REPORT

Prestons Waste Treatment Facility

Scoping Report: 9-13 Whyalla Place, Prestons

Submitted to:

NSW Department of Planning, Industry, and Environment

Submitted by:

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Distribution List

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Glossary

Term	Definition
BC Act	*Biodiversity Conservation Act 2016*
BOM	Bureau of Meteorology
C&D	Construction and Demolition
C&I	Commercial and Industrial
CLM Act	*Contaminated Land Management Act 1977*
DPIE	Department of Planning, Industry, and Environment
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
EPA	Environment Protection Authority
EPBC Act	*Environmental Protection and Biodiversity Conservation Act 1999*
The LEP	*Liverpool Local Environment Plan 2008*
ISEPP	*State Environmental Planning Policy (Infrastructure) 2007*
MNES	Matters of National Environmental Significance
POEO Act	*Protection of the Environment Operations Act 1997*
the Site	9-13 Whyalla Place, Prestons
RRF	Resource Recovery Facility
SEARs	Secretary's Environmental Assessment Requirements
SEPPs	State Environmental Planning Policies
SSD	State Significant Development
The Project	The project for which approval is being sought
Tpa	Tonnes per annum
WARR Act	*Waste Avoidance and Resource Recovery Act 2001*

Table of Contents

FIGURES

APPENDICES

1.0 INTRODUCTION

1.1 Overview

Hi Quality Waste Treatment Services Pty Ltd (Hi-Quality) seek to construct and operate a Waste Treatment Facility (the Project) to be located at 9-13 Whyalla Place, Prestons NSW 2170 (the Site). The Project proposes to utilise technologies for treating solid and liquid wastes to a level suitable for reuse, disposal to landfill or disposal to sewer.

The Waste Treatment Facility would process up to 270,000 tonnes of solid waste per annum primarily generated from industrial processes and contaminated sites and include treatment of:

- Contaminated Soils;
- Contaminated sludges; and
- Liquid Wastes.

New ancillary infrastructure would be constructed as part of the Project including:

- weighbridges and weighbridge office;
- warehouse extension;
- new driveway;
- parking; and
- wheel wash and truck wash down bay.

Hi-Quality would also site some corporate office functions at this location, utilising existing office space.

The Project will be assessed as State Significant Development (SSD) by the NSW Department of Planning, Industry, and Environment (DPIE) under Part 4 of the *Environmental Planning and Assessment Act 1979* and the purpose of this Scoping Report is to request Secretary's Environmental Assessment Requirements (SEARs) for the Project to be addressed within an Environmental Impact Statement (EIS).

1.2 The Proponent

Hi Quality Waste Treatment Services Pty Ltd (the Proponent) is a part of the Hi-Quality Group, which was established over 50 years ago and proudly remains an Australian family owned business. The business is a diverse, dynamic organisation that can quickly respond to the needs and demands of its customers. The company has grown from a single business as a bulk transport contractor to a multidisciplinary contractor and a major integrated natural resource and recycled products supplier with associated businesses.

Hi-Quality's operations located over four Australian States and Territories specialise in:

- Waste Treatment;
- Transport, logistics and plant hire;
- Civil and environmental services;
- Quarrying;
- Resource recovery and recycling;
- Waste management and landfill;

- Building and landscaping product supplies;
- Skip bins; and
- Property development.

Hi-Quality has 14 operational sites that provide extended market coverage and efficient supply and are located at:

- Greater Sydney at Kemps Creek (2), Menangle, Brandown, Bringelly, Wallacia, Mt Hunter, Londonderry and St Marys;
- NSW Southern Highlands at Windellama and Oallen Ford;
- ACT at Fyshwick;
- Queensland at Yatala; and
- Victoria at Sunbury.

Hi-Quality operate sites that have similar logistics, scale and/or operation to the Project including the recently approved and operating Waste Treatment Facility located in Yatala, Queensland. The Yatala Waste Treatment Facility is approved to accept and treat up to 350,000 tonnes of waste per annum, treating waste types including:

- Regulated Solid and Liquid Wastes;
- Waste sludges; and
- Waste Water.

Hi-Quality's head office is currently situated at Kemps Creek, NSW, where general management and finance is located along with the transport division, maintenance workshop and landscaping yard.

Hi-Quality manages its operations with strict adherence to safety compliance, quality systems and environmental performance and sustainability and has achieved Integrated Management Systems (IMS) certification for quality management systems (AS/NZS ISO 9001- 2015), OH&S management systems (AS/NZS ISO 4801 - 2001) and environment management systems (AS/NZS ISO 14001 - 2015).

1.3 Site Location and Description

The Site (Lot 103/DP866530) is located within the Liverpool Local Government Area (LGA), approximately 5 km west of Liverpool CBD and is within the established industrial area of the suburb of Prestons. The Site is approximately 9,000 sqm in total size and is at an elevation of approximately 23 mAHD, with the area gently sloping to the north east and east.

The Site is zoned IN3 Heavy Industrial under the provisions of *Liverpool Local Environmental Plan 2008* (the LEP) and is surrounded by industrial activities. Land zoned approximately 200 m to the north west is zoned as B6 Enterprise Corridor while 300 m to the west of the Site is zoned RE2 Private Recreation (refer to **Figure 1**).

The Site is located approximately 500 m to the north of the M7 and approximately 500 m south of the nearest residents across Hoxton Park Road. The Site is 300 m from Maxwells Creek to the east and 420 m from a hotel to the west (refer to **Figure 2**).

The Site has an existing building of 4,097 sqm with dual driveways and direct roller door access and further infrastructure including parking, two entrances and a landscaped area to the west (refer to **Figure 3**).

1.4 Site History

The Site and surrounding area was developed into commercial/industrial land uses prior to 2000. The Site was first developed into an industrial property, with the general site layout at this time consistent with the existing site layout (i.e. warehouse on the eastern part of the Site, two site entrances, parking and landscaped area on the western part of the Site). The Site has been utilised for industrial activities including for the manufacturing of pre-cast concrete slabs for the construction industry and storage of plant and equipment in addition to warehousing and distribution activities.

The Site currently has the following development consents granted by Liverpool City Council:

- DA-1381/2013 change of use for the warehouse and distribution of media products and internal fitout involving pallet racking.
- DA-1148/2013 construction of a water tank and pump room and associated installation of sprinklers within an existing factory
- CD-653/2013 removal of internal office walls.

1.5 Purpose of this Report

The Project is to be assessed as State Significant Development (SSD) on the basis that it satisfies Clause 23(3) in Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011*.

This Scoping Report has been prepared to support a SSD application and to support the request for Secretary's Environmental Assessment Requirements (SEARs) for the Project, which would inform the preparation of an Environmental Impact Statement (EIS) under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This report provides the strategic need for the Project, a description of the Project, statutory approval requirements as well as the identification of key potential environmental issues that may be associated with the Project to inform the SEARs and the subsequent EIS.

