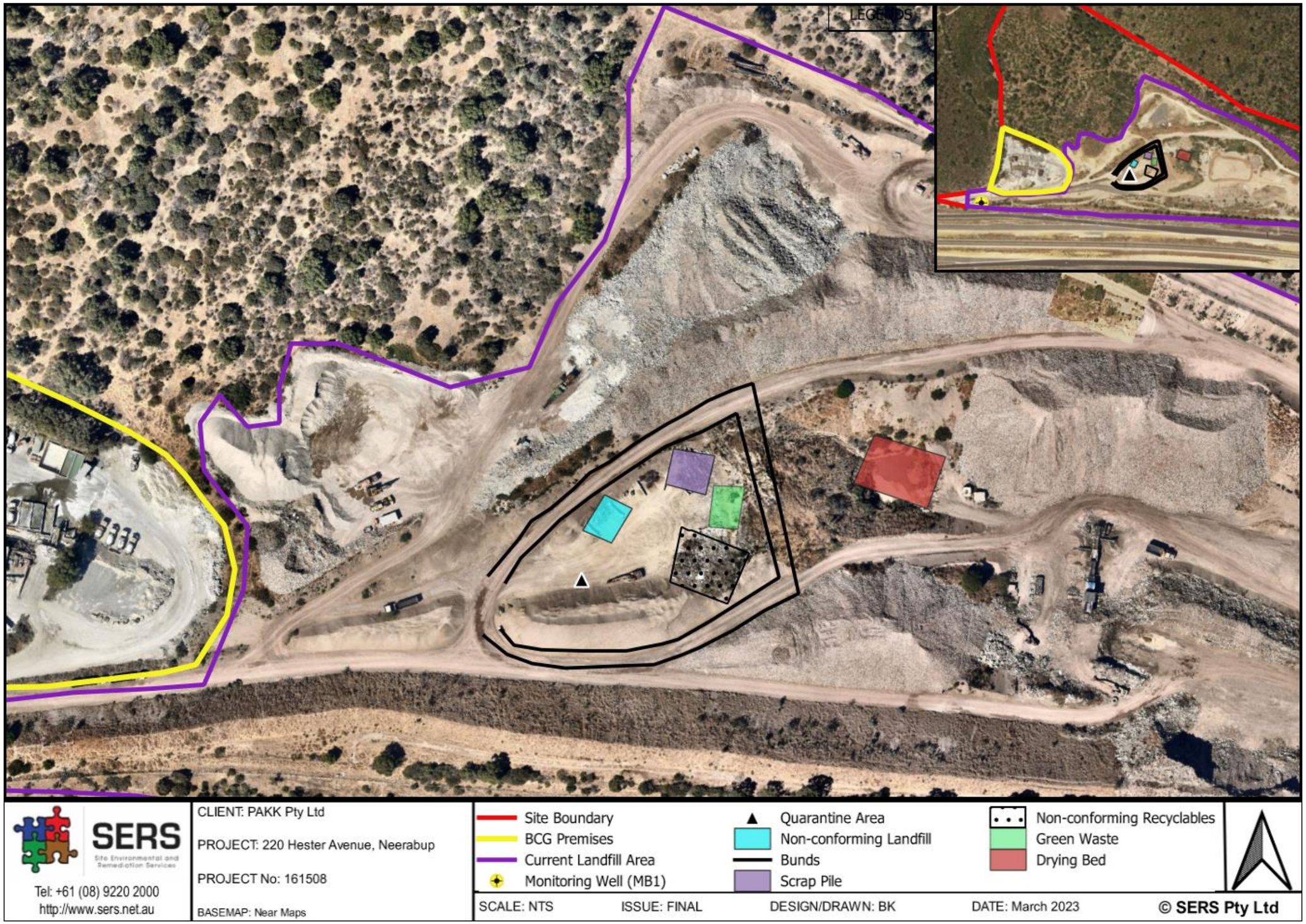


Figure 2: Storage area layout

Minimum System Performance:

