

Environmental Management Plan

Resource Recovery Facility
29 Muramats Road, East Arm NT 0822

RED-HSEQ-ENV-015

Version 2.3



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1. Environment Policy Statement

Attachment 1 - Environmental Policy Statement - RED-HSEQ-DOC-007

2. Background

2.1. Project Description

NTEX Code Red, a locally registered business in Darwin, embarked on its operational journey on the 27th of April 2023. With a vision for responsible and eco-conscious construction, demolition and other waste management, NTEX Code Red is actively pursuing a new Environmental Protection Licence (EPL) to engage in waste processing and storage endeavours.

The intended operational base for this environmentally forward initiative is the current NTEX Code Red Resource Recovery Facility, conveniently located at 29 Muramats Road, East Arm Northern Territory 0822. NTEX Code Red's primary objectives are:

- ◆ Providing an efficient and sustainable solution for recycling and processing of waste materials.
- ◆ Minimising the associated adverse environmental impacts of waste materials.
- ◆ Cost-efficient and resilient supply chains.

2.2. Project-Specific Details – Proposed Works

NTEX Code Red proposes the establishment of a temporary listed waste storage area located at 25 Muramats Road, East Arm, Northern Territory 0822, adjoining the existing NTEX Code Red Resource Recovery Facility at 29 Muramats Road.

The proposed storage area will be physically connected to the current facility via a controlled access gate, allowing secure and efficient internal movement between the two adjoining properties while maintaining appropriate site controls.

The purpose of the proposed works is to support NTEX Code Red's waste management operations by providing a dedicated, temporary storage area for listed waste materials. Storage within this area will be strictly limited to asbestos and soils contaminated with listed waste, in accordance with relevant environmental and regulatory requirements.

The proposed temporary storage area will operate as an ancillary component of the existing facility and will be managed under NTEX Code Red's environmental management systems to ensure:

- Compliance with applicable environmental legislation and licence conditions;
- Secure containment of listed waste materials;
- Minimisation of environmental and human health risks; and
- Controlled access and operational oversight.

No additional waste types will be accepted or stored within the proposed temporary listed waste storage area.



3. EMP Objectives

The objectives of the NTEX Code Red Environmental Management Plan (EMP) are to ensure that appropriate environmental protection and mitigation measures are implemented to prevent negative impacts on the surrounding environment as well as outline the required management measures by considering the site-specific conditions.

This includes but is not limited to:

- ◆ Work in conjunction with NTEX Code Red Environmental Management System which is the NTEX Code Red internal document control guide.
- ◆ Provide a summary of known environmental site conditions deemed relevant to the future construction and establishment of the re-development of the site; and
- ◆ Provide a range of environmental control plans to manage potential risks associated with the current environmental conditions at the site. The controls will ensure that significant adverse impact on the environment, the health of the site workers and neighbouring users can be effectively mitigated throughout the entirety of the proposed project's lifespan.

There is currently no proposed future construction land re-development at 29 Muramats Road, East Arm. The site will be rehabilitated to resemble its original condition. As the site is leased, the site will be returned to its current owner Mr. Raymond Breen in an acceptable condition agreed by all parties.

An Environmental Risk Assessment of the site has been undertaken for the upcoming operation of the tyre shredding process and storage areas (see 18. Risk Assessment).

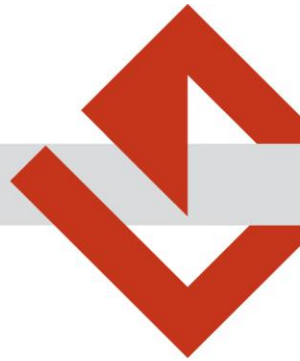
The EMP includes the following:

- ◆ Procedures to ensure that no significant adverse environmental impacts occur because of the works,
- ◆ Proposed monitoring systems to ensure no adverse environmental impacts occur,
- ◆ Identification of possible risks of operational failure and response measures to be implemented, and
- ◆ Day to day management requirements for the ongoing operation of the processing and storage activities of listed waste.¹

Consequently, with respect to the above conditions and considering the general philosophies of environmental management, the objectives of this EMP are as follows:

- ◆ To identify the relevant legislative requirements applicable to the works,
- ◆ To document issue-specific environmental management measures (controls) sufficient to meet the requirements of the environmental assessment process,
- ◆ To provide a clear guidance so that design and operation minimises any potential environmental impacts,
- ◆ To present a clear framework for effective management of protection measures throughout the listed waste processing and storage activities for the project and ongoing use of the site,
- ◆ To assign clear and appropriate responsibilities for the implementation of specific environmental measures,

¹ Waste Management and Pollution Control (Administration) Regulations 1998, Schedule 2, Northern Territory Government.



- ◆ To develop site-specific criteria and monitoring requirements for the measurement and on-going assessment of performance,
- ◆ To enable the development of issue-specific Environmental Control Plans (ECPs) for the implementation of this EMP,
- ◆ To identify and record commitments to ongoing environmental responsibility, and
- ◆ To identify post construction commitments to be followed during the operation of the site.

4. Organisation Structure and Responsibility

NTEX Code Red is required to comply with any environmental protection provisions conveyed by the NT EPA and observe the requirements of any applicable statute by-law, standard etc. related to environmental protection.

NTEX Code Red must comply with environmental statutory requirements and procedures defined within the Environmental Management Plan (EMP) and supplementary plans.

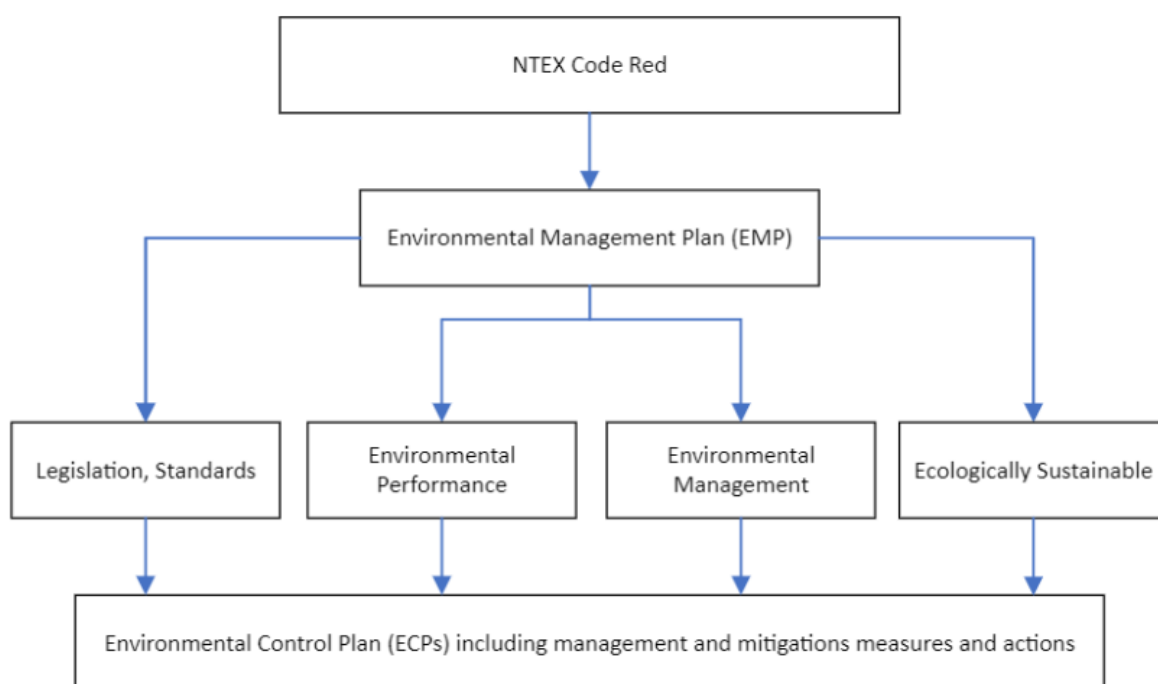


Figure 1. Environmental Management System Hierarchy

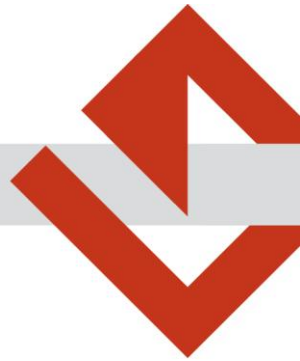
Environmental Site Representative – Gerard Breen 0428 136 075

Director – Gerard Breen, responsible for ensuring the EMP is implemented onsite and ensuring employees fulfil their responsibilities under the EMP.

Director of Operations – John Breen 0467 074 955

Operations Manager – Georgina Laws 0448 242 038

Environmental Consultant – Chris Gamble, Agon Environmental, responsible for the environmental auditing and contamination assessments.



5. Approvals, Licences and Permits

Relevant approvals, licences and permits that may be required, including but not limited to:

- ◆ access to pastoral, private or Aboriginal owned land,
- ◆ approval to extract water and/or minerals from pastoral or private land,
- ◆ swipe card or Power and Water Corporation (PWC) Meter number for use,
- ◆ Aboriginal Areas Protection Authority (AAPA) Certificate that allows for works,
- ◆ Aboriginal Land Council approvals (i.e. CLC Clearance Certificate),
- ◆ access/Work permit from relevant Land Council (as minimum the application to the Land Council in the interim and permit on receipt),
- ◆ permits from the entities with jurisdiction over the land to carry out the works, and/or activities associated with the works, on that land (i.e. Parks and Wildlife, Crown Lands etc.),
- ◆ approval from Department of Health (DoH) for on-site effluent disposal system and/or certification from a licenced plumber,
- ◆ registration with DoH for a camp commercial food preparation area in accordance with the Food Act,
- ◆ the Departments Environment Services Branch endorsement of the EMP (when issued), and
- ◆ Development Permit under the NT Planning Scheme.



6. Legislation, Regulations and Standards

NTEX Code Red comply with, but not be limited to, the following as applicable:

6.1. Northern Territory Legislation

- ◆ Aboriginal Land Act 1978
- ◆ Agriculture and Veterinary Chemicals (NT) Act
- ◆ Bushfires Management Act 2016
- ◆ Building Act 1993
- ◆ Dangerous Goods Act 1998
- ◆ Environmental Protection Act 2019
- ◆ Environmental Offences and Penalties Act 1996
- ◆ Fire and Emergency Act 1996
- ◆ Heritage Act 2011
- ◆ Litter Act
- ◆ Marine Pollution Act
- ◆ National Environment Protection Council (NT) Act
- ◆ Northern Territory Environment Protection Authority Act
- ◆ Nuclear Waste, Transport, Storage and Disposal (Prohibition) Act
- ◆ Northern Territory Aboriginal Sacred Sites Act 1989
- ◆ Soil Conservation and Land Utilisation Act 1969
- ◆ Territory Parks and Wildlife Conservation Act 1976
- ◆ Transportation of Dangerous Goods by Road and Rail (National Uniform Legislation) Act 2010
- ◆ Waste Management and Pollution Control Act 1998
- ◆ Water Act 1992
- ◆ Weeds Management Act 2001
- ◆ Work Health and Safety (National Uniform Legislation) Act 2011

6.2. Northern Territory Regulations

- ◆ Building Regulations
- ◆ Dangerous Goods Regulations
- ◆ Environmental Offences and Penalties Regulations
- ◆ Fire and Emergency Regulations
- ◆ Heritage Regulations
- ◆ Territory Parks and Wildlife Conservation By-Laws
- ◆ Territory Parks and Wildlife Conservation Regulations
- ◆ Transportation of Dangerous Goods by Road and Rail (National Uniform Legislation) Regulations
- ◆ Waste Management and Pollution Control (Administration) Regulations
- ◆ Water Regulations
- ◆ Weeds Management Regulations
- ◆ Work Health and Safety (National Uniform Legislation) Regulations

6.3. Federal Legislation

- ◆ Aboriginal and Torres Strait Islander Act 2005

- ◆ Aboriginal and Torres Strait Islander Heritage Protection Act 1984
- ◆ Aboriginal Land Rights (Northern Territory) Act 1976
- ◆ Agricultural and Veterinary Chemicals Act 1994
- ◆ Australian Heritage Council Act 2003
- ◆ Australian Environment Protection Act 2019
- ◆ Clean Energy Act 2011
- ◆ Environment Protection and Biodiversity Conservation Act 1999
- ◆ Environment Protection (Impact of Proposals) Act 1974
- ◆ Environment Protection (Sea Dumping) Act 1981
- ◆ Industrial Chemicals (Notification and Assessment) Act 1989
- ◆ Motor Vehicles Standards Act 1989
- ◆ National Environment Protection Council Act 1994
- ◆ National Environment Protection Measures (Implementation) Act 1998
- ◆ National Greenhouse and Energy Reporting Act 2007
- ◆ Native Title Act 1993
- ◆ Natural Heritage Trust of Australia Act 1997
- ◆ Ozone Protection and Synthetic Greenhouse Gas Management Act 1989
- ◆ Water Act 2007 and Water Efficiency Labelling and Standards Act 2005
- ◆ Recycling and Waste Reduction Act 2020
- ◆ Recycling and Waste Reduction (Export – Waste Tyres) Rules 2021 Federal Regulations
- ◆ Aboriginal and Torres Strait Islander Heritage Protection Regulations
- ◆ Aboriginal Land Rights (Northern Territory) (Land Description) Regulations
- ◆ Aboriginal Land Rights (Northern Territory) Regulations
- ◆ Environment Protection and Biodiversity Conservation Regulations

6.4. Federal Regulations

- ◆ Aboriginal and Torres Strait Islander Heritage Protection Regulations
- ◆ Aboriginal Land Rights (Northern Territory) (Land Description) Regulations
- ◆ Aboriginal Land Rights (Northern Territory) Regulations
- ◆ Environment Protection and Biodiversity Conservation Regulations

6.5. Australian Standards

- ◆ AS/NZS/ISO 14001 Environmental management systems-Requirements with guidance for use
- ◆ AS 2187.2 Explosives – Storage and use – Use of explosives
- ◆ AS 1940 – 2017 The storage and handling of flammable and combustible liquids
- ◆ AS1692 – 2006 Steel tanks for flammable and combustible liquids
- ◆ AS490-2009 Protection of trees on development sites
- ◆ AS 2436 Guide to noise and vibration control on construction, maintenance and demolition sites