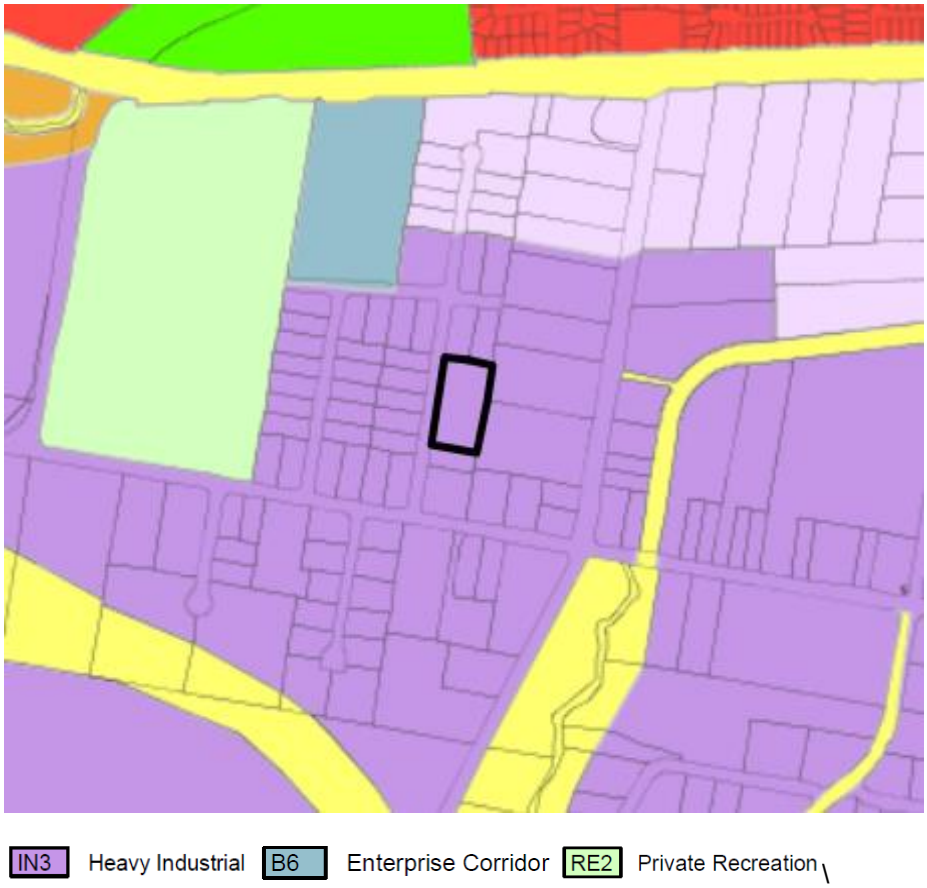

Figure 1: Zoning for the Site and surrounds (Source eplanning.liverpool.nsw.gov.au)

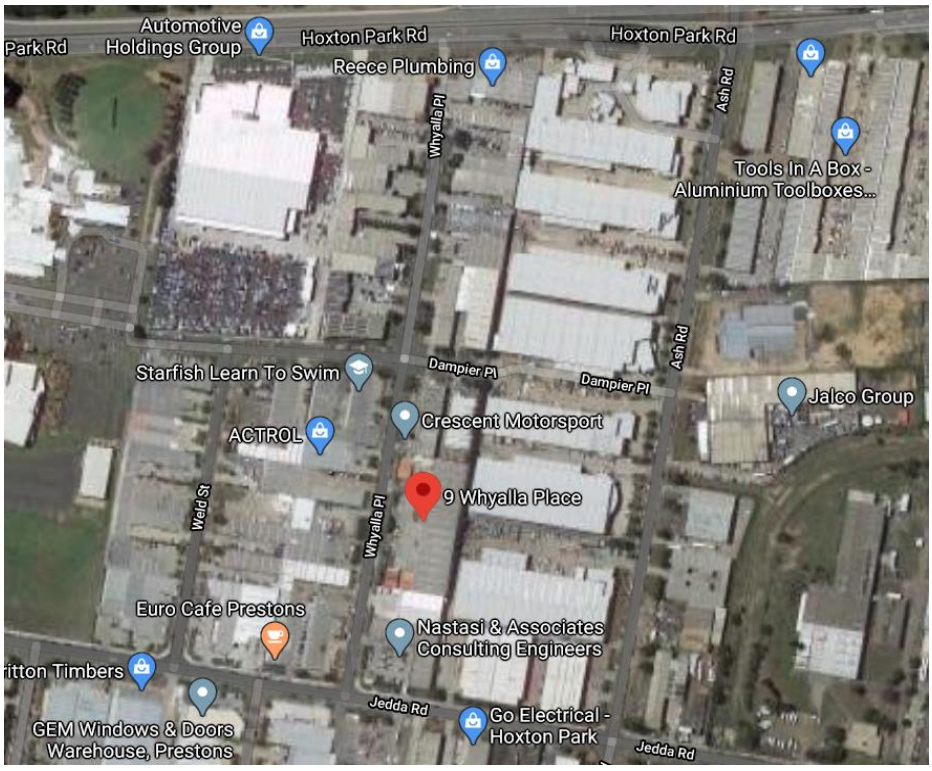

Figure 2: The Site and surrounding land use (Source: Nearmap)

LEGEND

BOL	BOLLARD	SV	STOP VALVE
TEL	TELSTRA PIT	HYD	WATER HYDRANT
LP	ELECTRIC LIGHT POLE	DR	DRAIN
PP	POWER POLE	TAP	TAP
SP	SIGN POST	ELC	ELECTRICAL BOX
MH	MANHOLE		CONC. WALL
	SITE BOUNDARY		SERVICE - WATER
	S.W.D		SERVICE - COMS
	SERVICE - SEWER		SERVICE - ELECTRICITY

NOTE(S)

1. LOCATION OF TELECOMMUNICATIONS LINE TAKEN FROM DIAL BEFORE YOU DIG .
2. LOCATION OF SEWER LINE TAKEN FROM DIAL BEFORE YOU DIG.

REFERENCE(S)

BASE SURVEY TAKEN FROM TSS TOTAL SURVEYING SOLUTIONS DRG NO. 20100_A DWG, DATED 2020-06-18.
EXIT DOORS TAKEN FROM GIROTTO PRECAST PTY LTD DRG NO. GS-A001.DWG, DATED 2011-05-11.
EXISTING STORMWATER DRAINS TAKEN FROM CENTRUM ARCHITECTS DRG NO. 90127-A01.DWG, DATED 1997-11.
ELECTRICITY SUBSTATION TAKEN FROM G.R.BUSH & PARTNERS DRG NO. FS001-01.DWG, DATED 2013-10-08.