Flow Rate: 10.00l/s
Pressure: 700.00KPA
Tank Volume: 450,000L

#1 150mm Tank Suction: Typical Assembly

#1 150mm Tank Vortex: Typical Assembly

#1 Booster Hydrant: Typical Assembly

Proposed Tank Location: 450,000L

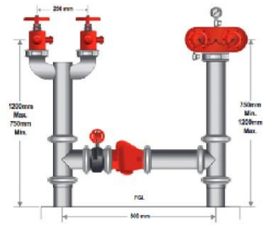
Figure 3: Fire water storage tanks and distribution system layout 1

Figure 4: Fire water storage tanks and distribution system layout 2

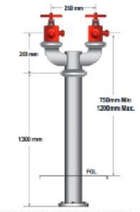
Minimum System Performance:

Flow Rate: 10.00l/s
Pressure: 700.00KPA
Tank Volume: 450,000L

Hydrant #1: Typical Hydrant Booster Assembly



Hydrant #2,#3,#4: Typical Hydrant Assembly



Hose Reel #1,#2,#3 #4: Typical Hose Reel Assembly

Figure 5: Fire water storage tanks and distribution system layout 3

Control Room Setup Typical Detail: CR01

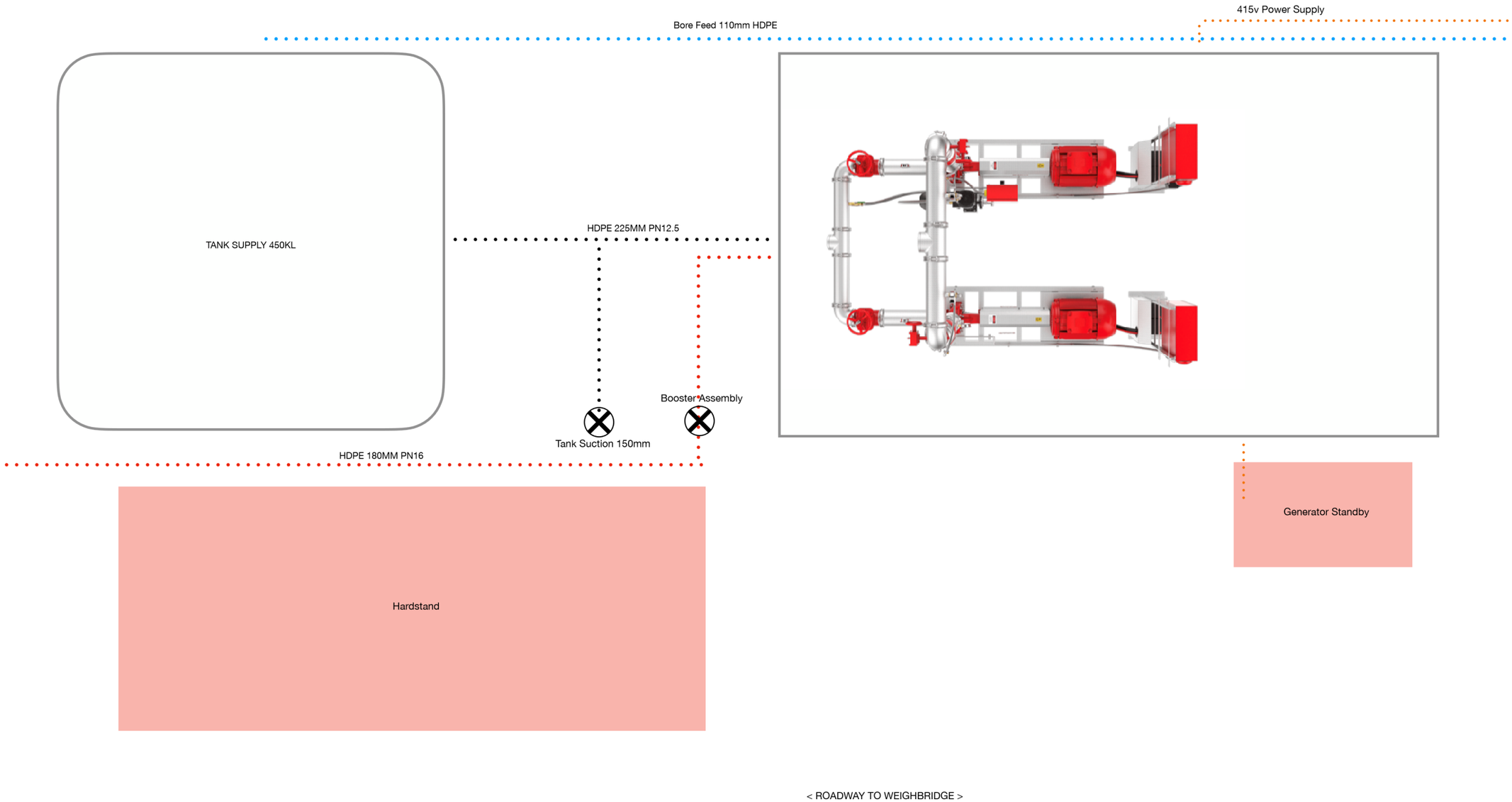
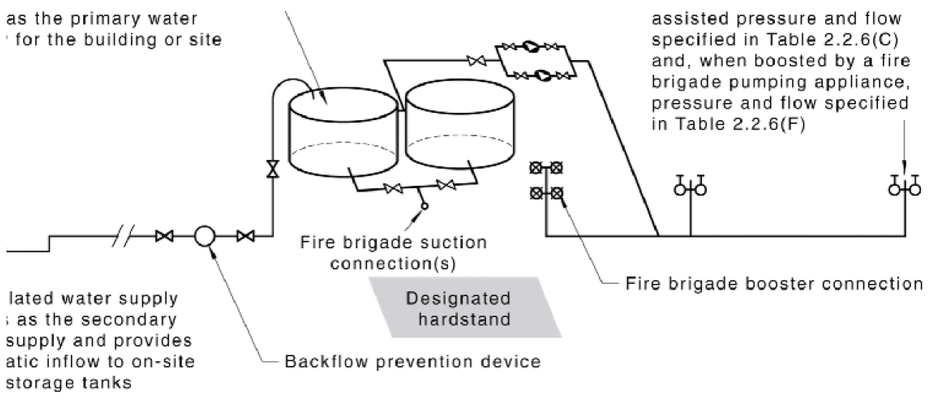
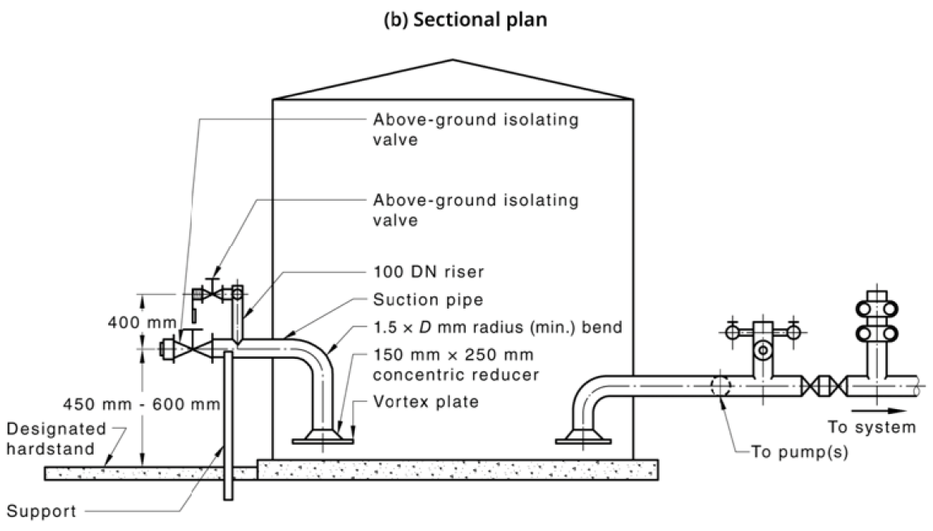