6.6. Other Standards

- ◆ ASTM D 2487 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
- ◆ ASTM D 7208-6 - Standard Test Method for Determination of Temporary Ditch Check Performance in Protecting Earthen Channels from Stormwater-Induced Erosion

- ◆ Code of Practice for Small On-Site Sewage and Sullage Treatment Systems and the Disposal or Reuse of Sewage Effluent November 1996
- ◆ The Australian Dangerous Goods Code Edition 7.4

6.7. ANZECC Publications

- ◆ Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration
- ◆ ANZECC Australian Guidelines for Water Quality Monitoring and Reporting
- ◆ ANZECC Guidelines for Fresh and Marine Water Quality

6.8. Other Publications

- ◆ International Erosion Control Association (IECA) Australasia Best Practice Erosion and Sediment Control
- ◆ Queensland Maroon Book for urban storm water management - Manual for Erosion & Sediment Control, Version 1.2, Sunshine Coast Regional Council
- ◆ Blue Book – Managing Urban Stormwater Soils and Construction, Volume 1, 4th edition, Volume 2a – Installation of services, Volume 2b Waste Landfills, Volume 2c Unsealed Roads, Volume 2d Main Road Construction and Volume 2e Mines and Quarries
- ◆ Queensland Acid Sulfate Soil Technical Manual, Soil Management Guidelines, Version 4, SE Dear, LE O'Brien, AE McElnea, NG Moore, SK Dobos, KM Watling and CR Ahern
- ◆ RTA Code of Practice for Water Management
- ◆ Environmental Noise Management Manual
- ◆ Soil Survey Standard Test Method, Unified Soil Classification System: Field Method
- ◆ Spray drift fact Sheet-APVMA
- ◆ Why do fish need to cross the road? - NSW DPI
- ◆ QLD standard work method for the assessment of the lawfulness of releases to waters from construction sites
- ◆ Australian Rainfall and runoff – Flood analysis and design
- ◆ Declared weeds of the Northern Territory
- ◆ Weeds of National Significance (WONS)
- ◆ DLRM Land Clearing Guidelines NT Planning Scheme 2010
- ◆ NT EPA - Noise Guidelines for Development Sites in the Northern Territory
- ◆ NT EPA - Keeping our Stormwater clean – a Builder's Guide
- ◆ NT EPA – Prevent Pollution from Building Sites
- ◆ NT WorkSafe – How to Safely remove asbestos – Code of Practice
- ◆ Power and Water Corporation – Disinfection of Subdivisions and Water Service Connections from 20mm and Greater



7. Facility Overview

7.1. Existing Environment

The NTEX Code Red facility is located at 29 Muramats Road, East Arm NT 0822. Code Red occupies the land parcel described as Section 05529 Hundred of Bagot, Survey Plan number L2001/067. The land parcel is 25,000 m² in size.

The site is freehold land located within a commercial/industrial area, with all neighbouring properties being utilised for a range of industrial purposes including logistics, freight, petroleum, machinery and marine-related industries.

The site is relatively flat in the northern half of the site, but grades down towards the water's edge with a change in level of 4.5 m over a 160 m distance in the southern half of the site. Surface water is likely to drain towards Hudson Creek to the south.

The site geology comprises the Quaternary Sedimentary deposits of the Pine Creek Orogen (Qa) and would be commonly described as sand, silt and clay in coastal estuaries.

There are no groundwater wells on site, with the closest wells being on the site adjacent to the west where 7 wells are recorded as being installed in 2014 to between 12 and 15 m below ground level. There are no other groundwater wells within 2km of the site boundaries. All of the offsite wells on the adjacent land parcel are listed as for investigation purposes, with 6 backfilled and 1 remaining current. Overall, there is no evidence of groundwater abstraction for any purposes within close proximity of the site.

The site has a monsoonal tropical climate with two distinct seasons, a wet season from November to March and a dry season from May to September, with transitional months in April and October. The site is not within any fire planning areas and does not have any vegetation or known fauna present onsite.

The site is likely to be partially inundated in a 1 in 100 year storm surge event, and would be almost entirely inundated in a 1 in 1000 year storm surge event (NT NR Maps).

Existing water quality in East Arm, Darwin Harbour varies greatly with tides and seasons, and is considered to be very good (NT Department of Lands, Planning and Environment). Concentrations of nutrients and heavy metals are known to be low, and dissolved oxygen may be expected to be low in proximity to the site due to the presence of mangroves which consume oxygen.

Air quality in the East Arm area is of unknown quality, with the NT EPA's air quality monitoring program not including any monitoring stations in the East Arm area. However, overall the NT EPA data suggests that air quality in the East Arm area is likely to be acceptable and within the NEPM criteria, with the only exceedances of criteria in the local area being attributable to exceptional events such as bushfire smoke.

A summary of the features of the surrounding environment and their proximity to Code Red is provided in the following table:

Feature of the Surrounding Environment	Distance to NTEX Code Red
Landmarks	The East Arm Wharf and the Australian Border Force Wharf are present approximately 5 km to the west of the site. The Hidden Valley Raceway is approximately 3.5 km to the north of the site.

Feature of the Surrounding Environment	Distance to NTEX Code Red
Site of cultural/social significance	The site is not within any native title areas, noting that the Larrakia Native Title Determination applies to land to the north, east, west and south of the site.
Regional community centre	Berrimah is the nearest community area where residential housing is present.
National Reserve System	There are no national reserves onsite or within 2 km of the site. The closest National Reserve is Charles Darwin National Park is over 3 km to the north west.
Sensitive environments (e.g. waterways, groundwater resources, natural features, conservation reserves)	Hudson Creek adjacent to the south. Mangrove ecosystems approximately 500 m east and 300 m west. Darwin Harbour.

As the NTEX Code Red facility is a transfer station with an ongoing operation in a commercial/industrial area, it is considered that a conceptual site model is not required, as there is no disposal of wastes; accordingly, there are no discharges, wastes or contaminants from the site that the surrounding environment would be exposed to. It is considered that ongoing operation will not result in any additional impacts on species, ecosystems, the social or economic environment.

7.2. Proposed Temporary Listed Waste Storage Area – Surrounding Environment

NTEX Code Red also proposes the use of a temporary listed waste storage area located at 25 Muramats Road, East Arm NT 0822, which directly adjoins the existing facility at 29 Muramats Road.

Given the immediate proximity and shared boundary between the two land parcels, the environmental setting of the proposed temporary storage area is consistent with that described for the existing facility. The adjoining site is similarly situated within a commercial/industrial precinct and is surrounded by industrial land uses, including logistics, freight, petroleum, machinery, and marine-related industries.

The proposed temporary storage area exhibits the same key environmental characteristics as the existing facility, including:

- Comparable topography and surface drainage patterns, with surface water likely to drain towards Hudson Creek to the south;
- Similar underlying geology associated with Quaternary Sedimentary deposits of the Pine Creek Orogen;
- No known groundwater abstraction within close proximity;
- The same monsoonal tropical climate and exposure to seasonal weather conditions; and
- Proximity to the same sensitive environmental receptors, including Hudson Creek, nearby mangrove ecosystems, and Darwin Harbour.

As with the existing facility, the proposed temporary listed waste storage area will not involve waste disposal activities. The area will be used solely for the temporary storage of asbestos and soils



contaminated with listed waste, and operations will be managed to prevent any discharge of contaminants to land, surface water, groundwater, or air.

Accordingly, the proposed temporary storage area is not expected to introduce any additional environmental risks or impacts beyond those already assessed for the existing NTEX Code Red facility.

7.3. Waste Types and Volumes

The Resource Recovery Facility site is currently used to receive recovered materials from construction and demolition activities, as well as commercial and industrial activities. Materials are subsequently crushed, processed, and repurposed for other projects in Darwin and the surrounding Greater Darwin Region.

Most of the materials received are derived from construction and demolition activities. A smaller proportion of the waste stream is obtained from commercial/industrial sources, for example tyres are received from a range of customers including local councils, government bodies, private entities and marine, aviation and transportation companies.

Materials delivered at the facility for direct resource recovery must undergo testing for possible contamination and must be verified by the Resource Recovery Facility Manager to ensure the materials are free of contamination before they can be accepted at the facility. A copy of the Material Assessment Procedure is provided in **Attachment 2 – Material Assessment and Acceptance Criteria – RED-HSEQ-ENV-010**.

The facility accepts materials for subsequent resources recovery as follows:

- ◆ Concrete,
- ◆ Bricks,
- ◆ Ceramics,
- ◆ Natural rock,
- ◆ Solid waste (e.g. tyres), and
- ◆ Asphalt.

The facility also accepts listed wastes for transfer to another licensed facility only (*no onsite processing*) as follows:

- ◆ Heavy metals, metal compounds and hydrocarbons.
- ◆ Asbestos and similar fibres.
- ◆ Liquid waste.
- ◆ Contaminated soil and similar composites.
- ◆ Organic waste (animal effluent and residues).
- ◆ Grease trap waste.

All materials (including listed and non-listed wastes) are tracked in and out of the facility using a tracking register which records date, vehicle registration, company, material source, site destination, tonnes and weighbridge docket number. Incoming concrete is also tracked for the status of any applicable clearance certificates, whilst outgoing tyres are tracked as either shredded or whole.

The adjoining site at 25 Muramats Road, East Arm NT 0822 is proposed to be used as a temporary listed waste storage area only and will operate as an ancillary component of the NTEX Code Red Resource Recovery Facility.



No resource recovery, processing, crushing, or treatment activities will be undertaken at this location. The site will be used exclusively for the temporary storage of listed wastes, limited to:

- Asbestos and similar fibres, and
- Soils contaminated with listed waste.

7.4. Waste Operational Hours

The facility standard hours are Monday to Friday 7:00 am to 4:00 pm, Saturday and Sunday by appointment only and closed Public Holidays.

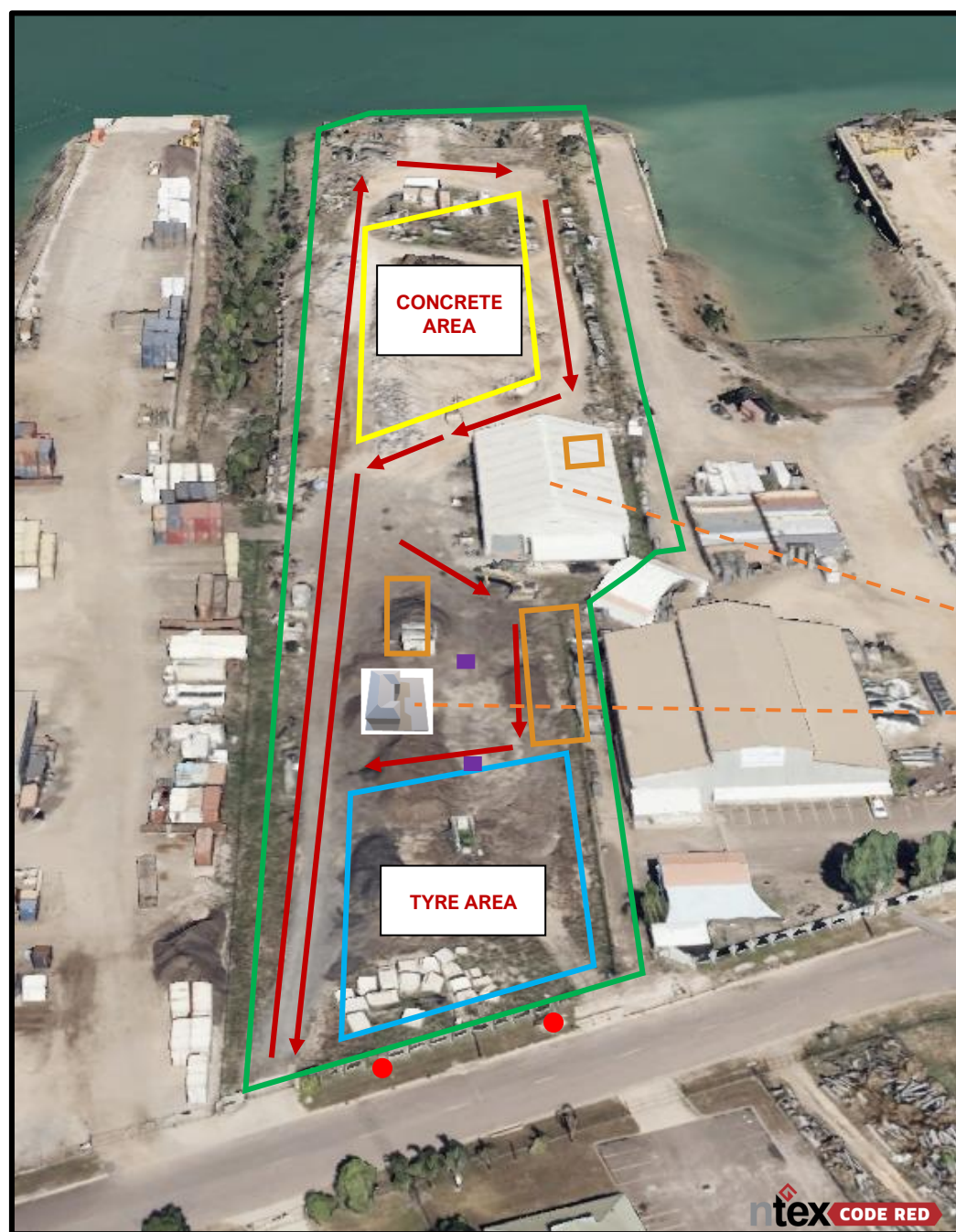
The proposed temporary listed waste storage area at 25 Muramats Road will operate under the same standard operational hours as the existing NTEX Code Red Resource Recovery Facility. Any access outside of these hours will be subject to prior approval and managed in accordance with site operational procedures.