NOT FOR CONSTRUCTION

DRAFT

0 10 20
1:400 METRES

CLIENT
HI QUALITY GROUP

PROJECT
9 WHYALLA PLACE, PRESTONS

CONSULTANT
GOLDER

YYYY-MM-DD	2020-08-11
DESIGNED	
PREPARED	
REVIEWED	
APPROVED	

TITLE
PRESTONS WASTE TREATMENT FACILITY
EXISTING LAYOUT

PROJECT NO.	CONTROL	REV.	FIGURE
20142192	005	A	F003

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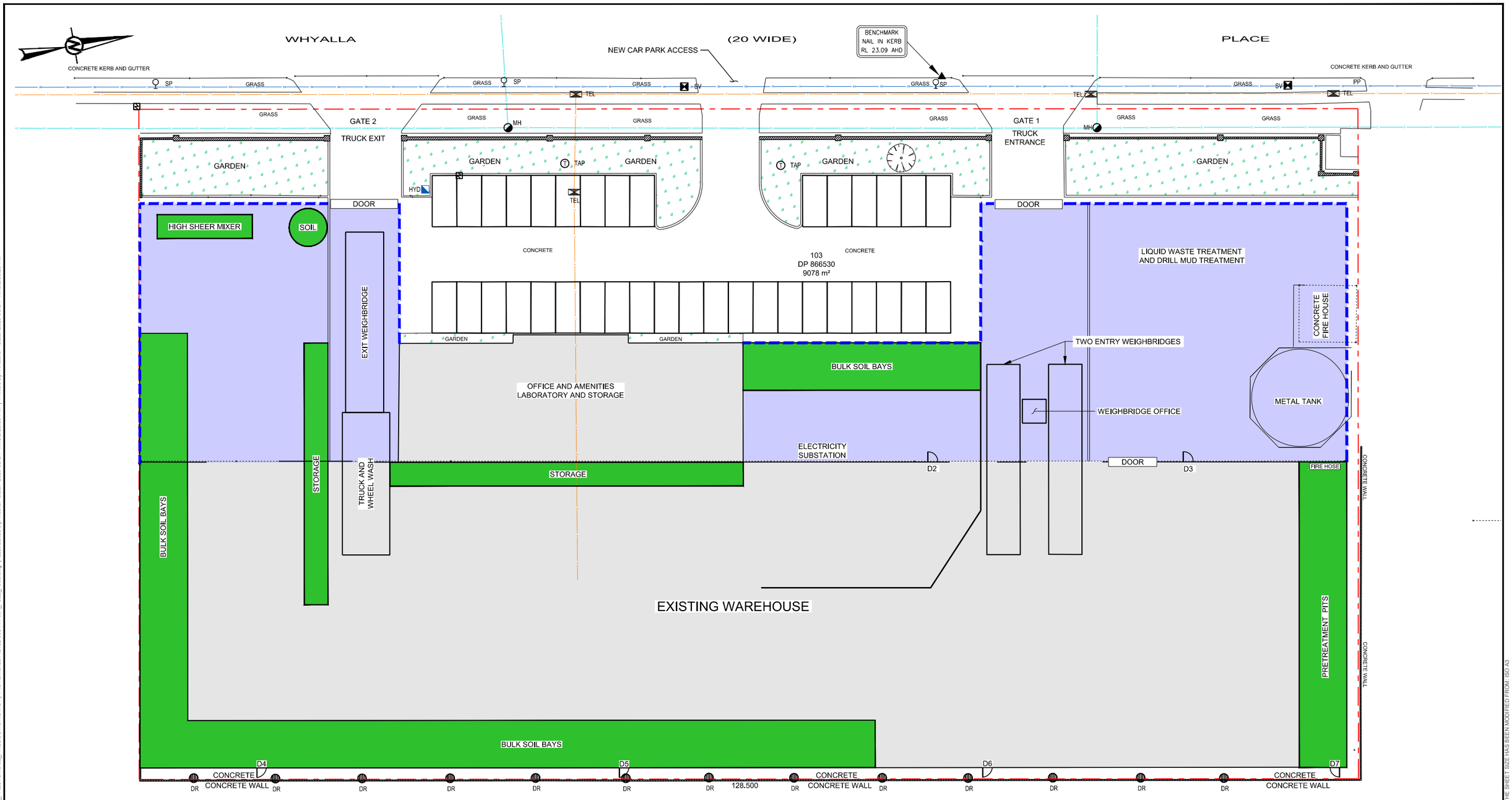

LEGEND

TEL	TELSTRA PIT	HYD	WATER HYDRANT
LP	ELECTRIC LIGHT POLE	DR	DRAIN
PP	POWER POLE	TAP	TAP
SV	STOP VALVE	ELC	ELECTRICAL BOX
MH	MANHOLE		KEY INTERNAL INFRASTRUCTURE
	GARDEN		WAREHOUSE - EXISTING
	CONC. WALL		WAREHOUSE - EXTENSION
	SITE BOUNDARY		SERVICE - WATER
	S.W.D		SERVICE - COMS
	SERVICE - SEWER		SERVICE - ELECTRICITY

NOTE(S)

1. LOCATION OF TELECOMMUNICATIONS LINE TAKEN FROM DIAL BEFORE YOU DIG .
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NOT FOR CONSTRUCTION

DRAFT

0 10 20
1:400 METRES

CLIENT
HI QUALITY GROUP

PROJECT
9 WHYALLA PLACE, PRESTONS

CONSULTANT
GOLDER

YYYY-MM-DD	2020-07-31
DESIGNED	JM
PREPARED	JF
REVIEWED	JM
APPROVED	JM

TITLE
PRESTONS WASTE TREATMENT FACILITY
CONCEPTUAL LAYOUT

PROJECT NO.	CONTROL	REV.	FIGURE
20142192	005	0	F004

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ISO A3

2.0 PROJECT DESCRIPTION

2.1 Overview

The Project proposes to construct and operate a Waste Treatment Facility at the Site that will include:

- Bulk Soils Treatment;
- Sediments and Sludges Treatment;
- Liquid Waste Treatment;
- Waste Storage and Transfer; and
- Ancillary infrastructure and activities including weighbridge and access.

The Waste Treatment Facility would process up to 270,000 tonnes of waste per annum.

Hi-Quality would locate some corporate office functions at this location, utilising existing office space.

2.2 Site Layout

The existing layout for the Site is presented in **Figure 3** and the proposed layout for the Project is presented in **Figure 4**.

The existing warehouse building and warehouse building extension would house the Waste Treatment Facility.

Access would be via Whyalla Place, which is an existing sealed road to the Site. Site access and egress would be via the existing Site entrances and exit as shown in **Figure 4**. A separate new entrance is proposed for employees and visitors to the Site.

Weighbridges and weighbridge office would be constructed. The approximate location of the weighbridges is presented in **Figure 4**.

A wheel and truck wash would be located upon exit of the building as shown in **Figure 4**.

The Project would provide parking spaces for visitors and for staff as shown in **Figure 4**.

2.3 Waste Treatment Facility

The Waste Treatment Facility would be located within the warehouse building and warehouse building extension as shown on **Figure 4**. All waste material would be received, treated, stockpiled and loaded out within the building. All material entering and leaving the Site would be recorded by the weighbridges. An engineered designed building heating, ventilation and air conditioning (HVAC) system would be installed to capture fugitive dust and/or vapour emissions.