Figure 6: Firewater tank, hardstand and pump supply schematic

TYPICAL DETAIL: AS2419.1.2021





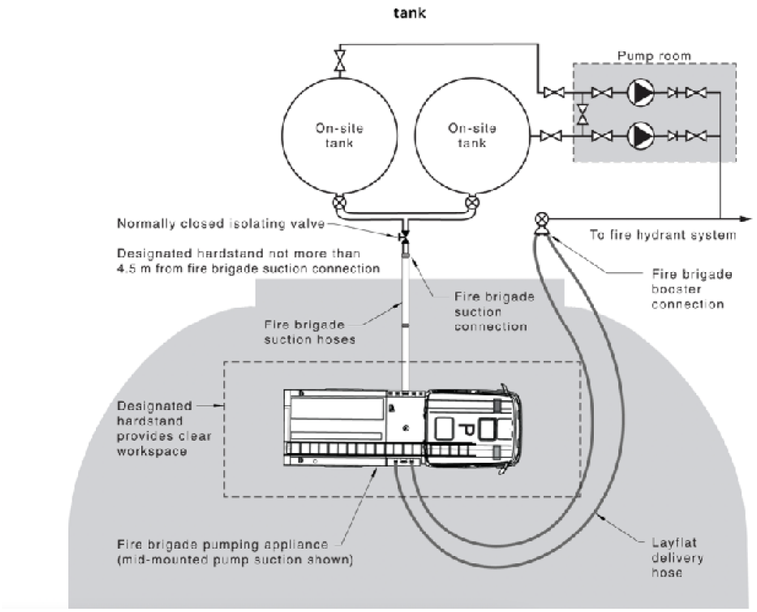
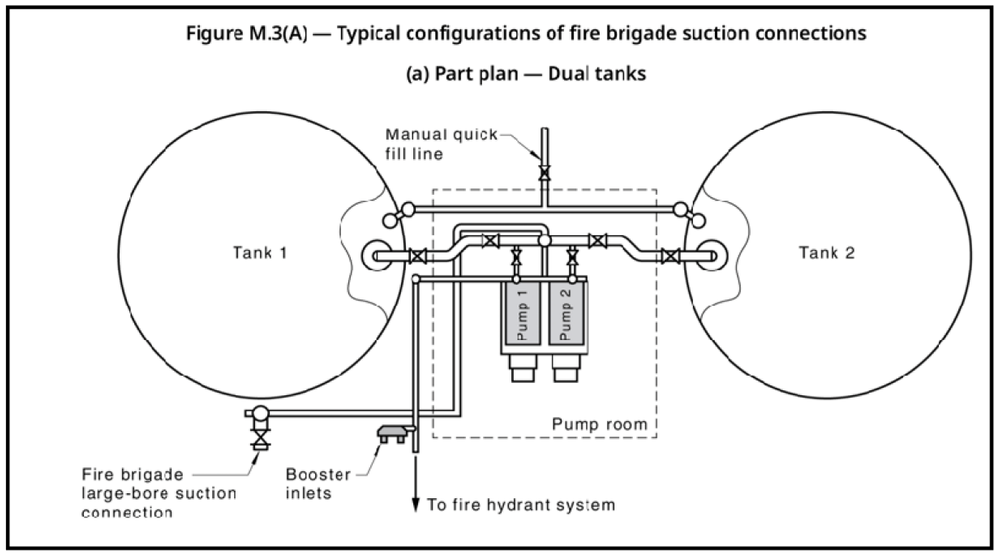