7.5. Facility Layout Map

NTEX Code Red, 29 Muramats Road, East Arm, NT, 0822

12°28'48.8"S 130°55'35.8"E



Legend

SITE PERIMETER

TRAFFIC ROUTE

CONCRETE AREA

TYRE AREA

LISTED WASTE STORAGE

STORMWATER DRAINS

FIRE HYDRANTS

WORKSHOP

SITE OFFICE & WEIGHBRIDGE

Image: [Google Earth](#)



8. Management of listed waste

The waste types listed under Schedule 2 of the Waste Management and Pollution Control (Administration) Regulations 1998, encompass a wide range of hazardous and controlled substances that require specific handling, transport, and disposal protocols.²

Heavy Metals, Metal Compounds and Hydrocarbon

Acidic solutions or acids in solid form
 Animal Effluent & Residues
 Antimony, antimony compounds
 Arsenic, arsenic compounds
 Asbestos
 Barium compounds other than barium sulphate
 Basic solutions or bases in solid form
 Beryllium, beryllium compounds
 Boron compounds
 Cadmium, cadmium compounds
 Ceramic-based fibres with physio-chemical characteristics similar to those of asbestos
 Chlorates
 Chromium compounds (hexavalent or trivalent)
 Cobalt compounds
 Containers that are contaminated with residues of a listed waste
 Copper compounds
 Cyanides (inorganic)
 Cyanides (organic)
 Encapsulated, chemically fixed, solidified or polymerised wastes
 Halogenated organic solvents
 Highly odorous organic chemicals (including mercaptans and acrylates)
 Inorganic fluorine compounds excluding calcium fluoride
 Isocyanate compounds
 Mercury, mercury compounds
 Metal carbonyls

² Waste Management and Pollution Control (Administration) Regulations 1998, Schedule 2, Northern Territory Government.



Nickel compounds

Non- Toxic Salts

Organic phosphorus compounds

Organic solvents excluding halogenated solvents

Organohalogen compounds that are not otherwise specified in this Schedule

Perchlorates

Phenols, phenol compounds including chlorophenols

Phosphorus compounds other than mineral phosphates

Polychlorinated dibenzo-furan (any congener)

Polychlorinated dibenzo-p-dioxin (any congener)

Residue from industrial waste treatment or disposal operations

Selenium, selenium compounds

Sewage sludge and residues, including nightsoil and septic tank sludge

Surface active agents (surfactants) that contain principally organic constituents and that may contain metals and inorganic materials

Tannery wastes (including leather dust, ash, sludges, and flours)

Tellurium, tellurium compounds

Thallium, thallium compounds

Triethylamine catalysts for setting foundry sands

Vanadium compounds

Waste chemical substances arising from research and development or teaching activities, including those substances which are not identified and/or are new and the effects of which on human health and/or the environment are not known

Waste from the manufacture, formulation and use of wood-preserving chemicals

Waste from the production, formulation and use of biocides and phytopharmaceuticals

Waste from the production, formulation and use of photographic chemicals and processing materials

Waste from the production, formulation and use of resins, latex, plasticisers, glues and adhesives

Waste tarry residues arising from refining, distillation and any pyrolytic treatment

Waste from the production, formulation and use of organic solvents Waste substances and articles containing or contaminated with polychlorinated biphenyls (PCBs), polychlorinated naphthalenes (PCNs), polychlorinated terphenyls (PCTs) and/or polybrominated biphenyls (PBBs)



Waste substances and articles containing or contaminated with per- and polyfluoroalkyl substances (PFAS) Waste resulting from surface treatment of metals and plastics Zinc compounds
Asbestos and Similar Fibres Asbestos Ceramic-based fibres with physio-chemical characteristics similar to those of asbestos
Liquid Waste Fire debris and fire wash waters Waste mineral oils unfit for their original intended use Waste mixtures, or waste emulsions, of oil and water or hydrocarbon and water Waste resulting from surface treatment of metals and plastics
Contaminated soil and similar composites Containers contaminated with residues of a listed waste Soils contaminated with a listed waste
Grease trap waste
Tyres
Organic waste Animal Effluent & Residues

8.1. Listed Waste Management Objectives

- ◆ Ensure that waste handling activities do not result in environmental harm.
- ◆ Safeguard surface water and groundwater from contamination.
- ◆ Prevent any incidents involving the spillage of hazardous substances.
- ◆ Encourage the reuse and recycling of listed wastes wherever possible.

8.2. Listed Waste Tracking (Collection, Transport, Processing and Storage)

- ◆ Date and time of waste collection
- ◆ Source of the listed waste
- ◆ Name of the Company / Client (if different from the licensee)
- ◆ Vehicle registration number
- ◆ Type of listed waste
- ◆ Quantity of listed waste
- ◆ Destination of the listed waste



8.3. Listed waste collection, transportation, processing and storage measures

All waste streams received onsite, including listed wastes, are separated into designated areas with appropriate bunding and control measures to minimise environmental harm. Segregated areas are provided for listed and non-listed wastes.

The specific management measures for listed wastes are identified in the following sections specific to each form of waste.

Heavy Metals, Metal Compounds, and Hydrocarbon Waste

Category	Management Measures	Frequency
Waste acceptance for collection	- Obtain waste documentation and ensure pre-approval from relevant authorities. - Verify waste type, origin, and container integrity prior to collection. - Check for accurate labelling, ensuring all required hazard symbols and descriptions are present.	Per load
Waste Handling	- Waste must be handled using precautions specific to each specific waste type, using appropriate PPE and tools to avoid direct contact or exposure. - Secure waste in properly sealed and leak-proof containers to prevent leaks or spills during transport. - Record all relevant details of the waste being collected.	Per collection
Transportation preparation	- Ensure waste is loaded securely and evenly distributed to avoid movement during transport. - Use approved vehicles with containment systems, such as spill-proof liners or compartments. - Ensure that vehicle meets NT EPA requirements, NT WorkSafe and Australian Dangerous Goods Code (ADG) standards. - Ensure that waste types are segregated for transport as required	Before transport
Transportation	- Monitor containers for any signs of leaks or spills during transport. - Ensure the driver and team are trained and equipped with emergency spill kits. - Transport all waste in accordance with NT EPA requirements, NT WorkSafe and Australian Dangerous Goods Code (ADG) standards. - Segregate waste types for transport in accordance with the segregation requirements table.	Per trip

Category	Management Measures	Frequency
Processing	- Send to licensed facilities for treatment and disposal (e.g., stabilisation, recycling of hydrocarbons). - Monitor waste handling per regulatory protocols.	As per treatment plan
Storage	- Store in sealed containers to avoid any leakages. - Clear and readable labelling. - Regularly inspect for leaks or corrosion, away from water sources. <i>Refer to RED-HSEQ-SAF-071 Site Inspection Checklist.</i> - Maintain waste accurate waste manifests and records. - Maintain spill kits and fire extinguishing equipment. - Segregate waste types for storage in accordance with the segregation requirements table.	Weekly inspections
Monitoring	- Inspect containers, vehicle, and spill containments before each trip. - Conduct visual inspections during loading/unloading for damage or leaks.	Before, during, and after transport
Corrective Actions	- Contain any spills or leaks immediately during loading, collection, or transport. - Notify the relevant authorities and take corrective measures in case of accidents or incidents. - Reroute and reschedule transport if necessary for safety concerns.	As required
Reporting	- Document each load's collection and transport process, including weight, client, origin, type of waste and destination. - Submit incident reports for any accidents or spills during transport.	As required

Heavy Metals, Metal Compounds, Hydrocarbons: Waste Segregation Requirements

Waste Type	Waste Segregation
Acidic solutions or acids in solid form	Separate from basic wastes to prevent dangerous reactions during storage and disposal
Antimony, antimony compounds	Segregate from other hazardous waste



Waste Type	Waste Segregation
Arsenic, arsenic compounds	Separate from organic materials and other hazardous wastes
Barium compounds other than barium sulphate	Separate from sulphates and other incompatible wastes
Basic Solutions or bases in solid form	Separate from acidic waste to prevent dangerous reactions.
Beryllium, beryllium compounds	Must be segregated from other metals and waste streams.
Boron compounds	Separate from incompatible materials like strong acids
Cadmium, cadmium compounds	Separate from other heavy metals to avoid contamination
Chlorates	Separate from reducing agents and incompatible materials
Chromium compounds	Must be segregated from other hazardous wastes
Cobalt compounds	Must be segregated from incompatible materials
Containers that are contaminated with residues of a listed waste	Segregate from clean containers, must be treated as hazardous.
Copper compounds	Separate from other heavy metals to avoid contamination
Cyanides	Must be segregated from other hazardous wastes
Encapsulated, chemically fixed, solidified or polymerised wastes	Must be segregated from untreated hazardous wastes.
Halogenated organic solvents	Segregate from non-halogenated solvents.
Highly odorous organic chemicals	Segregate from other non-odorous waste.
Inorganic fluorine compounds excluding calcium fluoride	Segregate from other chemicals and waste.
Isocyanate compounds	Segregate from other chemical waste
Lead, Lead compounds	Segregate from other metals and non-hazardous waste to prevent cross-contamination.
Mercury, mercury compounds	Segregate from other heavy metals

Waste Type	Waste Segregation
Nickel compounds	Segregate from other metals and non-hazardous waste.
Non-toxic salts	Segregate based on salt type and potential reactivity.
Organic phosphorus compounds	Segregate from other chemical wastes.
Organohalogen compounds not otherwise specified	Segregate from non-halogenated waste.
Phenols, phenol compounds including chlorophenols	Segregate by chemical properties (e.g., halogenated, non-halogenated)
Polychlorinated dibenzo-furan (any congener)	Segregate from general industrial waste
Polychlorinated dibenzo-p-dioxin (any congener)	Segregate toxic chlorinated wastes
Residue from industrial waste treatment or disposal operations	Segregate based on chemical composition of the waste.
Selenium, selenium compounds	Segregate from non-selenium wastes.
Surface active agents (surfactants) with organic constituents	Segregate organic from inorganic surfactants
Tannery wastes	Segregate by type (organic vs. inorganic residues)
Tellurium, tellurium compounds	Segregate from other metals
Thallium, thallium compounds	Segregate from other heavy metals
Vanadium compounds	Segregate from other heavy metals
Waste chemical substances arising from research and development or teaching activities, including those substances which are not identified and/or are new and the effects of which on human health and/or the environment are not known	Segregate based on hazard class if known; isolate unidentified substances from other waste streams.
Waste from the manufacture of wood-preserving chemicals	Segregate toxic from non-toxic waste

Waste Type	Waste Segregation
Waste from the production, formulation and use of biocides and phytopharmaceuticals	Segregate based on chemical properties (organic, inorganic)
Waste from the production, formulation and use of photographic chemicals and processing materials	Segregate silver-rich waste from general chemical waste
Waste from the production, formulation and use of resins, latex, plasticisers, glues and adhesives	Segregate based on chemical composition (organic vs. inorganic)
Waste from the production and preparation of pharmaceutical products	Segregate based on chemical composition and hazardous properties, separate from general waste.
Waste tarry residues arising from refining, distillation and any pyrolytic treatment	Segregate from other waste streams, especially organic solvents
Waste substances and articles containing or contaminated with polychlorinated biphenyls (PCBs), polychlorinated naphthalenes (PCNs), polychlorinated terphenyls (PCTs), and/or polybrominated biphenyls (PBBs)	Segregate from other non-toxic waste.
Waste substances and articles containing or contaminated with per- and polyfluoroalkyl substances (PFAS)	Segregate from other listed waste with different hazard profiles, such as reactive, flammable or volatile wastes.
Zinc compounds	Segregate from other metal waste.

Asbestos and Similar Fibers (including silica)

Category	Management Measures	Frequency
Waste acceptance for collection	- Ensure that all asbestos loads for collection are pre-arranged with relevant documentation in place (e.g., collection permits and asbestos register details). - Confirm that asbestos materials are properly packaged according to	Per load

Category	Management Measures	Frequency
	NT WorkSafe and Safe Work Australia guidelines (double-wrapped in 200 µm thick plastic sheeting, sealed, and labelled with the asbestos warning). - Only collect asbestos from licensed removalists or approved sites in compliance with Northern Territory Dangerous Goods Regulations .	
Waste Handling	- Use specialised PPE including respirators, coveralls, and gloves to prevent exposure. - Collect waste using proper containment methods, such as double-bagging in asbestos-rated bags or using sealed containers. - Avoid activities that generate dust. - Licensed personal to work on materials with Asbestos training	Per collection
Transportation preparation	- Ensure that vehicles transporting asbestos meet, NT EPA requirements, NT WorkSafe and Australian Dangerous Goods Code (ADG) standards, including secure containment and ventilation controls to prevent fibre release. - Containers and asbestos packaging must be clearly marked with asbestos hazard labels and secured during transport. - Transport vehicles must be equipped with emergency response kits, including PPE, spill containment, and communication tools for incident management.	Before transport
Transportation	- Select appropriate routes for asbestos transportation that minimise risk to public areas, avoiding densely populated zones where possible. - Monitor asbestos packaging for any signs of damage during transport; in case of any leakage, stop the transport immediately and follow NT emergency procedures . - Ensure that vehicles transporting asbestos comply with the Australian Dangerous Goods Code (ADG) , and drivers are trained in asbestos handling and transport regulations. - Segregate wastes during transport as per storage requirements.	Per trip
Processing	- Not applicable	Upon disposal
Storage	- Short-term storage only, in well-ventilated, secure areas. - Keep containers sealed until final disposal destination. - Segregate asbestos from non-hazardous waste.	Weekly inspections Until disposal

Category	Management Measures	Frequency
	- Segregate ceramic-based fibres from asbestos and other hazardous materials. - Clear and readable container labelling. - Regularly inspect for leaks or corrosion, <i>Refer to RED-HSEQ-SAF-071 Site Inspection Checklist.</i> - Maintain waste accurate waste manifests and records.	
Monitoring	- Periodic checks on the packaging and containment during transport to prevent any possible exposure or spillage. - Monitor the vehicle's containment to ensure no asbestos fibres are released during transportation. - Keep records of inspections and compliance with NT safety and transport regulations, noting any incidents during the journey.	Before, during, and after transport
Corrective Actions	- In case of packaging failure or spillage, follow immediate containment protocols as per Safe Work Australia and NT EPA guidelines, isolating the area and contacting local authorities. - Repackage and secure asbestos materials in compliance with local safety standards before continuing transportation. - Notify the relevant health and safety bodies (e.g., NT WorkSafe) if any asbestos exposure or safety breaches occur during transportation.	As required
Reporting	- Maintain detailed records of collection and transport activities, including waste type, amount, and client destination. - Complete and file incident reports for any accidents or breaches of safety.	As required