General processing activities would include the following:

- Bulk Soils Treatment;
- Sediments and Sludges Treatment;
- Liquid Waste Treatment; and
- Waste Storage and Transfer.

Treatment processes for soils and sludges would comprise one or a combination of the following technologies:

- Pre-treatment activities, which may comprise dewatering or the addition of additives to improve the treatability of sludges as part of a step process prior to treatment;

- Physical and chemical separation;
- Chemical Oxidation;
- Bioremediation;
- Immobilisation (stabilisation and / or solidification);
- Acid Neutralisation; and
- Other treatment processes approved by NSW EPA.

Treatment technologies will generally focus on the destruction of contaminants (eg: chemical oxidation, bioremediation) or the separation of contaminants (eg: screening, chemical separation) from recoverable or more inert constituents. Preference is to be given to destructive technologies in the first instance, to achieve reduced total contaminant loads where material is to be disposed of to landfills. Of the expected tonnes per annum, it is expected that metals and metalloid impacted soils and sludges will form a high percentage of the waste stream. As such, it is expected that immobilisation will form an important treatment option at the Site.

There are four individual categories developed for the waste streams proposed for the Waste Treatment Facility, as summarised in **Table 1** below.

Table 1: Summary of Waste Categories & Preferential Treatment Technologies (Anthropogenic)

Category	Contaminant Group	General Description	Primary	Secondary
A	Organics	Wastes containing volatile and semi volatile substances, petroleum hydrocarbons, mineral oils, coal tar impacted materials, refinery wastes, biodegradable (aerobic) materials. Category A wastes are where there are more opportunities to destroy contaminant mass. This category excludes chlorinated (halogenated) hydrocarbon containing wastes	Bioremediation	Chemical Oxidation / Immobilisation
B	Halogenated Hydrocarbons	Including chlorinated solvent impacted soils which may contain potentially separate phase liquids entrapped within the soil matrix, residues from industrial waste treatment / process operations. Category B materials can be chemically degraded and oxidised as a preferred treatment approach	Chemical Oxidation	Bioremediation / Immobilisation
C	Metals & Metalloids[1]	Wastes from electrical processing sources, contaminated soils from property development, treatment wastes from mining, metals refining, waste from chlor-alkali plants and fly	Immobilisation	Chemical Reduction[2]

Category	Contaminant Group	General Description	Primary	Secondary
		ash (power station wastes). Excludes solid waste slags.		
D	Other Specific Waste Streams Category D includes a broad list of waste types that are considered to be similar in terms of grouping and will have a similar treatment "profiles" in terms of common primary treatment technology.	including contaminants of a unique or special composition, including soils potentially containing asbestos, inorganic contaminants, sorted asbestos containing materials (ACM), non-toxic salts, organic phosphorous compounds, wastes containing peroxides, biocide and phytopharmaceutical wastes (biocide manufacture), isocyanate compounds (polymer wastes), chlorates (disinfection by products from water treatment), PFAS contaminated soils	Immobilisation	Chemical oxidation / Bioremediation

Notes:

1. *Excludes solid slags derived from metals processing industries.*
2. *Chemical reduction will only be appropriate where a reduction in valency produces a less toxic chemical form and may require both immobilisation and chemical reduction technologies to be undertaken to comply with waste disposal criteria (subject to chemical constituents).*

For each of the categories identified in **Table 1**, the waste streams will be subject to a treatment hierarchy appraisal to prioritise the application of destructive technologies. It is noted that some contaminants may require sequential application of primary treatment technologies in order to reduce both their toxicity, contaminant mass and / or meet landfill leachability criteria (where appropriate).

Wastewater will be treated by a custom design treatment plant. The proposed wastewater treatment plant will have the capability of treating waste waters contaminated with: Hydrocarbons (including TPH and PAH); Organics; Suspended Solids; Acidity and Alkalinity; Heavy Metals; Nutrients; and PFAS and will comprise the following treatment technologies:

- Acid/caustic, coagulant and polymer dosing to prepare wastewater for gravity separation;
- Gravity separation via clarifier;
- Dissolved air floatation (DAF);
- Sand media filtration for particulate removal;
- Granular activated carbon filtration for hydrocarbon and PFAS adsorption;
- Ion exchange filtration for PFAS adsorption and final polishing;
- pH correction;
- Sludge thickening to treat sludge from the clarifiers and DAF units; and

- Sludge dewatering via screw press.

Drill Mud will be treated separately in a dedicated treatment plant for separation of the soil particles from the drilling mud using separation technologies including sieves, hydrocyclone and centrifuge processes.

2.3.1 Sediments and Sludges

2.3.1.1 Delivery

It is estimated the facility would treat up to 20,000 tonnes per annum of sediments and sludges.

2.3.1.2 Pre-treatment

For sludges, where destructive technologies are not appropriate (eg: metal and metalloid contaminated sludges), pre-treatment would be required to remove surplus liquids for treatment or increase the internal shear strength of the material prior to stabilisation.. Various pre-treatment reagents are considered appropriate, including bentonites and low dosages of lime or cement to provide increased material stiffness. Once spadeable, the material would be transferred to the Bulk Soils Bays for treatment as outlined within Section **2.3.2**.

2.3.2 Bulk Soils Treatment

2.3.2.1 Delivery

Approximately 90,000 tonnes per annum of Bulk Soils would be treated by the Project. Principle treatment technologies will first consider contaminant destructive technologies.

2.3.2.2 Separation

Both physical and chemical separation technologies will be available for use at the site, with the aims of reducing total tonnages of waste streams to landfill and, where physical-chemical conditions are suitable, to reduce the total contaminant mass of the waste stream.

Physical separation will be undertaken on materials delivered to the Site that would benefit from the removal of solid inert materials or oversize soil particles (eg: gravels) that present no potential contaminative risk. The physical separation step will be undertaken within the Bulk Solids Bays. The materials will be physically screened by either belt driven screener or with an excavator and sieve bucket. The materials that have been physically screened will then be transferred to the soil treatment bays. The recovered materials would be stored in dedicated bays and transported to appropriately licenced facilities for further processing.

It is estimated that up to 20,000 tonnes per annum of scrap metal, cardboard and paper, plastics, wood waste and concrete brick and tile would be recovered and transferred to an appropriately licenced facility for further processing.

Chemical separation would be undertaken in the sludge and sediments treatment pits. Surfactant would be applied via spray application or similar and the soil mixed with a small excavator.

The separated liquid phase would be collected and sent to the Liquid Waste Treatment Plant for treatment in accordance with Section **2.3.4**. The solids fraction would be sent to Bulk Soils Treatments for chemical oxidation or bioremediation treatment.

2.3.2.3 Chemical Oxidation

It is estimated the Project would treat up to 10,000 tonnes per annum of contaminated soil via chemical oxidation.