Figure 7: Firewater tank and connecting pipework general schematic



Map of wall stabilisation fill area, showing the extend of the proposed batter

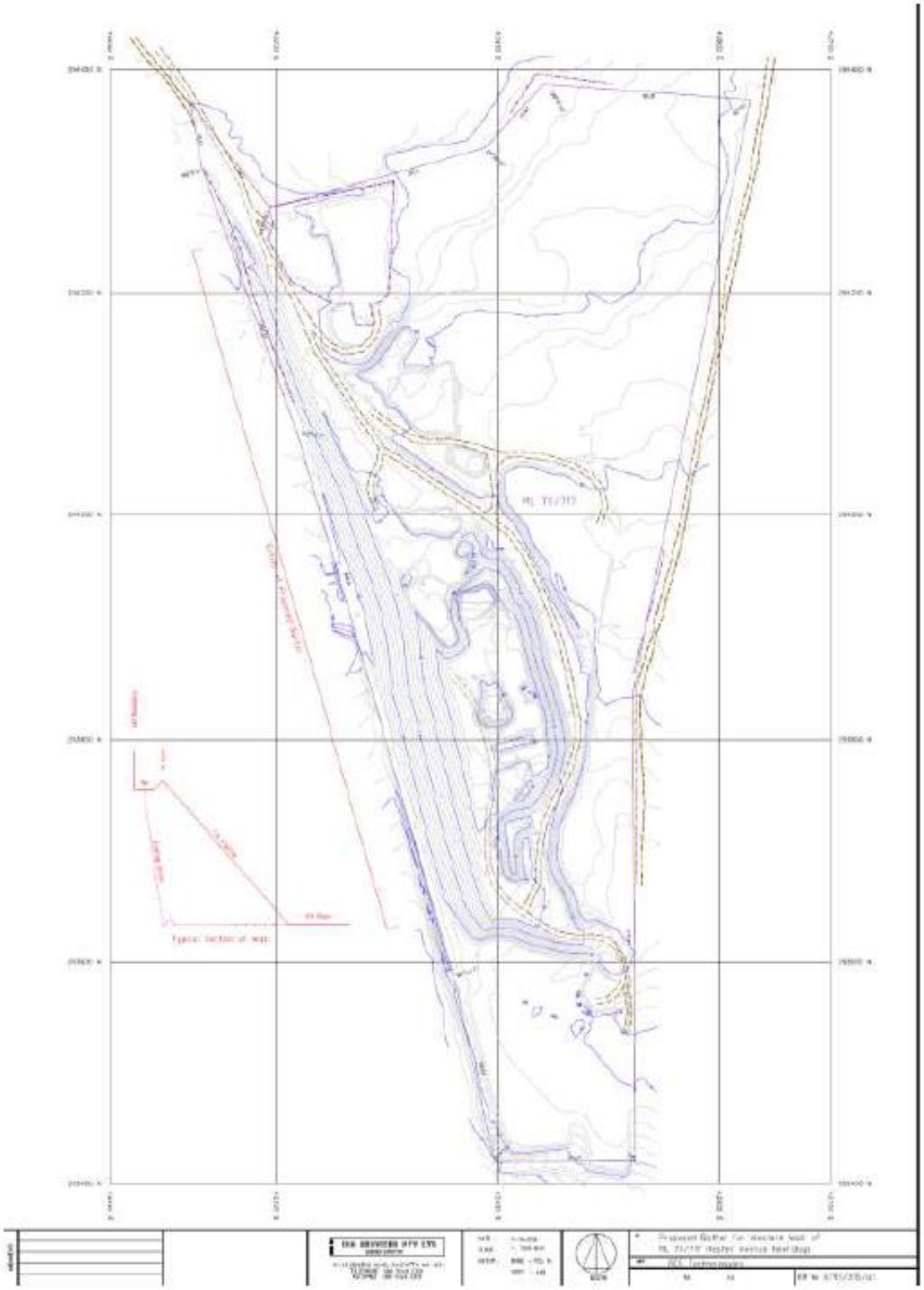


Figure 8: Map of the wall stabilisation

Schedule 2: Premises boundary

The vertices of the premises boundary are the coordinates listed in Table 15.

Table 15: Premises boundary coordinates (GDA2020 MGA Zone 50)

	Easting	Northing		Easting	Northing
1.	380459.283	6495083.619	18.	380024.912	6494954.841
2.	380409.319	6494816.805	19.	380030.930	6494943.149
3.	380359.353	6494549.992	20.	380048.072	6494914.991
4.	380365.705	6494130.231	21.	380076.313	6494851.879
5.	380238.457	6494128.301	22.	380090.739	6494846.680
6.	380232.315	6494154.903	23.	380106.790	6494843.904
7.	380200.519	6494292.598	24.	380113.265	6494844.304
8.	380127.255	6494536.178	25.	380122.262	6494852.290
9.	380053.990	6494779.757	26.	380125.735	6494856.966
10.	379965.208	6495017.218	27.	380135.721	6494877.052
11.	379954.518	6495075.197	28.	380138.215	6494890.850
12.	380025.803	6494982.721	29.	380132.517	6494900.180
13.	380030.923	6494966.692	30.	380132.375	6494935.064
14.	380030.923	6494966.692	31.	380139.926	6495013.940
15.	380030.923	6494966.692	32.	380139.926	6495013.940
16.	380030.923	6494966.692	33.	380220.646	6495037.691
17.	380030.923	6494966.692	34.	380272.603	6495095.133

Schedule 3: Asbestos risk classification procedure

To determine the risk of an incoming load containing asbestos or ACM, the gatehouse operator at the premises must establish:

- the source of the load including the site location and if possible, the age of any building or structure from which the waste originated;
- the content / waste types within the load; and
- the type of load.