Liquid Waste

Category	Management Measures	Frequency
Waste acceptance for collection	- Ensure pre-approval for the collection of liquid waste, with documentation verifying the type of liquid waste (e.g., fire debris and wash waters, waste oil emulsions). - Confirm that containers used for the liquid waste are sealed, leak-proof, and appropriately labelled for transportation.	Per load
Waste Handling	- Not applicable	
Transportation preparation	- Ensure that vehicles meet, NT EPA requirements, NT WorkSafe and Australian Dangerous Goods Code (ADG) standards.	Before transport

Category	Management Measures	Frequency
	- Load liquid waste containers securely, ensuring there is no risk of tipping or leakage during transport. - Vehicles must be equipped with spill containment kits and proper signage for liquid waste transport.	
Transportation	- Transport all waste in accordance with NT EPA requirements, NT WorkSafe and Australian Dangerous Goods Code (ADG) standards. - Regularly monitor containers during transport to detect leaks or spills. - Personnel must be trained in liquid waste transport and emergency spill response. - Segregate wastes during transport as per storage requirements.	Per trip
Processing	- Not applicable	
Storage	- Segregate fire debris and fire washwaters from non-hazardous debris. - Segregate waste mineral oils from non-oil waste. - Segregate waste mixtures from other industrial waste. - Segregate treated metal and plastic waste from other chemical waste. - Clear and readable container labelling - Regularly inspect for leaks or corrosion, <i>Refer to RED-HSEQ-SAF-071 Site Inspection Checklist</i> - Maintain waste accurate waste manifests and records	Weekly inspections
Monitoring	- Conduct pre-trip inspections of liquid waste containers and vehicle containment systems. - Monitor for signs of leaks during loading, unloading, and transportation.	Before, during, and after transport
Corrective Actions	- Immediately contain and clean up any liquid waste spills during collection, transport or storage - Report any spills to the relevant authorities and take corrective measures. - Reroute transport if there are safety or environmental concerns.	As required
Reporting	- Record details of each waste load like source, type, and volume. - Submit incident reports for any accidents or spills during transport or handling. - Maintain compliance with regulatory reporting requirements.	As required



Contaminated Soil and Similar Composites

Category	Management Measures	Frequency
Waste acceptance for collection	- Ensure pre-arranged approval is obtained for the collection of contaminated soil, with documentation outlining contaminants and source location. Soil contaminants exceeding the Shoal Bay Waste Management Facility Acceptance Criteria - Ensure contaminated soils are placed in sealed containers and labelled or bags (200µm or similar) - Ensure testing results, have been provided with assessment prior to collection.	Per load
Waste Handling	- Use appropriate PPE and equipment to handle contaminated soil safely. - Avoid spreading or dispersal of soil during collection. Soil contaminants exceeding the Shoal Bay Waste Management Facility Acceptance Criteria - Securely transfer soil into compliant, leak-proof containers or bulk bags designed for hazardous waste.	Per collection
Transportation preparation	- Ensure that vehicles meet, NT EPA requirements, NT WorkSafe and Australian Dangerous Goods Code (ADG) standards. - Ensure contaminated soil containers are properly loaded and secured in transport vehicles to prevent movement or spillage. Soil contaminants exceeding the Shoal Bay Waste Management Facility Acceptance Criteria - Vehicles must be equipped with covers, liners, and spill kits for secure transport. - Containers must be labelled with appropriate hazard warnings and secured to prevent movement during transit.	Before transport
Transportation	- Transport all waste in accordance with NT EPA requirements, NT WorkSafe and Australian Dangerous Goods Code (ADG) standards. - Monitor containers for any signs of leaks or spills during transport. - Train personnel in emergency response for handling contaminated soil spills. - Segregate wastes during transport as per storage requirements.	Per trip
Processing	- Not applicable	

Category	Management Measures	Frequency
Storage	- Store in sealed containers to avoid any spills or contamination - Regularly inspect for leaks and avoid storing near sensitive areas, <i>Refer to RED-HSEQ-SAF-071 Site Inspection Checklist.</i> - Segregate sewage sludge and residues from other non-organic waste. - Segregate contaminated soils from non-contaminated soil. - Clear and readable container labelling. - Maintain waste accurate waste manifests and records.	Weekly inspections
Monitoring	- Conduct pre-trip and post-trip inspections of containers for any signs of damage or leaks. - Monitor during loading and unloading to prevent spills or contamination of surrounding areas.	Before, during, and after transport
Corrective Actions	- Immediately contain and clean up any contaminated soil spills during collection or transport. - Notify relevant authorities of any spill incidents. - Secure and reload any spilled or improperly contained soil.	As required
Reporting	- Maintain detailed records of contaminated soil collection, transport and storage, including source, tonnage, destination, vehicle registration and type of contaminants. - Complete incident reports in case of accidents or spills during transport. - Submit reports to regulatory bodies as required.	As required

Grease Trap Waste

Category	Management Measures	Frequency
Waste acceptance for collection	- Confirm that grease trap waste loads are accompanied by proper documentation, including source and type of waste. - Assess the waste to ensure it does not contain hazardous materials exceeding acceptable limits (e.g., oil, grease, solids). - Collect only from approved facilities that adhere to local waste management regulations.	Per load
Waste Handling	- Ensure collection staff are trained in handling grease trap waste in accordance with NT EPA guidelines. - Use appropriate PPE (e.g., gloves, masks) during collection. - Pre-arrange collection through a service request, ensuring all relevant documentation is completed.	Per collection



Category	Management Measures	Frequency
	- Inspect grease traps for compliance with maintenance schedules before collection.	
Transportation preparation	- Ensure that vehicles meet, NT EPA requirements, NT WorkSafe and Australian Dangerous Goods Code (ADG) standards. - Use specialised vehicles equipped with leak-proof for transporting grease trap waste. - Ensure tanks are cleaned and maintained to prevent cross-contamination with other waste types. - Label vehicles and containers with appropriate hazard warnings and waste type identification.	Before transport
Transportation	- Follow designated routes that minimise exposure to sensitive environments (e.g., waterways). - Monitor transport conditions (e.g., temperature, pressure) to maintain waste integrity. - Maintain communication with disposal facilities to ensure timely and safe delivery. - Segregate wastes during transport as per storage requirements.	Per trip
Processing	- Send to licensed facilities for treatment, such as oil-water separation or anaerobic digestion. - Track waste quantities and adhere to processing regulations.	As per treatment plan
Storage	- Store in designated areas away from food processing or storage. - Ensure containers are closed to avoid odours and vermin and inspect regularly for leaks. <i>Refer to RED-HSEQ-SAF-071 Site Inspection Checklist</i> - Clear and readable container labelling. - Maintain waste accurate waste manifests and records. - Segregate from non-grease containing waste.	Weekly inspections
Monitoring	- Conduct inspections of containers and vehicles before and during transport to detect leaks or damage. - Keep records of vehicle maintenance and disinfection after each trip. - Monitor staff for health and safety compliance during collection and transport.	Before, during, and after transport
Corrective Actions	- If leaks or spills occur during transport, stop immediately and contain the spill according to established emergency procedures.	As required

Category	Management Measures	Frequency
	- Ensure immediate decontamination of workers, vehicles, and containers following any incidents.	
Reporting	- Maintain detailed records of grease trap waste collected and transported and stored including volumes and sources. - Report any incidents involving spills or exposure to the relevant regulatory authorities. - Submit compliance documentation as required by NT EPA regulations.	As required

Tyres

Category	Management Measures	Frequency
Waste acceptance for collection	- Ensure all the licenses are verified before the collection of tyres and they are accepted only from approved with appropriate documentation. - Verify that collected tyres are free from contaminants like oils or other hazardous materials.	Per load
Waste Handling	- Use appropriate vehicles that are equipped to handle large volumes of tyres, ensuring secure loading to prevent movement during transport. - Train personnel in safe loading and unloading practices.	Per collection
Transportation preparation	- Ensure that vehicles meet, NT EPA requirements, NT WorkSafe and Australian Dangerous Goods Code (ADG) standards. - Use vehicles designed for transporting bulky materials like tyres, ensuring they are fitted with secure tie-downs or restraints. - Conduct pre-trip inspections to ensure tyres are securely loaded and the vehicle is in good condition. - Ensure vehicles are marked with the appropriate waste symbols and documentation.	Before transport
Transportation	- Follow designated routes that minimise the risk of accidents, avoiding environmentally sensitive areas (e.g., water bodies) and populated zones. - Monitor tyre loads during transit to ensure stability and prevent any shifting that could lead to accidents. - Ensure vehicles comply with NT regulations for the transport of bulky waste. - Segregate wastes during transport as per storage requirements.	Per trip



Category	Management Measures	Frequency
Processing	- See 10. Tyre Shredding & Mobile Tyre Shredding - Shredding tyres in the NTEX Code Red resource recovery facility following safety and environmental protocols - Ensure proper tyre shredding process compliance with NT EPA regulations	As per processing schedule
Storage	- Store shredded material in secure, ventilated areas to prevent fire hazards until they are loaded for exports. - Maintain good housekeeping practices to minimise risks associated with stored shredded tyres. <i>Refer to RED-HSEQ-SAF-071 Site Inspection Checklist</i> - Segregate from other waste, especially hazardous waste. - Clear and readable container labelling. - Maintain waste accurate waste manifests and records.	Weekly inspections
Monitoring	- Conduct regular checks on the tyre load during transport to ensure it remains secure and stable. - Record and report any incidents, such as load shifts or vehicle issues, immediately to the appropriate authorities. - Regularly inspect transport vehicles for wear and tear, especially those carrying heavy or bulky loads.	Before, during, and after transport
Corrective Actions	- If tyres shift or the load becomes unstable, stop the vehicle immediately and secure the load before continuing. - Report any incidents involving tyre transport to the relevant authorities. - Provide additional training or review loading procedures if repeated issues occur.	As required
Reporting	- Maintain detailed records of tyre collections, transport, processing and storages including the tyre stockpiles, source, and client destination. - Submit regular reports to the NT EPA, including any incidents during transport. - Ensure all tyre transportation activities are documented and comply with NT regulations.	As required

Animal Effluent & Residues

Category	Management Measures	Frequency
Waste acceptance for collection	- Obtain pre-arranged approval for collection with documentation specifying the source and type of animal effluent/residues. - Ensure containment in sealed, and labelled containers or bags. - Verify that testing results are available if needed.	Per load
Waste collection	- Use appropriate PPE (e.g., gloves, masks) and equipment to safely handle animal effluent/residues. - Minimize handling to avoid spills or splashes. - Secure effluent in compliant, leak-proof or sealed containers.	Per collection
Transportation preparation	- Ensure that vehicles meet, NT EPA requirements, NT WorkSafe and Australian Dangerous Goods Code (ADG) standards. - Properly secure effluent containers in vehicles to prevent movement or spillage. - Use vehicles equipped with covers, liners, and spill kits for safe transport. - Label containers with appropriate hazard warnings.	Before transport
Transportation	- Follow designated routes to reduce environmental impact in case of a spill. - Monitor containers for signs of leaks or spills during transport. - Train personnel in emergency response for handling effluent spills. - Segregate from non-organic waste and hazardous chemicals during transport.	Per trip
Processing	- Not Applicable	
Storage	- Not Applicable	
Monitoring	- Inspect containers pre- and post-trip for any signs of leaks. - Monitor during loading and unloading to avoid spills or contamination of surrounding areas.	Prior, during, and after transport
Corrective Actions	- Immediately contain and clean any spills of animal effluent during collection or transport. - Notify relevant authorities of any spill incidents. - Secure and reload any spilled or improperly contained effluent.	As required
Reporting	- Maintain detailed records of each load, including source, volume, destination, vehicle details, and type of effluent/residue.	As required

Category	Management Measures	Frequency
	- Complete incident reports for any spills or accidents. - Submit reports to regulatory bodies when required.	

8.4. Listed Waste Segregation Areas

This map outlines designated segregation areas for the storage of listed wastes within the Resource Recovery Facility. To minimise environmental risks and ensure regulatory adherence, listed wastes are segregated based on their sensitivity to temperature, light, and chemical stability.

Cool, Dry Storage Areas are reserved for wastes that are reactive, volatile, or photodegradable, requiring protection from direct sunlight and heat.

General Storage Areas accommodate listed wastes that are chemically stable and not affected by ambient environmental conditions.

Proper segregation helps prevent hazardous reactions, protects container integrity, and supports safe handling practices.



- Cool, Dry Storage Area for Listed Waste that require protection from heat or sunlight.
- General Storage Area for Listed Waste
- Weighbridge

The proposed temporary listed waste storage area at 25 Muramats Road will be used exclusively for the storage of asbestos and similar fibres and soils contaminated with listed waste. As such, segregation requirements for this area are specific to these waste streams.

All listed waste materials will be stored within a dedicated, clearly delineated storage area, designed to contain materials and prevent migration beyond the storage footprint. Controls will be implemented to reduce the risk of fibre release, including restricted access, and dust suppression measures as necessary. Bunding and surface controls will be maintained to minimise the risk of runoff, leachate generation, and environmental release.

No other listed or non-listed waste types will be stored within the temporary storage area. The segregation measures implemented at this location are designed to:

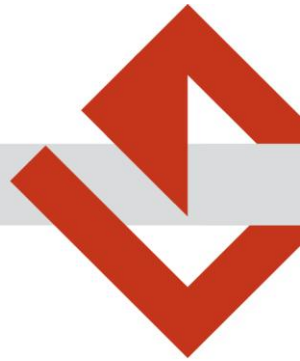
- Prevent cross-contamination;
- Maintain material stability;
- Minimise the risk of airborne fibre release; and
- Support safe handling and compliant transfer of materials to appropriately licensed facilities.