Chemical oxidation involves the addition of reagents / binders such as peroxide, potassium permanganate or sodium persulphate to destroy or immobilise contaminants. This results in the production of less hazardous and less toxic compounds that are more stable and less mobile (leachable). Soil contaminants to be treated

include Monoaromatics (eg: BTEX) and TPHs where soils that have suffered fuel spills; PAHs; Phenols, Chlorinated hydrocarbons; and Some pesticides / herbicides.

Treatment would be undertaken in a batch process with reagents added and mechanically mixed using a high sheer mixer (Reterra or similar). The Reterra has a fully automated dosing rate capable of accurately replicating reagent dosing requirements in a control mixing chamber. Materials would be stored in dedicated bays to maintain separation of each source batch.

After mixing, the treated materials would be cured and subjected to validation testing prior to classification being completed and transferred to an appropriately licenced waste disposal facility. It is estimated 10,000 tonnes per annum of treated soil would be disposed of to an appropriately licenced facility per annum.

2.3.2.4 Bioremediation

It is estimated the Project would treat up to 10,000 tonnes per annum of contaminated soil via bio-remediation processes.

Advanced bio-remediation technology is a proven method of treating hydrocarbon contamination to degrade organic species. The Project proposes bioremediation will exclusively be aerobic treatment of soils. Soil contaminants to be treated via Bioremediation would include Total Petroleum Hydrocarbons (TPH), Polyaromatic Hydrocarbons (PAH), Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Organic Carbon (TOC). Treatment would be undertaken in a batch process. Mixing would be undertaken in a batch process with reagents added and mechanically mixed. Soil would be cured in windrows with a GORE cover system or similar with air sparging or turning for aeration.

It is estimated that approximately 10,000 tonnes per annum of treated soil will be reused or disposed of to an appropriately licenced facility.

2.3.2.5 Immobilisation

It is estimated the Project would treat up to 60,0000 tonnes per annum of contaminated soil via immobilisation.

Immobilisation is a proven treatment technology and is a treatment technique which contains contaminants within a final solidified / chemically fixated matrix, based on the addition of cementitious or pozzolanic binder materials. Contaminants to be treated using immobilisation include metals, metalloids, some PAH impacted materials, coal tar contaminated soils / sediments and pesticide impacted materials. Treatment would be undertaken in a batch process with reagents added and mechanically mixed using a high sheer mixer. Materials would be treated and stored in dedicated bays to maintain separation of each source batch.

After mixing, the treated materials would be stockpiled, cured and subjected to validation testing prior to final classification being completed and transfer to an appropriately licenced waste disposal facility. It is estimated 60,000 tonnes per annum of treated soil would be disposed of to an appropriately licenced facility per annum.

2.3.3 Acid Sulphate Soils

It is estimated the Project would treat up to 30,000 tonnes per annum of acid sulphate soils.

Acid neutralising regents would be mechanically mixed in small stockpiles or within the treatment bays using , where batches are greater than 500 tonnes. Materials would be treated and stored in dedicated bays to maintain separation of each source batch.

It is estimated 30,000 tonnes per annum of treated acid sulphate soils will be disposed to an appropriately licenced facility.

2.3.4 Liquid Wastes Treatment

Liquid waste treatment would take place within the Waste Treatment Facility. Approximately 70 ML per annum of wastewater would be treated at the Site or approximately 1-2 ML/day. Wastewater will be treated by a custom design treatment plant .

Residual wastes from the treatment of wastewater treatment include:

- Waste oil. This will be collected and sent to an appropriately licenced oil recycler.
- Filter cakes from the filter press will be tested and disposed of at an appropriately licenced facility. It is estimated approximately 4,000 tonnes of filter cake would be disposed per annum.

Treated wastewater would be sampled and disposed to sewer in accordance with Sydney Water Trade Waste Agreement. It is estimated 65 ML per annum would be disposed to sewer.

The Wastewater Treatment Plant and reagents would be bunded in accordance with relevant Australian Standards.

2.3.4.1 Drill Mud Treatment

A Drilling Mud Processing plant would be located in the warehouse. Approximately 10,000 tonnes of non-contaminated drilling mud waste would be processed at the Site per annum.

The treatment process would involve separation of the soil particles from the drilling mud using separation technologies including sieves, hydrocyclone and centrifuge.

Separated solids would be placed in a Bulk Solids Bay for sampling and testing in accordance with the NSW EPA “Treated Drilling Mud Order 2014” and once dry would be transported for reuse or to an appropriately licenced facility.

Approximately 6,000 tonnes per annum of recovered solids would be transferred for reuse or to an appropriately licenced facility. Approximately 4,000 kL of liquid waste per annum would be tested and classified either for re-use on site for dust suppression or discharged to sewer under a Trade Waste Agreement with Sydney Water.

2.4 Packaged Waste

Packaged waste would be stored in bunding in accordance with relevant Australian Standards.

Packaged waste for storage and transfer only would remain packaged within the Waste Treatment Facility.

Packaged waste for treatment would be treated per Section **2.5**.

Empty packaging would be shredded for offsite disposal to an appropriately licenced facility.

2.5 Waste Storage, Consolidation and Transfer Only (No Treatment)

Approximately 60,000 tonnes per annum of Bulk Solids and Packaged materials would be accepted at the Site for storage, consolidation and transfer to an appropriately licenced facility only. i.e. these materials would not be treated at the Site. Bulk materials would be unloaded, stored, consolidated and loaded for transfer within the Waste Treatment Facility.

2.6 Waste Codes

The Project would be licensed to accept and treat the waste types listed in Appendix A.

2.7 Stormwater

The Project would utilise the existing stormwater management infrastructure at the Site.

All waste unloading, treatment and loading will be undertaken within the Waste Treatment Facility. Trucks would remain covered until unloading within the facility.

2.8 Water Supply

Water demand would be met through an existing connection to Sydney Water supply that runs along Whyalla Place in additional to a rainwater tank that would capture water from on the site for reuse (such as from the warehouse roof).

2.9 Utilities

The Project would utilise existing utilities connections.

2.10 Construction of the Project

Construction methods would be determined at the time of construction in accordance with the Project approval requirements. Estimated construction time is approximately 6 months. Construction would comprise the following key activities:

- Construction of Weighbridges and Weighbridge office;
- New driveway;
- Warehouse Building extension;
- HVAC System; and
- Internal fit out – pits, push wall, bunding, water treatment plant.

Weighbridge: Construction of the new weighbridges and weighbridge office would have a construction period of approximately 1 month.

New Driveway: A new driveway will be constructed and would involve earthworks and minor concrete works and would have a construction period of approximately 1 month.

Warehouse Building Extension: Construction of the warehouse building extension would have a construction period of approximately 6 months.

Building internal fit out: installation of waste treatment equipment including tanks, pits, push walls, silos, pumping and dosing systems and installation of the HVAC system. Fit out of the Waste Treatment Facility would have a construction period of approximately 3 months.

2.10.1 Equipment

Equipment necessary for the construction of the Project would include compaction equipment, backhoes, excavators, rollers, truck, concrete pumping equipment, air compressors, concrete vibrators and saws, mobile cranes and welders.