Where the source of the load can clearly be determined to be a building or structure constructed after 1990 then the load can be considered to represent a low risk of asbestos contamination.

Where the waste originates from a building constructed before 1990 or there is uncertainty over this issue, the risks associated with asbestos in the load must be established in line with the risk classification matrix in Table 16 below.

Table 16: Risk classification matrix

	TYPE OF LOAD		
MATERIAL TYPE	**Commercial**	**Public – utes, cars, and trailers [1]**	**Skip bins**
Clean concrete (without formwork)	Low	High	High
Clean brick	Low	High	High
Clean bitumen / asphalt	Low	High	High
Mixed construction waste	High	High	High
Mixed demolition waste	High	High	High

Note 1: If it is possible to view the entire load of incoming construction and demolition material (such as in the case of a small trailer with a shallow load), then consideration may be given to classifying those loads as 'low risk'.

Schedule 4: High risk load procedure

- 'High risk loads' must be unloaded and spread over a sufficiently large area to enable a comprehensive visual inspection of all sides and components of the material to be undertaken.
- If asbestos fines (AF) or fibrous asbestos (FA) is suspected or identified, the load must be isolated, kept wet and, once appropriately contained, redirected to an appropriately authorised facility.
- Where ACM is suspected or identified within a load and is not capable of being easily removed by hand, the load must be rejected in full and isolated, kept wet and, once appropriately contained, redirected to an appropriately authorised facility.
- Where suspected ACM fragments capable of being easily removed by hand are identified in a load, the suspect ACM must be removed from the load and either:
  (a) appropriately isolated and covered for asbestos testing. If testing of representative samples confirms the material is ACM it must be redirected to an appropriately authorised facility. If testing confirms the material is not ACM the waste can be returned to the stockpile to await further processing; or
  (b) assumed to be ACM and redirected to an appropriately authorised facility.
- All suspected or assumed ACM must be segregated and stored in the quarantined storage area or container. Material must be clearly labelled, kept secure and sufficiently contained to prevent the release of asbestos including wind-blown fibres.
- Once all suspected or assumed ACM has been removed from a load in line with the above procedure, the residual material can be added to the stockpile waiting further processing.
- Records must be kept to ensure that the process from receipt of all waste types to the completion of the unloading procedure is auditable and that any loads found to contain suspect asbestos will be traced back to the customer and originating site.

Schedule 5: Asbestos monitoring and testing

Product testing and supply

All types of recycled product must be inspected and/or sampled and tested for ACM, FA and AF, as outlined in this Schedule. Inspections and sampling may only be undertaken by staff if they have received training on:

- procedures to implement the requirements of this Schedule;
- the Asbestos Management Plan required by condition 28; and
- the training required by condition 31.

ACM and FA are subject to visual inspection and sampling procedures since they are larger in size (>7 mm) and AF (<7 mm) is assessed by submitting samples for laboratory analysis.

Recycled products may be sampled from conveyors or stockpiles. Whichever approach is adopted, the operator will need to ensure that they have appropriate systems in place to allow them to identify where in the product stockpiles each sample is from to allow further testing or separation to occur if required.

Stockpile inspection and sampling

- In the case of recycled drainage rock (≥20 mm) and recycled road-base (<19 mm) a visual inspection should be undertaken in a systematic grid fashion over any new stockpile material to identify any suspect asbestos material.
- No sampling is required for recycled drainage rock (≥20 mm), other than to determine by laboratory analysis whether a suspect fragment is asbestos.
- For recycled road-base (<19 mm) and screened sand (<10 mm), sampling is necessary and must be spread evenly over the whole stockpile surface or samples may be taken at regular intervals (as per conveyor sampling) during construction of the stockpile. Suspect ACM or areas must be targeted for sampling.
- Sampling of road-base (<19 mm) and screened sand (<10 mm) products must occur at a minimum rate of 40 locations per 4000 tonnes or 14 samples per 1000 m^3 of product.

Conveyor sampling

- Sampling of road base (<19 mm) and screened sand (<10 mm) products must occur at a minimum rate of 1 sample per 70 m^3 of a product output. Suspect ACM or areas must be targeted for sampling.