The segregation and management of listed wastes at the temporary storage area will be overseen through NTEX Code Red's existing operational procedures and environmental management systems.

25 Muramats Road, Hudson Creek, NT, 0822 -12.479638, 130.926812



- Proposed Temporary Listed Waste Storage Area.
- ↔ Access gate between adjoining properties



9. Concrete and Silica Crushing

Prior to crushing, concrete and silica are stored in a segregated designated area. Before crushing occurs, all foreign materials are removed from the materials to be crushed including plastic, rubber and reinforcing bar.

Crushing of concrete and silica is undertaken outdoors through a mechanical process but utilising an Arjes Titan 900 Crusher (crushing machine) which produces 600 mm to 75 mm size crushed material. This then goes through a secondary crushing in a Rubblemaster 120 x Impact Crusher (secondary crusher) which crushes material to a 20 mm size. Both crushing machines are fitted with a dust extractor and no engineered stone is crushed. No chemicals are used during the crushing process.

Crushed materials are stored in a segregated designated outdoor area whilst awaiting removal for offsite reuse. Crushed materials are stockpiled to between 3 m and 8 m height.

Crushed materials are loaded out for offsite reuse by an excavator, which loads material into a side tipper/hook truck bin. This activity occurs outdoors and in accordance with the NTEX Code Red Air Quality Management Plan (AQMP).

Dust is minimised throughout the crushing process through the following control measures:

- ◆ Using dust suppression spraying units, water cart and water boards during crushing.
- ◆ No crushing to below 20 mm size.
- ◆ Maintaining stockpile heights to under 8 m.
- ◆ Limitation on vehicle speed onsite to 20 km/hr.
- ◆ Minimising the height of the loader bucket when lifting crushed concrete into trucks.
- ◆ Water cart onsite to add moisture to crushed materials at any stage during crushing, stockpiling or loading into trucks.
- ◆ Covering of all loads of crushed material when leaving the site.

The AQMP requires that no visible dust is generated by any concrete crushing. Particular weather conditions including dry weather and winds of over 30 km/hr are known to be a higher risk for dust generation. Should dust become visible, actions will be taken to respond to the issue until no visible dust is evident, including one or more of the following:

- ◆ Additional water usage during crushing.
- ◆ Reduced crushing rate.
- ◆ Pause crushing activities until high-risk weather conditions ease.
- ◆ Cease all crushing activities during wind events of over 50 km/hr.

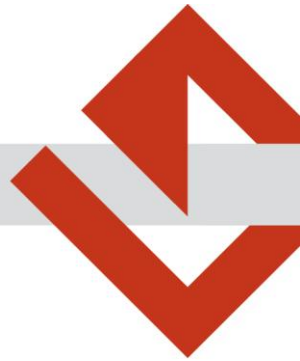
Noise will be managed during concrete and silica crushing through the Noise and Vibration Management Plan (NVMP). The NVMP requires that site activities do not result in any complaints from the public, adjoining businesses or other parties. Should crushing activities result in a complaint, actions will be taken to reduce noise levels and further investigate the nature of the complaint as follows:

- ◆ Identify source of complaint, location, time and whether it is an onsite or offsite activity that is creating noise.
- ◆ Update and review complaints register and note whether similar complaints have been received historically.
- ◆ Service and maintain all machinery to ensure it is in good working order to minimise noise.

- ◆ Confirm whether decibel requirements of the Work Health and Safety (National Uniform Legislation) Regulations 2011 – Chapter 4, part 4.1 – (1) are being complied with.
- ◆ Reduce crushing rate.
- ◆ Adjust crushing times.
- ◆ Consider acoustic assessment to quantify noise levels.

9.1. Concrete and Silica Crushing Area





10. Tyre Shredding & Mobile Tyre Shredding

10.1. Tyre Processing at NTEX Code Red

The tyre shredding process involves cutting down used tyres into smaller manageable pieces which can then be repurposed for various applications such as further recycling, manufacturing or energy generation such as tyre derived fuel.

On receipt into NTEX Code Red, tyres are sorted based on size and/or source into stockpiles ready for pre-shredding preparations such as inspections and cleaning. This involves removing foreign objects like rims, rocks, metal debris or dirt.

The shredding process is undertaken outdoors through a mechanical process using an Arjes Titan 900 shredder which produces an initial output of shredded product between 4-8 inches in size. No chemicals are used during the shredding process. This activity occurs outdoors and in accordance with the NTEX Code Red Air Quality Management Plan (AQMP).

Dust/particle matter is minimised throughout the shredding process through the following control measures:

- ◆ Using dust suppression spraying units or water carts during shredding.
- ◆ Regular inspections.
- ◆ Limitation of vehicle speed onsite to 20 km/hr
- ◆ Water cart onsite to add moisture to material at any stage during processing, shredding, stockpiling or packing.

The AQMP requires that no visible dust is generated by any tyre processing. Weather conditions including dry weather and winds of over 30 km/hr are known to be a higher risk for dust generation. Should dust/particle matter become visible, actions will be taken to respond to the issue until no visible dust/particle matter is evident, including one or more of the following:

- ◆ Additional water usage during shredding activities.
- ◆ Reduced processing rate.
- ◆ Pause shredding activities until high-risk weather conditions ease.
- ◆ Cease all shredding activities during wind events of over 50 km/hr.

Installation of sandbags and silt sock around stormwater drains within the processing area are utilised to prevent sediment run off from water added during processing, heavy rain, storm event.

- ◆ Noise will be managed during processing and shredding through the Noise and Vibration Management Plan (NVMP). The NVMP requires that site activities do not result in any complaints from the public, adjoining businesses or other parties. Should processing or shredding activities result in a complaint, actions will be taken to reduce noise levels and further investigate the nature of the complaint as follows:
 - ◆ Identify source of complaint, location, time and whether it is an onsite or offsite activity that is creating noise.
 - ◆ Update and review complaints register and note whether similar complaints have been received historically.
 - ◆ Service and maintain all machinery to ensure it is in good working order to minimise noise.
 - ◆ Confirm whether decibel requirements of the Work Health and Safety (National Uniform Legislation) Regulations 2011 – Chapter 4, part 4.1 – (1) are being complied with.
 - ◆ Reduce processing rate.

- ◆ Adjust shredding times.
- ◆ Consider acoustic assessment to quantify noise levels.

Processed materials are stored in a segregated designated outdoor area whilst awaiting removal offsite. Stockpiles consist of keeping a 10m gap between windrows, a maximum height of 3m, maximum length of 45m and maximum width of 5m. Stockpiles and segregated areas adhere to the NT EPA Waste Management and Pollution Act 1998 and the Fire and Emergency Regulations 1996.

Processed tyres are packed into 40ft HC shipping containers within the segregated tyre area, sealed and transported to Darwin Port for export overseas. Any remaining residue material is swept and placed into designated bins for disposal at an authorised waste disposal facility. Residual material is isolated and subject to testing prior to disposal. Metal extracted from processing is placed in designated bins and transported to a local recycling merchant.

Frequent and ongoing processing and export shipments are utilised to reduce stockpiles of unprocessed and processed materials to avoid stagnant water accumulation. Therefore in-turn reducing the chances of mosquito breeding and pests.

10.2. Tyre Processing Area at NTEX Code Red





10.3. Mobile Tyre Shredding

The mobile shredding operations primarily cover the regions affected by waste management challenges within but not limited to the Northern Territory. NTEX Code Red consolidates tyres from various sources such as private entities and local/regional councils and shred tyres on-site using mobile shredding equipment. All mobile shredding operations are carried out in strict compliance in accordance with the NT EPA guidelines, ensuring environmental protection and operational safety.

The shredding processing is undertaken outdoors using an Arjes Titan 900 Shredder which produces an initial output of shredded product between 4-8 inches in size. No chemicals are added during the process. The shredded product will be transported from the project site to the Resource Recovery Facility at 29 Muramats Road, East Arm, Northern Territory. Processed materials are stored in designated area outdoors whilst awaiting removal offsite via packing and exporting. Stockpiles consist of keeping a 10m gap between windrows, a maximum height of 3m, maximum length of 45m and maximum width of 5m.

A detailed work methodology, comprehensive risk assessment and emergency response procedure specific to the project will be developed to ensure safe shredding and secure removal of shredded material and machinery from a project site. These measures are designed to mitigate risk, safeguard personnel and maintain environmental and safety compliance.

As per the Waste Pollution Control Act 1998 shredding operations conducted in communities under a population of 1000, NTEX Code Red will work within the confinement of the local government environmental management plan and subsequent environmental protection licence.

Refer to **Attachment 3 - Project Risk Assessment - RED-HSEQ-SAF-021**.

Category	Measure
Site Assessment	- Conduct initial assessment of the site to ensure suitability for mobile shredding operations. - Identify potential hazards and risks, such as access restrictions, environmental sensitivity or community proximity.
Regulatory Compliance	- Obtain necessary permits and approvals from the NT EPA for mobile tyre shredding operations. - Ensure that the shredding site complies with local environmental regulations, or any conditions set by regulatory bodies are met.
Staff Training and Induction	- Provide comprehensive training to all personnel involved in the operation, focusing on; Safe operation of shredding machinery, emergency procedures, handling waste materials, adherence to SWMS.

Category	Measure
Transportation and Equipment Setup	- Safe transport of mobile tyre shredding equipment to project site. - Conduct machine pre-starts to ensure the equipment is in good working order. - Performing pre-operational safety checks.
Site Establishment	- Set up shredding operation area, ensure adequate space for tyre collection, shredding and temporary stockpiles. - Maintain or create any necessary firebreaks to allow for adequate spacing between stockpiles and operational areas to minimise fire risk, - Implement environmental protection measures, such as spill containment and dust control mechanisms. - Where necessary implement a control zone for operational activities by installing temporary fencing to prevent unauthorised access.
Tyre Collection and Handling	- Collect and receive tyres from designated collections points. - Ensure accurate documentation and tracking of tyres.
Tyre Shredding	- Operate mobile shredding equipment in compliance with SWMS and OHS protocols. - Monitor shredding process to minimise risks. - Implement dust and control measures during shredding to reduce any environmental impacts.
Waste Disposal and Material Recovery	- Transport shredded material to Resource Recovery Facility, 29 Muramats Road, East Arm, NT. - Ensure all material handling complies with NT EPA guidelines and is accurately and correctly documented.
Site Cleanup	- Clean-up site after shredding activities are completed, ensuring that all waste is collected and transported within regulations. - Conduct site inspections to verify no environmental damage and the site has been restored to original condition.
Demobilisation of Equipment	- Perform maintenance checks on equipment prior to loading. - Safe transport of shredding equipment.



Category	Measure
Monitoring and Reporting	- Regular audits and assessments to ensure compliance with OHS and environmental standards. - Periodic review of shredding operations, site safety and waste disposal to identify areas of improvement. - Maintain detailed records of tyre collections, shredding volumes and disposal or reuse outcomes. - Provide regular progress reports to stakeholders, including regulators, local authorities and NTEX Management, detailing environmental safety and compliance.



11. Environmental Incidents and Complaints

In accordance with the conditions of the EPL, the NT EPA will be notified by Section 14 Pollution Incident Reporting in the event of an incident causing or with the potential to cause environmental harm.

A register of all such incidents will be maintained, together with the following records:

- ◆ Date and time of incident / complaint,
- ◆ Nature of incident / complaint,
- ◆ Details of incident / complaint,
- ◆ Location of the incident details,
- ◆ Impact of the incident,
- ◆ The method by which the complaint was made (telephone, letter, meeting, etc.),
- ◆ Name, address, contact telephone number of complainant (if no such details were provided, a note to that effect),
- ◆ Action taken in response including follow up contact with the complainant,
- ◆ Any monitoring to confirm that the complaint has been satisfactorily resolved,
- ◆ If no action was taken, the reasons why no action was taken.