2.10.2 Construction Environmental Management

Prior to construction a Construction Environmental Management Plan (CEMP) would be prepared. All construction works would be undertaken in accordance with the construction environmental controls presented within the EIS and include consideration of relevant Project approval conditions.

2.10.3 Construction Hours

Standard construction hours of 07:00 to 18:00 Monday to Friday and 08:00 to 13:00 on Saturdays with no work on Sundays and public holidays is proposed. The construction phase duration is expected to be 6 months.

2.10.4 Work Force

The construction workforce would vary throughout the construction period depending on the activities underway. Typically, the construction workforce would be up to 20 persons.

2.11 Operation of the Project

2.11.1 Hours of Operation

The Project would receive waste 24 hours a day, while processing and dispatch operations undertaken between 7:00 am and 6:00 pm Monday to Saturday and 8 am to 6 pm Sundays and Public Holidays.

2.11.2 Work Force

A total of up to 10 full-time employees would be required for the processing and dispatch operation of the Waste Treatment Facility, whilst four staff would be required outside of these hours for receipt of material.

Up to 30 personnel are estimated to utilise the office space..

2.11.3 Environmental Management during Operation

A detailed description of environmental management during operation would be provided in the EIS and would include:

- Traffic and transport management;
- Materials and waste management;
- Water Management;
- Air quality management; and
- Noise management.

2.12 Capital Investment Value

The capital investment value for the Project is estimated at $20 million.

3.0 STRATEGIC NEED AND PROJECT JUSTIFICATION

3.1 Strategic Need

The Project is aligned with a number of legislative and strategic drivers.

The Australian Government's (2018) "National Waste Policy: Less waste, more resources" (National Waste Policy) is a collaborative policy that sets the direction and framework for waste management and resource recovery until 2030 in Australia. The National Waste Policy incorporates the waste hierarchy, and a focus on high order uses, while building on the idea of continually reusing, recycling and reprocessing materials in a circular economy. As identified within the National Waste Policy, the following five principles underpin waste management, recycling and resource recovery in a circular economy:

- Avoid waste;
  - Prioritise waste avoidance, encourage efficient use, reuse and repair;
  - Design products so waste is minimised, they are made to last and we can more easily recover materials;
- Improve resource recovery;
  - Improve material collection systems and processes for recycling;
  - Improve the quality of recycled material we produce;
- Increase use of recycled material and build demand and markets for recycled products;
- Better manage material flows to benefit human health, the environment and the economy; and
- Improve information to support innovation, guide investment and enable informed consumer decisions.
- Where landfilling is a requirement, prioritise the destruction of contaminants to reduce overall contaminant mass (where technically suitable).

The Project is consistent with these key principles such as providing for efficient use, reuse and repair thereby facilitating waste avoidance, improving resource recovery through material collection systems and processes for recycling and improving the quality of recycled material in addition to building demand and markets for recycled products. The Waste Treatment Facility will ensure the destruction and separation of contaminants for safe disposal to protect human health and the environment, whilst enabling materials to remain in productive use where feasible as part of a circular economy. This will better manage the flows of materials within our economy that benefit human health, the environment and deliver opportunities for wealth creation.

In addition to the National Waste Policy, the *Waste Avoidance and Resource Recovery Act 2001* (WARR Act) incorporates the waste hierarchy that prioritises avoidance, followed by recycling, recovery, treatment and disposal, while the *Protection of the Environment Operation Act 1997* (POEO Act) establishes the waste levy as a financial incentive for recycling over disposal. The key waste policy tool under this NSW State framework is the EPA (2014) "NSW Waste and Resource Recovery Strategy 2014-21" (WARR Strategy), which includes the following goals:

- Avoiding and reducing waste generation;
- Increasing recycling – with target recycling rates by 2021-22 of 80 per cent for Construction and Demolition (C&D) waste and 70 per cent for Commercial and Industrial (C&I) waste; and,
- Diverting more waste from landfill to alternative uses, such as recycling and energy recovery.

The Project seeks to address these goals through providing for resource recovery and recycling and significantly increase the beneficial reuse potential of treated materials. The NSW State Government 2021 plan re-commits the government to achieving the WARR Strategy recycling targets as a key priority Goal 23.

In addition, the Project will enable the appropriate treatment of materials that may be inappropriate to reuse, recycle or recover for energy to ensure reduced impacts to the environment and human health as identified by the waste hierarchy and the WARR Strategy.

The Project is also aligned with the Greater Sydney Commission's 2018 "Greater Sydney Region Plan: *A Metropolis of Three Cities".*

In relation to waste and resource recovery, the Greater Sydney Region Plan's Planning Priority W19 seeks to optimise self-sufficiency through developing greater localised precinct-wide waste processing capacity that promotes efficiency. The location of the Project including its proximity to identified major projects to be constructed and its access to transport links including the M7 and M5 makes the Site a strategic resource recovery asset that would play a key role in achieving this vision.

In addition, Objective 35 identifies that more waste should be re-used and recycled to support the development of a circular economy and that while *"…the provision of waste management is an essential service to communities. Existing waste management facilities do not have the capacity to accommodate projected growth*" (Greater Sydney Commission's 2018). Furthermore, existing waste management facilities need to be protected from residential encroachment and at the same time address ongoing environmental issues such as odour, noise, truck movements and dust.

The Western City District Plan (a subplan of the "Greater Sydney Region Plan: *A Metropolis of Three Cities")* also states:

There is diminishing capacity in existing landfill sites in Greater Sydney, with more waste being sent to landfill outside the region. This increases costs to the community. Additional sites for resource recovery within Greater Sydney would reduce waste going to landfill and the associated transport costs. …Therefore, retaining industrial land locally for waste management and recycling is critical. …Land use plans need to address opportunities to develop recycling and waste management facilities.

In providing for the treatment and resource recovery of materials for reuse, the Project aims to keep resources circulating in our economy to maximise value, generate local jobs and minimise waste. As such, it is directly related and aligned with recent discussion papers and draft policy including:

- NSW EPA (October 2018) "Too Good To Waste" Discussion paper on a circular economy approach for NSW;
- NSW EPA (October 2018) NSW Circular Economy Policy Statement "Too Good To Waste"; and
- Greater Sydney Commissions (October 2018) "A Metropolis that Works": Thought Leadership Series: TLP 2018–1.

3.2 Need for the Project

The Proponent supports the strategic need and legislative drivers for waste treatment and recovery and the Project directly contributes to meeting the NSW Government's waste strategies and targets. The Site is ideally located for the Project because:

- The Site is located in Western Sydney to service a number of major urban areas (including; Liverpool, Penrith and Fairfield LGAs) and major projects in Western Sydney (M12, Western Sydney Airport, Western Sydney Aerotropolis);

- The Site is readily accessible from major transport links including the M7;
- The Site and surrounding area is zoned for industrial land use that is compatible for the Project operations;
- The Project would contribute to further diverting waste from limited landfill capacity, which is a demonstrated need through Commonwealth and NSW State Targets and the Strategic Need discussion (refer to Section **3.1**);
- The Site is adequately separated from sensitive receivers to enable potential adverse environmental impacts (i.e. air and noise) to be managed and/or mitigated. This includes much of the on site activity being within the existing building located on the Site; and
- The Site provides contingency to secure future waste disposal options and to complement future alternate resource recovery management options in the Western Sydney Region.