Sample treatment

- Each sample collected must be at least 10 litres in volume and then be divided into 2 size fractions (>7 mm and <7 mm) in the field by sieving through a 7 mm screen or spread out for inspection on a contrasting colour fabric. The >7 mm fraction should be examined for any suspect ACM and this be retained to calculate the level of contamination.
- The <7 mm fraction will need to be a minimum 500 mL, be wetted, and submitted for laboratory analysis. This sample size is considered necessary to improve the limit of detection for asbestos in the analysis procedure.

Sample analysis method

>7 mm sample fractions –

- Asbestos concentrations (ACM and FA) should be calculated in accordance with the methods detailed in Appendix 2 of the *Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia*. Averaging asbestos levels across the stockpile is not appropriate and asbestos levels within each sample should be reported.

<7 mm sample fractions

- Each <7 mm sample fraction must be analysed for FA and AF.
- Asbestos analysis must be undertaken by an independent NATA certified laboratory and comply with *Australian Standard Method for the Qualitative Identification of asbestos in bulk samples* (*AS 4964*) or be demonstrated to be able to achieve the equivalent level of results to this Australian Standard.

AS 4964 is currently the only method in Australia that has NATA certification; however, the practicable level of detection for this standard polarized light microscopy method (PLM) and dispersion staining is 0.01% w/w. It is possible however, to measure asbestos contamination at or lower than 0.001% w/w where an increased sample size is used, however DWER recognises that any reporting of concentrations below 0.01% w/w will be outside the conditions set by NATA.

Therefore, to determine whether recycled products meet the product specifications for asbestos content, samples must be a minimum of 500 mL in size. Licence holders must adopt one of the following analytical approaches:

- Detected/non-detected – where any quantity of asbestos is detected by the PLM method it must be assumed, without further analysis, to be in concentrations above the product specification limit of 0.001% w/w. A weight of evidence approach may be adopted i.e. the frequency and occurrence of other positive results in the stockpile can be taken into account to determine whether the stockpile being assessed is considered to meet the product specification or not; or
- Where any quantity of asbestos is detected by the PLM method, the sample is subject to further testing in the form of a semi-quantitative method with a lower level of detection for asbestos. Either of the following methods are considered acceptable by DWER:
    - The extraction and weighing of fibre bundles or fibre cement material from the total sample; and
    - Measuring the width and length (i.e. volume) of individual fibre by Phase Contrast Microscopy and calculating the weight of fibres in the extracted sub-sample.

Interpreting inspection and sampling results

- If the visual inspection, sieve sample or analytical results identify asbestos above or possibly above the 0.001% w/w criterion, then that stockpile or product process should be deemed potentially contaminated and considered for off-site disposal as Special Waste Type 1, or subject to further actions to remediate it or to demonstrate its acceptability by further assessment. A record should be made of the decision-making and action taken (e.g. off-site disposal, further assessment undertaken etc.) in relation to that stockpile.

- In addition to the above, where asbestos is identified above or possibly above the 0.001% w/w criterion, an investigation into the likely cause for the presence of asbestos in the product should be undertaken and measures implemented to prevent a reoccurrence. A record of the investigation and its findings together with the details of any preventative measures implemented at the site should be made.
- As a guide, in the case of recycled drainage rock identification of a piece of ACM or FA per 10 m^2 of surface would be deemed to exceed the specification for that area, and for the whole stockpile if repeated in 2 or more other separate areas. A single fragment exceedance can be considered an isolated occurrence in the absence of other contamination evidence and the stockpile allowed for beneficial use. If there is multiple contamination only of a localised area then that area can be excavated to the extent of any visible asbestos and then the remainder of the stockpile considered to be suitable for use.
- For laboratory analysis it is important that each result be considered on its own merits in regard to the asbestos control specification and that there is no averaging across samples. In the case of a single exceedance at a level less than 0.01% w/w, the stockpile (nominally 4000 tonnes) may not be deemed contaminated if repeat samples of immediately adjacent areas do not demonstrate specification exceedances.
- The same approach as indicated in the preceding paragraph can be applied to the results of the >7 mm sieve sampling in regard to the recycled sand material and roadbase. In this case a 1 cm^3 fragment of ACM or FA would be deemed to exceed the specification for a 10 L sample.
- It should be noted that specification exceedances in regard to different assessment methods for the same type of stockpile should not be viewed in isolation from each other.