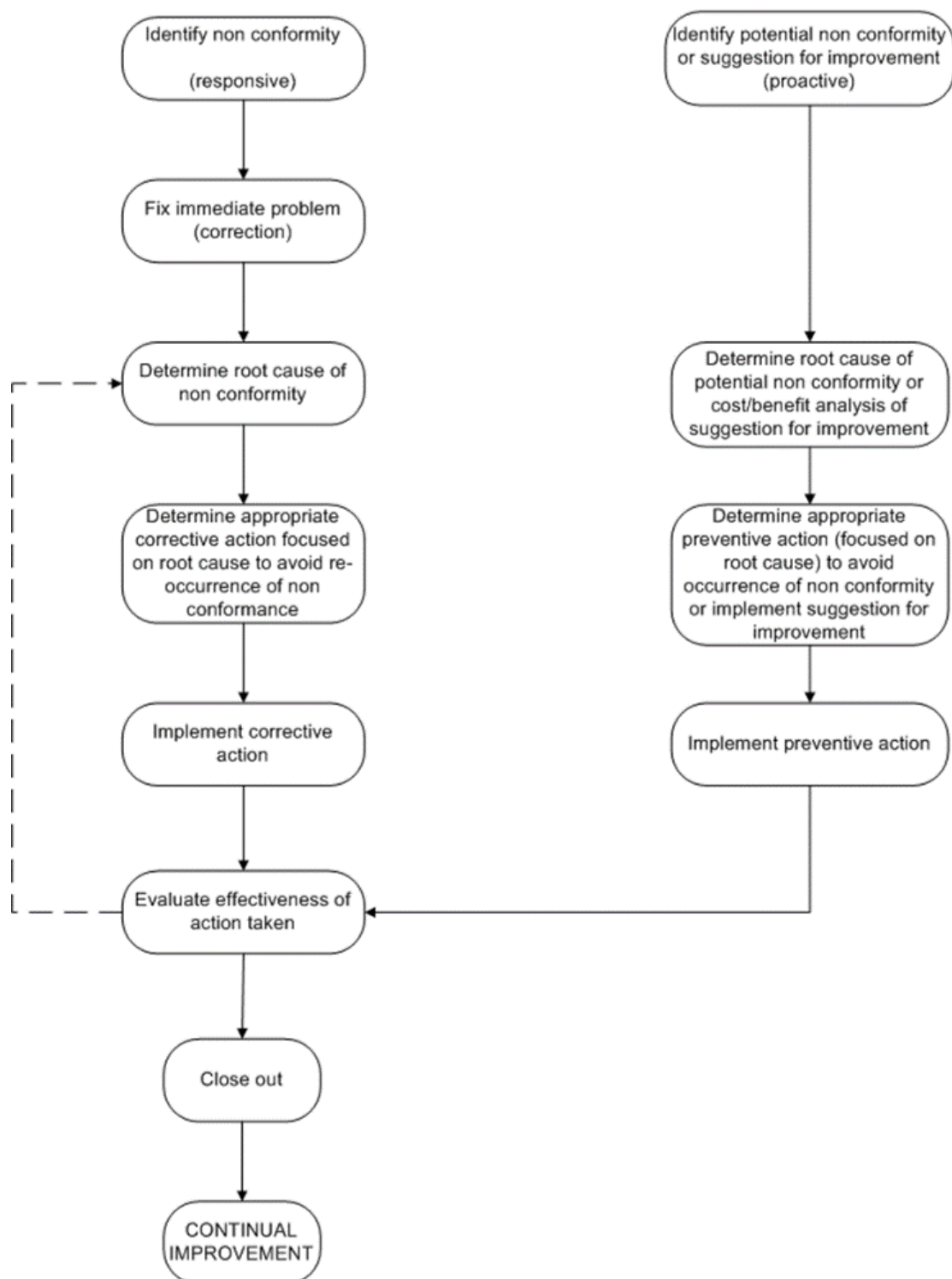
12. Non-Conformance

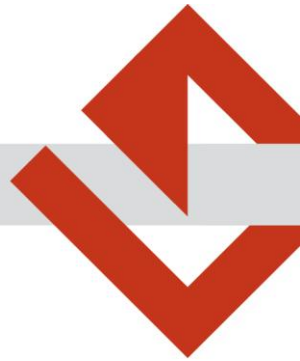
The below flowchart illustrates the organisation's process for identifying actual and potential environmental nonconformity, recording suggestions for improvement to environmental management, taking appropriate action to correct nonconformity and mitigate environmental impact, taking corrective action to avoid recurrence of nonconformity and taking preventive action to avoid occurrence of nonconformity or implement a suggestion.

This process has the ultimate goal of driving continual improvement of the Environmental Management Plan.

Actual and potential nonconformity is identified and suggestions for improvement are made by the following means:

- ◆ Internal audit.
- ◆ External audit.
- ◆ Site inspections.
- ◆ Feedback from external parties.
- ◆ Complaints from customers or other stakeholders.
- ◆ Suggestions for improvement from employees and contractors.
- ◆ Occurrence of environmental emergencies and accidents.
- ◆ Testing of emergency preparedness and response.
- ◆ Management review.





13. Corrective Action Process

The Environmental Co-ordinator is responsible for maintaining a Register of Environmental Nonconformity and Suggestions for Improvement to Environmental Management. Each record in this register is given a Corrective and Preventive Action Number (CPA No.) and is associated with a Corrective and Preventive Action Form used to analyse nonconformity and suggestions for improvement and manage action taken. The Corrective and Preventive Action Form provides for the following:

- ◆ The taking of immediate action to correct the nonconformity (i.e. correction) and mitigate environmental impact,
- ◆ Root cause analysis of actual nonconformity,
- ◆ The taking of corrective action addressing the root cause to avoid recurrence of nonconformity, or the taking of preventive action to avoid occurrence of nonconformity or implement a suggestion for improvement,
- ◆ Evaluation of the effectiveness of the action taken,
- ◆ Close out,
- ◆ Corrective and preventive action often requires changes to environmental Plan documentation. In such cases, this process feeds into the process for control of documents,

The environmental co-ordinator is responsible for reporting on the status of corrective and preventive action in management reviews.

All incidences of non-conformance, a problem report is processed in accordance with established procedures that allow for:

- ◆ Recording all relevant details of the non-conformance,
- ◆ Reporting the Non-Conformity to the Client (if applicable),
- ◆ Investigating the cause,
- ◆ Determining the corrective and preventive actions, as appropriate,
- ◆ Verifying that all actions have been completed and are effective.

Non-conformances are reviewed by authorised personnel in accordance with documented procedures.

All the Non-Conformances will be recorded within the register, tracked, and closed out.

Failure to comply with, or a breach of any condition, will result in the issue of a Corrective Action Request, or a Non-Conformance Report or any combination of these.

Corrective and preventative action report (CAPAR)

Any corrective or preventative actions from audits and/or inspections need to be documented.

Refer to Attachment 4 - Corrective and Preventative Action Report - RED-HSEQ-Q&A-010

14. Monitoring

The records of any monitoring as required by and/or for any approvals, licences, or conditions for the project phase must be:

- ◆ In a legible form,
- ◆ Kept for at least 4 years after the monitoring or event to which they relate/ took place, and
- ◆ Be available upon request to any authorised person.

Each quarter NTEX Code Red will perform a Quarterly Environmental Inspection.

Refer to Attachment 5 - Quarterly Environmental Inspection - RED-HSEQ-ENV-008.

A site Pre-start Checklist is performed at the very beginning of each project of which contains a checklist for Possible hazards, Emergency Arrangements, Training or Briefing requirements and Supervisory requirements.

Refer to Attachment 6 - Site Pre-Start Checklist - RED-HSEQ-SAF-095.

A Site Inspection Checklist and a Pre-Start Safety Briefing is performed daily before works commence. During the Pre-start Safety Briefing the staff are informed of daily upcoming activity, possible hazards, weather forecasts and deliveries.

Refer to Attachment 7 - Site Inspection Checklist - RED -HSEQ-SAF-071 & Attachment 8 - Pre-Start Safety Briefing - RED- HSEQ-SAF-016.

The following minimum records will be kept regarding any monitoring/ sampling activity:

- ◆ The nature of the monitoring and how it relates to the EMP (i.e. which ECP is relevant to the monitoring event),
- ◆ The date(s) on which the monitoring was taken,
- ◆ The time(s) at which the monitoring was collected,
- ◆ The point at which the monitoring was taken, and
- ◆ The name of the person who conducted the sample.

Follow up Action

Where adherence to the requirements in this document are found to be unsatisfactory in achieving broader environmental and site management goals, action will be taken to investigate the cause and make amendments to the Environmental Management Plan as required.

Reporting

Where monitoring requirements are stipulated in the ECPs, appropriate reporting (and bookkeeping) must be presented following such events. Records of environmental monitoring are to be maintained, including the effectiveness of any corrective action taken. Records of environmental monitoring are to be made available to the NT EPA (if required) upon request.



15. Auditing

NTEX Code Red will implement an inspection program during the listed waste collection, transport, process and storage activities to assess compliance with the EMP and other regulatory requirements. An inspection program may include inspections, observations, internal and external environmental compliance audits. The findings of the inspections will be reviewed by the NTEX Code Red Management, along with any recommendations for variation to the EMP which might arise as a consequence of the inspection process.

This will be in the form of the Site Inspection Checklist and Quarterly Environmental Inspection.

Refer to Attachment 5 - Quarterly Environmental Inspection - RED- HSEQ-ENV-008.

Refer to Attachment 7 - Site Inspection Checklist - RED- HSEQ-SAF-071.

NTEX Code Red will maintain records of the results of environmental audits including non-conformances and the effectiveness of any remedial action taken.

Records of environmental audits are to be made available to the NT EPA upon request.

Resource Recovery Facility Key Contacts

Title	Name	Phone	Email
Environmental Site Representative NTEX Code Red	Gerard Breen	0428 136 075	ntex@ntex.com.au
Director NTEX Code Red	Gerard Breen	0428 136 075	ntex@ntex.com.au
Director of Operations NTEX Code Red	John Breen	0467 074 955	projects@ntex.com.au
Operations Manager NTEX Code Red	Georgina Laws	0448 242 038	craccounts@ntex.com.au
Environmental Consultant Agon Environmental	Chris Gamble	0408 018 788	chris.gamble@agonenviro.com.au

NTEX Code Red nominate the Resource Recovery Facility Manager and Resource Recovery Facility Administrator to be present during audits. Principal's nominated person is Gerard Breen.

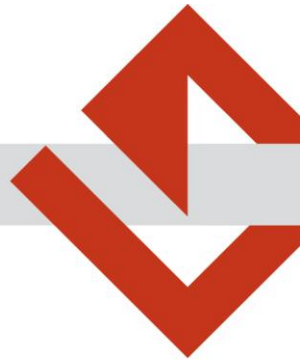
16. Environmental Training and Induction

All site staff, sub-contractors and visitors will be subject to and made aware of the site EMP, environmentally sensitive areas, identified cultural sites of significance, Sacred Sites or Restricted Works Areas (RWAs) and environmental responsibilities.

All site staff, sub-contractors and visitors will be required to undertake a site-specific induction.

All personnel are responsible for compliance with the EMP and environmental objectives. All personnel will be inducted by the Resource Recovery Facility Manager or the Resource Recovery Facility Administrator under this plan, prior to accessing the site. Through the induction process and through other ongoing methods, all project personnel will be made aware of the requirements of the EMP. Additional requirements may include prestart and toolbox meetings, safety inspections and environmental checks undertaken at varying frequencies.

Refer to Attachment 9 - Induction Questionnaire - RED-HSEQ-SAF-088.



17. Emergency Management

17.1. Emergency Response

NTEX Code Red have an Emergency Response Plan for the accounting and management of personnel during emergencies and managing the emergency to minimise risk to personnel, plant, the public and the environment.

Refer to Attachment 10 – Emergency Response Plan - RED-HSEQ-SAF-078

The Emergency Response Plan contains at least:

- ◆ Emergency procedures,
- ◆ Emergency contact names (including the Chief Warden) and phone numbers, both internal and external,
- ◆ Emergency preparedness checklist,
- ◆ Site Cyclone Plan,
- ◆ Responsibilities before/ after an emergency, and
- ◆ Immediate actions in response to specific threats (fire, spill etc.).

17.2. Emergency Response Team

Role	Responsibilities
Emergency Response Team Leader	◆ Ensure this Plan is completed, regularly reviewed, implemented, and tested. ◆ Review and approve all modifications to the Emergency Response system, facilities, and Team Members (including action on any post incident or exercise report recommendations). ◆ Establish and maintain an Emergency Control Centre (ECC) and support facilities. ◆ Establish an ERT exercise schedule as required by this plan. ◆ Integrate the ERT exercise schedule with the NTEX Emergency Management Team to ensure the effectiveness of site - EMT communications interface. ◆ Ensure any third-party personnel who may be co-opted in a response are fully aware of expectations on them and are prepared to become immediately effective in an emergency. ◆ Promote the NTEX Site Emergency Response arrangements to all site personnel. ◆ Maintain familiarisation with obligations under this plan including reporting requirements, notifications etc. ◆ Ensure that all NTEX project Managers, Supervisors and ERT members receive an awareness session on their roles, responsibilities, and requirements of this plan. ◆ Provide single point of contact with Emergency Services and Client.
Deputy Emergency Response Team Leader	◆ Undertake duties delegated by the ERT Leader; and ◆ In the absence of the ERT Leader, fulfil the role of ERT Leader.
Communications Officer	◆ Responsible for managing all incoming calls. ◆ Responsible for managing outgoing calls as delegated by ERT Leader.
Area Warden(s)	◆ Ensuring the safe evacuation of all site personnel in the event of an emergency. ◆ Conduct a head count and advise the ERT Leader/Deputy of the results. ◆ Establish a watch for arriving emergency vehicles and provide an initial brief to the responding agency Emergency Controller. ◆ Undertake traffic control duties.
First Aider	◆ Proceed to the Emergency muster point and provide first aid as required.



17.3. Responsible Persons and Emergency Contacts

Contact	Position / Location	Phone number
NT EPA – Pollution Hotline	Environmental Regulator	1800 064 567
Gerard Breen	Environmental Site Representative	0428 136 075
Gerard Breen	Director	0428 136 075
	WHS Representative	
First Aid Officers	Georgina Laws	0448 242 038
Wild Care	Volunteer	08 8988 6121 0408 885 341
Royal Darwin Hospital	Tiwi	08 8922 8888
Palmerston Regional Hospital	Palmerston	08 7979 9200
Katherine District Hospital	Katherine	08 8973 9211
Emergency-Police-Fire-Ambulance	Calling from Landline Calling from Mobile	000 112
Police	NT Police 24 Hours Police Assistance Line	131 144
	Peter McAuley Centre Berrimah	08 8922 3344
	Palmerston Station	08 8999 3422
Fire (Non-Urgent Enquiries)	General Enquiries - Business Hours	08 8946 4107
	General Enquiries - After Hours	08 8922 1555
	Darwin Station	08 8946 4105
	Palmerston Station	08 8999 3422
	Katherine Station	08 8973 8014
	Fire Assistance	08 8999 3473
NT Emergency Services	Working Hours	08 8922 3630
	After Hours	131 444
NT WorkSafe	Work H&S	1800 019 115



17.4. Fire

IF YOU SEE FIRE OR SMOKE DO NOT PANIC OR SHOUT!

REMAIN CALM & REMEMBER R.A.C.E.

R escue people	From immediate danger – if safe to do so.
A larm	Alert Emergency Response Team members Sound the Alarm.
C ontain fire & smoke	If safe to do so, close all doors and windows.
E xtinguish	Only attempt to extinguish the fire if trained and safe to do so by using the appropriate firefighting equipment, e.g. an extinguisher suitable for the type of fire encountered. Workers should not attempt to use firefighting water hoses unless special training has been provided.



Prepare to evacuate if necessary to the evacuation assembly point(s).



Do not allow people to enter the building / structure / project until all clear is given.



Follow instructions from emergency team members, security, or other emergency personnel.



Do not allow vehicles to enter/leave the car park of the building/structure/project until all clear is given.



Ensure any visitors are accompanied from the workplace when evacuation is ordered.



Leave lights on.



Obey all instructions – do not return to the workplace until all clear is given

THE ORDER IN WHICH THESE ACTIONS ARE PERFORMED WILL DEPEND UPON THE PARTICULAR FIRE OR SMOKE INCIDENT.