The Project is supported by strong market drivers for waste treatment and recovery. Construction activity in residential, non-residential and infrastructure sectors has expanded rapidly, particularly in the Western Sydney region in recent years and is forecast to continue.

The Project would result in additional waste being diverted from landfill in the local area, thereby not only reducing the transport, environmental and health costs to the community but resulting in beneficial reuse, supporting the development of a circular economy and addressing the capacity to accommodate projected growth as identified by the Greater Sydney Commission's 2018 "Greater Sydney Region Plan: *A Metropolis of Three Cities"*. The Project would provide the Western Sydney Region with additional capacity waste throughput. This in turn would assist in reducing pressure on Sydney's remaining landfill capacity.

The Site of the Project is strategically located to service housing growth in Western Sydney in addition to large public infrastructure projects scheduled over the next decade and beyond. This will underpin strong demand for waste recycling and waste treatment capacity. Key public projects, which the Project is well placed to service include the M9, M12, Western Sydney Airport, the Northern Road upgrade, the Outer Sydney Orbital and the Western Sydney Aerotropolis. Recycling and waste treatment capacity will be needed to meet this demand.

The Project will contribute to the objectives of relevant legislative and strategic policy through providing for more efficient recovery of resources, treatment technologies to reduce potential health and environmental impacts and providing materials to projects and relevant industries within the vicinity of the Site where existing waste management facilities are anticipated to not have the capacity to accommodate projected growth (Greater Sydney Commission's 2018). Thus, there is a clear and demonstrated strategic need and project justification at the Site.

3.3 Alternatives

The Site of the Project has been identified as the most suitable for a number of reasons, including the compatibility of the existing land use, efficiencies associated with utilising existing infrastructure, the strategic location in proximity to major transport links and proximity to relevant markets and waste generation sources.

Providing for additional resource recovery capacity will result in lower environmental and economic costs to the Proponent, customers and ultimately the wider community.

4.0 STRATEGIC AND STATUTORY CONTEXT

This section provides an overview of the Project in relation to relevant strategic and legislative planning requirements. A detailed assessment of all the relevant legislation would be undertaken as part of the EIS.

4.1 Commonwealth Legislation

The *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides for the protection and management of Matters of National Environmental Significance (MNES), including the following:

- World heritage properties;
- National heritage places;
- Ramsar wetlands of international importance;
- Listed threatened species and communities;
- Listed migratory species;
- Commonwealth marine environment;
- The Great Barrier Reef Marine Park;
- Nuclear actions (including uranium mines); and
- A water resource, in relation to coal seam gas development and large coal mining development

The requirement for a Commonwealth approval is assessed through a referral process to the Commonwealth Department of Agriculture, Water and the Environment. If the Commonwealth Minister for Agriculture, Water and the Environment determines that a project is likely to have a significant impact, the project would become a controlled action and approval of the Commonwealth Minister is required.

The need for a referral is based on two triggers. The first is that it must relate to NES matters. The second is that it must have a significant impact on such matters.

An initial assessment of the Project against MNES suggests that it would not have a significant impact upon these matters and therefore referral to the Commonwealth Minister is not considered required. This would be further assessed during technical assessment completed during the EIS.

4.2 NSW Legislation

4.2.1 Environmental Planning and Assessment Act 1979

The NSW EP&A Act and the accompanying *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) provide the statutory and regulatory framework for the environmental assessment and approval of development in NSW. Part 4 of the EP&A Act provides for the assessment of 'development' that requires development consent, whilst Division 4.1 of Part 4 provides for control of the assessment of State Significant Development (SSD).

State Environment Planning Policy (State and Regional Development) 2011 identifies projects that trigger SSD. The Project would be considered SSD under Clause 23 of Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011*, which refers to:

23 Waste and resource management facilities

(3) Development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste.

Designated Development

The Project is also considered to be designated development as specified in Schedule 3 of the EP&A Regulation, which relevantly identifies the following types of development as 'designated development'

Clause 32 - Waste management facilities or works

(1) Waste management facilities or works that store, treat, purify or dispose of waste or sort, process, recycle, recover, use or reuse material from waste…

Integrated Development

Integrated Development includes development proposals that require development consent and one or more further specific approvals under additional legislation. Where integrated approval is required the development application must be submitted to the relevant approval body for assessment. The Project triggers integrated development under the POEO Act as is further discussed in Section **4.2.2**.

4.2.2 Other Legislation

The EIS would provide a review of the Project against relevant legislation. Legislation that may be applicable to the Project includes, but may not be limited to:

- *Protection of the Environment Operations Act 1977 (POEO Act):* The Project would be a Scheduled Activity as per Schedule 1 of the POEO Act and would consequently require an Environmental Protection Licence (EPL) in accordance with the POEO Act.
- The *Waste Avoidance and Resource Recovery Act 2001* (WARR Act): The WARR Act aims to encourage the most efficient use of resources to reduce environmental harm and ensure that resource management is undertaken in a logical, sustainable and organised manner. The Project would promote resource recovery and therefore be consistent with the WARR Act.
- *Roads Act 1993*: Transport for NSW (TfNSW) would be consulted during the preparation of the EIS.

4.2.3 Environmental Planning Instruments

Local Planning Instruments – Zoning and Permissibility

The relevant local planning instrument is the *Liverpool Local Environment Plan 2008* (the LEP). The Project site is zoned as IN3 Heavy Industrial. The objectives of this zone are as follows:

1) Objectives of zone

- *To provide suitable areas for those industries that need to be separated from other land uses.*
- *To encourage employment opportunities.*
- *To minimise any adverse effect of heavy industry on other land uses.*
- *To support and protect industrial land for industrial uses.*
- *To preserve opportunities for a wide range of industries and similar land uses by prohibiting land uses that detract from or undermine such opportunities.*

In accordance with the LEP "Resource recovery facilities" are permitted with consent in IN3 Heavy Industrial zoning where Resource recovery facilities are defined as:

resource recovery facility *means a building or place used for the recovery of resources from waste, including works or activities such as separating and sorting, processing or treating the waste, composting, temporary storage, transfer or sale of recovered resources, energy generation from gases and water treatment, but not including re-manufacture or disposal of the material by landfill or incineration.*

The Project meets this definition and is therefore permissible with consent.

State Environmental Planning Policies

The following State Environmental Planning Policies (SEPPs) may be applicable to the Project, and would be considered in the preparation of the EIS for the Project.