Note: In the event of witnessing evidence of a fire any employee may call the fire brigade – such action does not need another person's permission.

17.5. Weather - Cyclone

Authority

The NTEX Director has the overall responsibility for the co-ordination of actions to be taken in the event of a potential Tropical Cyclone affecting the project site.

The objective

This procedure is to ensure that the project site, workers, and surrounding community are as far as practicably possible protected from unnecessary damage or harm caused from NTEX Code Red activities due to the effects of a tropical cyclone and its destructive winds.

Tropical Cyclone Season

The cyclone season of the Northern Territory commences on 1 November and concludes on 30 April.



Cyclone Severity Categories

The severity of a tropical cyclone is described in terms of categories ranging from 1 to 5 related to the zone of maximum winds. An estimate of cyclone severity is included in all tropical cyclone advice.

The BOM Warning Service is not designed to give an exact statement of conditions at individual locations but will give a general idea of the expected worst conditions. Using this severity scale, communities will be able to assess the degree of cyclone threat and take appropriate action.

Category	Strongest Gusts (Km/H)	Indicative Typical Effects
1 - Tropical Cyclone	Less than 125 Gales	Minimal house damage. Damage to some crops, tree and caravans. Boats may drag moorings
2 - Tropical Cyclone	125 - 164 Destructive winds	Minor house damage. Significant damage to signs, trees and caravans. Heavy damage to some crops. Risk of power failure. Small boats may break moorings.
3 - Severe Tropical Cyclone	165 - 224 Very destructive winds	Some roof and structural damage. Some caravans destroyed. Power failure likely. Boats will break moorings
4 - Severe Tropical Cyclone	225 - 279 Very destructive winds	Significant roofing and structural damage. Many caravans destroyed and blown away. Dangerous airborne debris. Widespread power failures.
5 - Severe Tropical Cyclone	More than 280 Extremely destructive winds	Extremely dangerous with widespread destruction



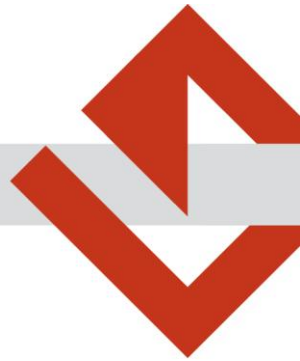
BOM also provides the following cyclone information services throughout the cyclone season:

Tropical Cyclone Seasonal Outlook	This is issued at the beginning of the season to provide an estimate of the level of tropical cyclone activity in the coming season.
Tropical Cyclone Outlook	These are issued daily throughout the tropical cyclone season. They provide a forecast up to three days in advance of the probability of cyclone development in the seas around Australia.
Tropical Cyclone Information Bulletin	These are issued when a cyclone is active in the Australian region, but is not expected to impact land-based communities within 48 hours
Tropical Cyclone Watch	A watch is issued if a cyclone is expected to affect coastal communities within 48 hours, but not expected within 24 hours.
Tropical Cyclone Warning	A warning is issued if a cyclone is affecting or is expected to affect coastal communities within 24 hours.
Marine Warnings	Marine Warnings are issued for high seas and coastal waters threatened by cyclones. Additional information can be obtained from the BOM website: http://www.bom.gov.au/cyclone/about/warnings/ A DP cyclone response is triggered by the declaration of a cyclone watch or warning, but response actions may be initiated prior to either a watch or warning being declared if the CMT considers early action warranted.

Cyclone Warning Stages

NTEX Code Red will be operating under the advice of the Bureau of Meteorology for our sites. NTEX Code Red uses a six-stage plan, which is aligned to the Northern Territory Government (NTG) Emergency Response Group for counter disaster region 1, to manage its response to a cyclone as outlined below:

Response Stages	Description
Pre-Season Readiness	Cyclone response plans reviewed and updated.
Stage 1 - Cyclone Watch (48hrs)	Stage 1 – Declared when a tropical low or tropical cyclone exists, and gale force winds are likely to affect Greater Darwin within the next 48 hours but not before 24 hours.
Stage 2- Cyclone Watch (24hrs)	Stage 2 - Declared when a tropical low or tropical cyclone is expected to cause gale force winds in Greater Darwin within 24 hours.
Stage 3- Cyclone Warning (12hrs)	Stage 3 - Declared when available information suggests that destructive winds are likely affect Greater Darwin within the next 6 – 12 hours.
Stage 4- Safety Management and Lockdown	Stage 4 – At this time an official announcement is made by Northern Territory Emergency Services advising all persons in Greater Darwin to TAKE SHELTER.
Stage 5- Destructive winds reach Greater Darwin	Stage 5 - Declared when destructive winds have reached the boundary of Greater Darwin.
All Clear Pending	Declared when winds no longer pose a threat to communities within Greater Darwin. Note that all clear is not declared at this time and a Stage 5 may be re-declared if necessary.
Stage 6 – All Clear	Stage 6 - Declared when it is considered safe for the public to leave shelter.
*Post Cyclone Recovery	RECOVERY – The recovery phase is managed by the Chief Minister’s office and is aimed at returning Greater Darwin back to normal.
*Stand Down	STAND DOWN - Declared when the Greater Darwin Controller considers that no further counter disaster measures are necessary.



Responsibilities

Site Management is responsible for maintaining the site in a neat and tidy state with the removal of unnecessary demolition waste from the site during the normal demolition activities.

❖ **Cyclone Watch Stage 1** - destructive winds possible within the next 48 hrs

NTEX Code Red Resource Recovery Facility Manager upon being informed of a cyclone watch stage 1 will advise site management of the watch status and request that all loose items that could be blown around unnecessarily as part of our Resource Recovery Facility and our activities be adequately restrained or secured. Loose items shall be secured inside buildings or containers where possible.

The Resource Recovery Facility Manager and delegated staff members shall monitor the BOM website, forecasts and warnings to keep up to date with the current track and intensity.

❖ **Cyclone Watch Stage 2** – Declared when it is expected that gale force winds are expected within the next 24 Hours.

NTEX Code Red Resource Recovery Facility Manager upon being informed of a cyclone watch stage 2 will advise site management of the watch status and request that any Vehicles, plant or equipment required to be relocated off site are removed from site.

❖ **Cyclone Warning** – Declared when available Information says that destructive winds are likely within the next 6- 12 hours.

NTEX Code Red Resource Recovery Facility Manager upon being informed of a cyclone warning will advise site management of the warning status and request that a final site inspection is actioned and that the site is secured, and all workers are sent home.

❖ **Cyclone All Clear Pending**

All NTEX Code Red Workers are to remain at home until the official all clear is given by the Emergency Controller.

❖ **Cyclone All Clear**

NTEX Code Red Resource Recovery Facility Manager upon being informed of a cyclone all clear will consult with the relevant authorities and if safe and permitted conduct an Inspection of the demolition site to determine the extent of damage to the site and advise site workers of their requirement to return to site or remain at home.

All Workers are to follow the NTEX Code Red Resource Recovery Facility Manager directions and not return to site until advised it is safe to do so.

17.6. Spills/Contamination

Remain calm	Do not panic!
Assess	Danger – to people. Potential – for material harm (not trivial) or serious irreversible harm to people or the environment resulting from a leak, spill or escape of a substance, or circumstances in which this is likely to occur.
Notify	Alert your supervisor. Alert Workplace Manager and EHS Manager. Alert Environment Protection Authority or Local Government Officer [when instructed]. Alert Emergency Services [fire brigade when instructed]. Alert others who may be affected, e.g. neighbours.
Conditions	Advise the exact location where the pollution is occurring or is likely to occur, the nature, the estimated quantity or volume and the concentration of any pollutants involved, the circumstances in which the incident occurred (including the cause of the incident if known), the action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution. Make the area safe [if required barricade area].
Action	Make the area safe [if required barricade area]. Land base incident: Install temporary bunding or other environmental barriers to contain/slow the effect of the spill [contained in a Spill Kit]. Water coarse base incident: ensure containment boom is containing spill, get marine skill response kit and remove contaminate for water course immediately. If safe any close valve or tap where relevant. Select appropriate personal protective equipment from Safety Data Sheet information. Remove all sources of ignition e.g. smoking or mobile telephone. Instigate all necessary action to minimise the size, spread and any adverse effects of actual/potential environmental harm if safe to do so. Supervisor/manager to determine if the incident area needs preservation for investigation by Authorities.
Procedure	Report in line with the requirements containing within the Incident Reporting and Management Procedure.



Onsite Refuelling Protocol

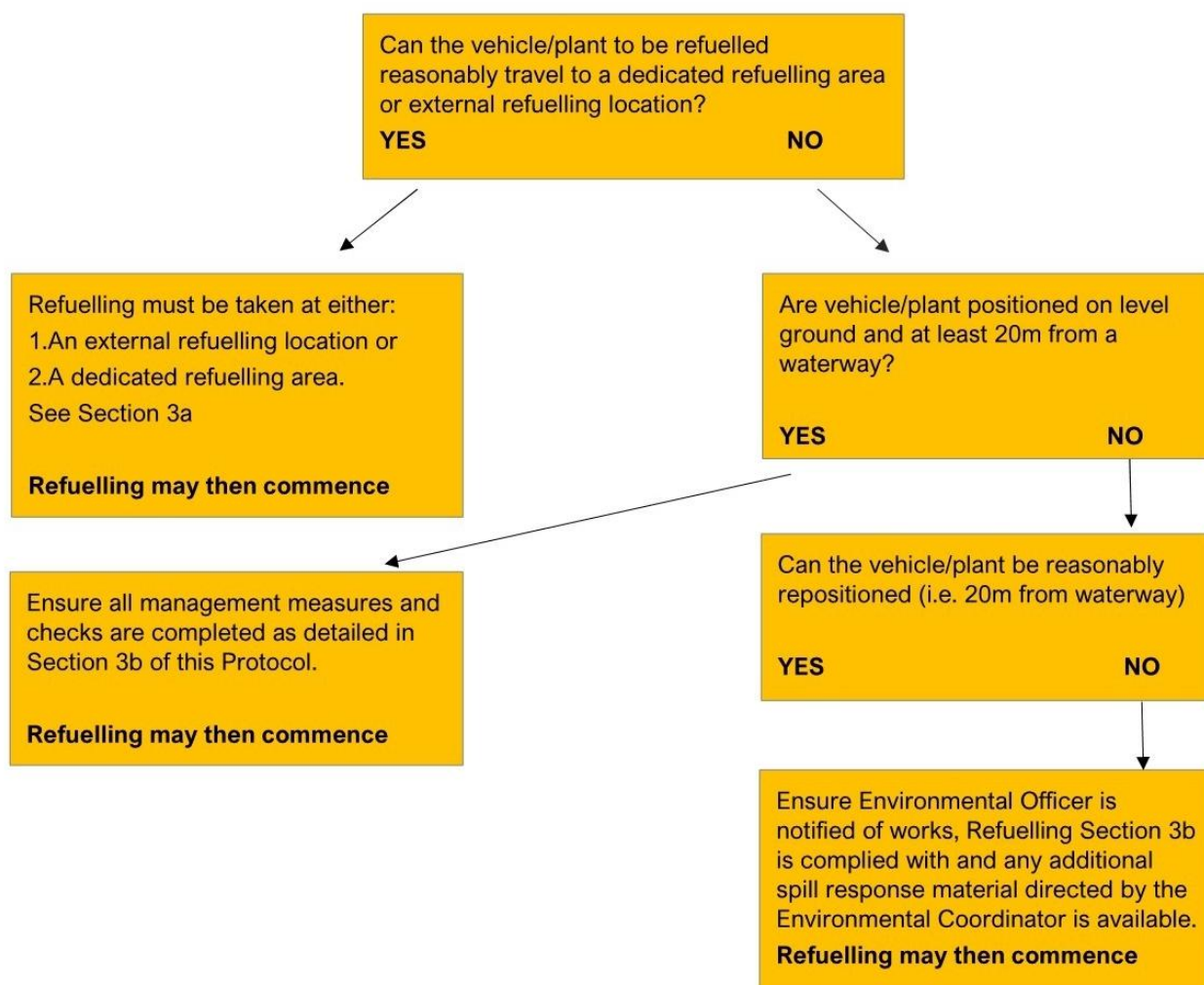
This protocol has been developed to manage refuelling of vehicles and plant during operation / construction.

The protocol includes:

- ♦ A decision-making flowchart to determine whether on-site or off-site Refuelling is appropriate in a given situation,
- ♦ Procedures for Refuelling to address the potential for spills, collisions with refueling vehicles or other hazardous incidents,
- ♦ Procedures to be followed in the event of a fuel spill, including containment and clean-up measures.

Refuelling decision flowchart

The following decision-making process diagram is to be used to determine appropriate refuelling locations.





Refuelling in Dedicated Areas

Note: Refuelling externally from the site or within dedicated compound/workshop areas on the site is preferred. When refuelling in workshop or compound areas, the following standard safeguards must be followed:

- ◆ Refuelling areas must be on hardstand areas and able to capture and contain any spills in oil/water separators.
- ◆ Where practical, refuelling areas should be undercover to prevent interaction with rainwater.
- ◆ Regular maintenance of refuelling areas and associated containment/treatment devices should be undertaken.

On-site Refuelling requirements

Where refuelling cannot be undertaken externally or in dedicated compound/workshop locations, the following control measures must be implemented:

Refuelling must be undertaken on relatively level ground at least 20m from waterways, drainage lines and sensitive areas. Where this is not possible, notify the Environmental Officer and implement additional spill controls measures,

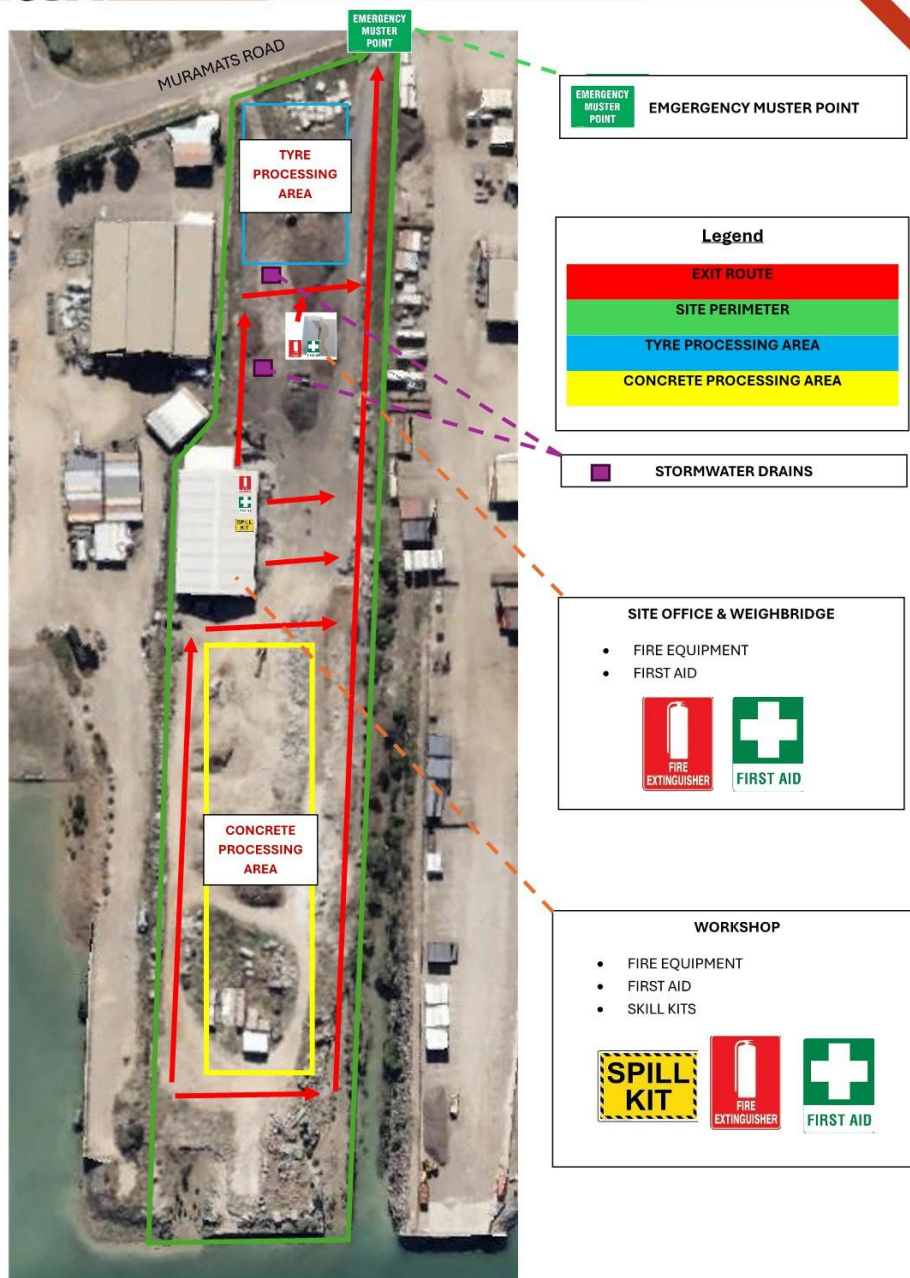
- ◆ Never refuel in vegetated areas,
- ◆ Never leave the refuelling activity unattended,
- ◆ Know where the spill kit is kept and ensure you know how to use it. Keep a spill kit on the refuelling truck,
- ◆ Ensure the machine operator shutdowns the machine and makes it safe according to the manufacturer's specifications before refuelling,
- ◆ Where necessary drip trays would be placed under standing machinery i.e., generators, compressors etc,
- ◆ Handling, storage and disposal of fuel, oil, and other chemicals will be undertaken in accordance with the Waste Guidelines (DECCW 2008) and AS1940 – 2004, the Storage and Handling of Flammable and Combustible Liquids,
- ◆ Control measures in this Protocol will be followed and all relevant personnel trained in the requirements,
- ◆ Emergency response procedures shall be implemented in the event of a spill or other environmental incident,
- ◆ Spill incidents will be reported to the Resource Recovery Facility Manager, who will report this to the environmental Site Representative for action.

Fuel Transportation Requirements

The following fuel transport controls will be implemented:

- ◆ On site transportation of fuel will only be carried out on established access haul roads,
- ◆ Vehicles/Trucks used to transport fuels and chemicals must be maintained to prevent spillage of loads,
- ◆ Fuel trucks entering the site will be fitted with standard site safety gear including UHF radios, reversing beepers, and flashing lights to ensure visibility on site and reduces the risk of vehicular collisions,
- ◆ Any container used to transport fuel must be secured on the vehicle carrying the container.

17.7. Emergency Site Plan



All activities at the proposed temporary listed waste storage area at 25 Muramats Road will be managed in accordance with NTEX Code Red's Emergency Response Plan (RED-HSEQ-DOC-078), which includes site-specific emergency procedures, roles and responsibilities, and notification requirements for incidents involving listed wastes.



18. Risk Assessment

18.1. Job Specific Risk

An assessment of areas of environmental risk was performed based on the project, and risk rankings assigned based on Australian Standard requirements AS 4360:2004 – Risk Management.

The Qualitative Risk Assessment (QRA) is aimed at developing a qualitative assessment of potential impacts that may occur during the collection, transportation, processing and storage of listed waste.

The QRA matrix has been prepared in general accordance with Australian Standard AS 4360 Risk Management Guidelines, 2004 (AS4360-2004).

Refer to **Attachment 3 – Project Risk Assessment – RED-HSEQ-SAF-021.**

AS/NZS ISO 31000 COMPLIANT RISK MANAGEMENT MATRIX - The probability of an event and the consequences if the event occurs, determine the level of risk in a hazard. Rate the level of risk for each hazard, based on the **Likelihood** of harm occurring, without controls in place and the most likely **Consequence** of that harm or loss.

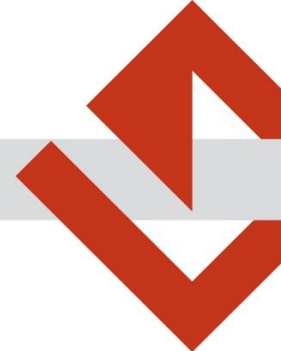
	Likelihood	Consequence				
		A	B	C	D	E
		Insignificant	Minor	Moderate	Major	Catastrophic
5	Almost certain	Medium	Medium	High	High	Extreme
4	Likely	Medium	Medium	Medium	High	Extreme
3	Possible	Low	Low	Medium	High	High
2	Unlikely	Low	Low	Low	Medium	Medium
1	Rare	Low	Low	Low	Low	Medium

Low	Controls were reviewed with the HSE Advisor and/or Supervisor. Work can proceed with controls in place.
Medium	Additional controls were put in place and reviewed with the HSE Advisor and/or Supervisor. Work may proceed with the additional controls in place.
High	Actual controls are insufficient or do not exist. Work cannot commence or must stop immediately. The Supervisor SHALL be contacted immediately. A methodology shall be formulated on how the task can be completed in consultation with the workgroup and control priorities implemented based on the level of risk. If it is not reasonably practicable to eliminate the risk, then the hierarchy of controls will be applied, and the risk reduced to ALARP (as low as reasonably practical).
Extreme	Actual controls are insufficient or do not exist, Work cannot commence or must stop immediately. The Manager SHALL be contacted immediately. A methodology shall be formulated on how the task can be completed in consultation with the workgroup and control priorities implemented based on the level of risk. If it is not reasonably practicable to eliminate the risk, then the hierarchy of controls will be applied, and the risk reduced to ALARP (as low as reasonably practical).

INCIDENT POTENTIAL / CONSEQUENCE

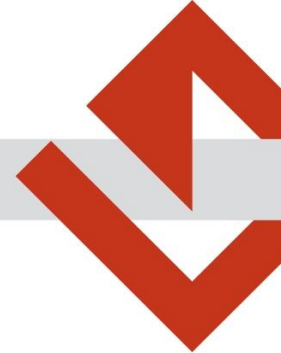
The table below provides guidance for incident potential / consequences ratings and aligns to the risk management matrix.

Note the table below are examples and not necessarily limited to.



Level of Analysis	Consequence Level - E	Consequence Level D	Consequence Level C	Consequence Level B	Consequence Level A
Injury	- Fatality - Permanent disability	Lost Time Injury	- Medical Treatment Injury - Alternate Duties injury	- Minor - First Aid	- Insignificant - No Injury
Environmental Impact	- Hydrocarbon / chemical spill to land >1000 litres - Hydrocarbon / chemical spill to water >500 litres - Environmental incident with irreversible impact - Prosecution by a regulatory body	- Hydrocarbon / chemical spill to land >500 <1000 litres - Hydrocarbon / chemical spill to water >200 <500, litres - Environmental incident with serious but reversible impact - Fire damage significant consequences - Stop Work Notice	- Hydrocarbon / chemical spill to land >100 <500 litres - Hydrocarbon / chemical spill to water >50 <200 litres - Environmental Incident with major but reversible impact - Fire damage major consequences - Prohibition Notice	- Hydrocarbon / chemical spill to land >10 litres >100 - Hydrocarbon / chemical spill to water >5 <50 litres - Environmental Incident with minor and reversible impact - Environmental Permit exceedance - Fire minor consequence - Improvement Notice	- Hydrocarbon / chemical spill to land <10 litres - Hydrocarbon / chemical spill to water <5 litres - Environmental Incident with minor and reversible impact - Environmental Permit exceedance - Fire minor consequence - Improvement Notice
Property Damage (and Asset Damage)	Asset damage or loss >\$1,000,000	Asset damage or loss >\$50,000 <\$1,000,000	Asset damage or loss >\$5,000 <\$50,000	Minor asset damage Asset Loss <\$5,000	Minor damage that does not require repair (cosmetic damage)
Community Impact / Reputational	- Incidents that could have national or international impact on company or contractor reputation - Incidents that attract national or international media attention - Company reputation	- Incidents that could have a local impact on company or contractor reputation - Incidents that attract local media attention - Company reputation	- Incidents that have little impact on reputation - Incidents that attract little or no media attention	- Incidents that have little impact on reputation - Incidents that attract little or no media attention	No Community impact / reputation damage

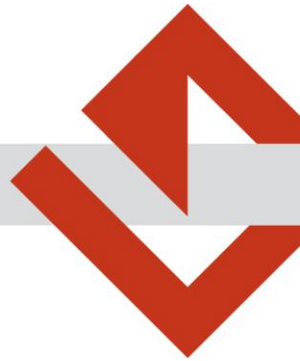
Worker review and sign on



Name	Date	Signature	Company

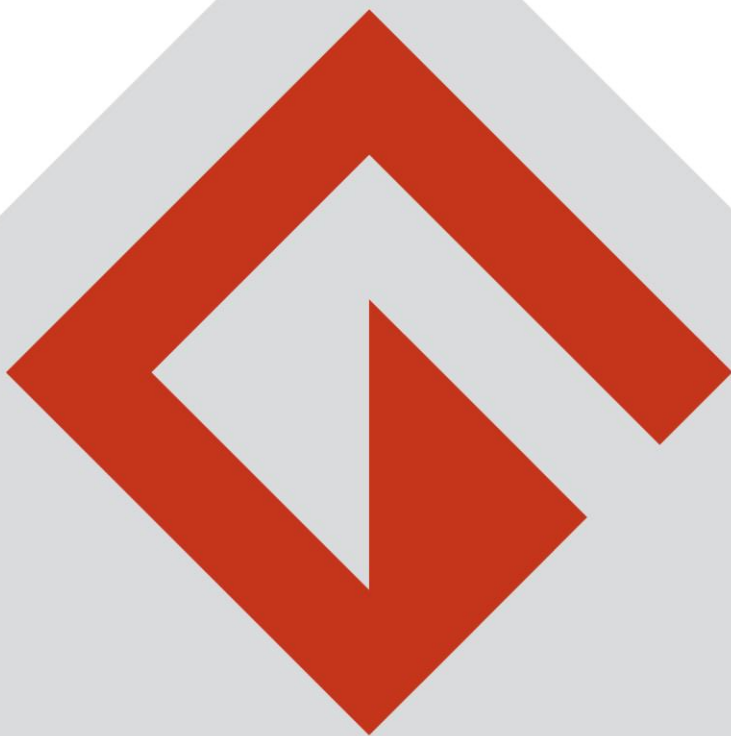
19. Attachments

1. Attachment 1 - Environmental Policy Statement - RED-HSEQ-DOC-007
2. Attachment 2 – Material Assessment and Acceptance Criteria – RED-HSEQ-ENV-010.
3. Attachment 3 – Project Risk Assessment – RED-HSEQ-SAF-021
4. Attachment 4 - Corrective and Preventative Action Report - RED-HSEQ-Q&A-010-
5. Attachment 5 - Quarterly Environmental Inspection - RED-HSEQ-ENV-008
6. Attachment 6 - Site Pre-Start Checklist: RED-HSEQ-SAF-095.
7. Attachment 7 - Site Inspection Checklist - RED -HSEQ-SAF-071
8. Attachment 8 Pre-Start Safety Briefing - RED- HSEQ-SAF-016.
9. Attachment 9 - Induction Questionnaire - RED-HSEQ-SAF-088.
10. Attachment 10 – Emergency Response Plan - RED-HSEQ-SAF-078
11. Attachment 11 29 Muramats Road, East Arm – Land Zoning Information
12. Attachment 12 Road, East arm – Approved Planning Application



20. References

- **NEPC – National Environmental Protection Council (2013)** *National Environment Protection (Assessment of Site Contamination) Measure* (NEPM) 1999, Amended 2013.
- **NHMRC – National Health and Medical Research Council/ Natural Resource Management Ministerial Council (2011)** *Guidelines for Managing Risk in Recreational Waters*
- **Waste Management and Pollution Control (Administration) Regulations 1998** *as in force on 1st Feb 2022- Listed waste in Schedule 02.*
- **Hazardous Waste in Australia** *prepared by Department of the Environment*, Final Report- Version 2, June 2015
- **Emergency Response Plan for Transporting Waste in the Northern Territory**, NT EPA



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