State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)

Under the *Infrastructure SEPP,* Zone IN3 Heavy Industrial is a prescribed zone in accordance with Clause 120. This clause identifies a resource recovery facility as defined the same as in the LEP. Under this clause, a resource recovery facility is defined as a type of waste or resource management facility under the following definition:

Waste or resource management facility *means a waste or resource transfer station, a resource recovery facility or a waste disposal facility.*

Under Clause 121 of the ISEPP:

a) *Development for the purpose of waste or resource management facilities, other than development referred to in subclause (2), may be carried out by any person with consent on land in a prescribed zone.*

The Project is therefore permissible with consent in accordance with Clause 121 of the ISEPP.

State Environmental Planning Policy No. 33 - Hazardous and Offensive Development (SEPP 33)

SEPP 33 links the permissibility of a development proposal to its safety and environmental performance. The Project is within the definition of a “potentially hazardous industry” or “potentially offensive industry” under SEPP 33. A screening assessment to determine the need for a preliminary hazard analysis would be undertaken by the Proponent, the findings of which would be presented in the EIS.

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)

Under the provisions of SEPP 55 it is necessary to establish if the Project is to be undertaken on land which has been declared or found to be contaminated, where rezoning of the land is proposed or where development contemplates a change of use. It is proposed for a contamination assessment to be completed for the Project as part of the EIS.

4.2.4 Strategic Planning

As identified in Section **3.1**, the Project is aligned with and consistent with the Greater Sydney Commission’s 2018 “Greater Sydney Region Plan: *A Metropolis of Three Cities”* and the Western City District Plan (a subplan of the Greater Sydney Region Plan).

In relation to waste, the Greater Sydney Region Plan’s Planning Priority W19 seeks to optimise self-sufficiency through developing greater localised precinct-wide waste processing capacity that promotes efficiency. The location of the Project including its proximity to identified major projects to be constructed and its access to transport links including the M7 (and future M12) makes the Site a strategic resource recovery asset that would play a key role in achieving this vision.

The Western Sydney District Plan identifies the need to retain industrial land locally for waste management and recycling such as being proposed by the Project. In addition, the Project directly addresses the Western Sydney District Plan’s stated aim to develop recycling and waste management facilities within the region, which will support the development of a circular economy and address the capacity to accommodate projected growth identified within the Greater Sydney Region Plan.

The Site sits within proximity to the Western Sydney Aerotropolis, which is designated by the NSW Government to promote better access to jobs, infrastructure and services as Greater Sydney's newest economic hub. It is considered the Project is consistent with this plan, which will be further addressed within the EIS.

5.0 MATTERS AND IMPACTS

A preliminary environmental risk analysis has been completed to assist in the identification of key issues for the Project based upon likelihood and consequence of potential adverse impacts. The findings of the Preliminary Risk Assessment are presented in **APPENDIX B**. This Preliminary Risk Assessment is based upon knowledge of the Site including previous desktop and investigations, existing conditions of consent and licences and further identification of environmental constraints and opportunities related to the Site and the activities being proposed as part of the Project.

An environmental risk analysis would be further developed and provided as part of the EIS, incorporating the findings of further site investigation and identified mitigation measures, the SEARs, and community and stakeholder liaison, to ensure all issues associated with the Project are identified and addressed appropriately to reduce their potential risk to an acceptable level.

The potential key issues as identified within the Preliminary Environmental Risk Assessment as having a medium risk are identified below in addition to how they would be addressed in the EIS.

5.1 Waste Management

Waste management employed throughout the operation of the Project would facilitate the maximisation of reuse and resource recovery opportunities and minimise impact on the surrounding community and environment. Once fully operational, the Site would handle a number of waste streams within the proposed Waste Treatment Facility as identified within Section **2.3**. Acceptance, quantifying and handling of the waste streams received and processed at the Site including stockpile and storage volumes, waste tracking and treatment processes would be further detailed in the EIS.

Risks associated with the Project include:

- Receipt of non-conforming wastes at the Site not permitted to be handled; and
- Unplanned disruption to operations resulting in large quantities of residual waste from waste processing being stored on site.

The EIS would identify and further discuss the waste management streams relating to the Project. This would involve identifying, quantifying and classifying all waste streams received and processed at the Site in accordance with relevant assessment documentation including obligations under the POEO Act and the NSW Department of Environment, Climate Change and Water, Waste Classification Guidelines (2009). In addition the EIS would address potential waste management impacts associated with the Project and identify management and mitigation measures for resource use and waste.

5.2 Traffic, Access and Car Parking

Proposed access to the Site is presented in **Figure 4**. Traffic accessing the Waste Treatment Facility would enter through the existing northern entrance via Whyalla Place. Material and waste loads would be directed through the weighbridge into the Waste Treatment Facility.

Employees and visitors would enter the Site via the separate proposed new entrance via Whyalla Place. The Project would provide onsite parking for employees and visitors as shown in **Figure 4**.

Construction of the Project would require the use of heavy vehicles to deliver construction plant, equipment and materials to the Site. The construction period would also result in increased use of light vehicles on the surrounding road network associated with the construction workforce. However, it is anticipated that traffic impacts during the construction phase of the Project are likely to be minimal.

During operation the Project would result in an increase in truck and vehicle movements associated with transportation of material to and from the Site and on site operations.

The EIS will include a Traffic Impact Assessment that would identify and assess the impacts associated with the Project including:

- The current and future capability of local and regional road infrastructure;
- The type and frequency of heavy vehicles proposed to utilise the Site;
- The suitability of the Project layout to accommodate the change to traffic vehicle movements; and
- Details of the internal network and parking in accordance with Australian Standards.

The EIS would include recommendations to mitigate the likely impacts of the Project on the road network including operational management plans and the suitability of the existing road network to accommodate the Project. In addition, appropriate consultation with TfNSW would be undertaken in accordance with regulations.

5.3 Air Quality and Greenhouse Gas

During construction and operation of the Project, it is likely there would be dust generation and particulate emissions including from processing, storage and transport, vehicles, and plant in addition to potential greenhouse gas emissions of plant and vehicles and odours from waste during operation.

The Project will include fitting the warehouse building with an engineered designed building HVAC system capture fugitive dust and/or vapours. An air quality and greenhouse gas assessment would be completed as part of the EIS in accordance with the NSW EPA's "Approved methods for the modelling and assessment of air pollutants in NSW" (2016) and will identify and assess the potential impacts of emissions of key pollutants and cumulative particulate matter to inform mitigation and management measures for the design and operation of the Project.

5.4 Noise

Background noise levels are largely influenced by existing operations of the surrounding industrial area and the surrounding road network including Whyalla Place, Jedda Road and Hoxton Park Road to the North. The nearest residential receivers are located approximately 500 metres to the North across Hoxton Park Road.

During construction and operation of the Project, noise emissions would vary depending on the activities being undertaken. Potential receivers within the existing industrial park may be impacted by noise generated from traffic at the Site and the operation of plant and equipment. However, the extent of impacts would vary according to the relationship of the construction works and operations to the receiver location, intervening structures and the site activity. However, given the background noise, intervening structures and distance to sensitive receivers, noise impacts are expected to be medium to low prior to mitigation and management measures..

A noise and vibration assessment would be undertaken as part of the EIS to determine the potential impacts of the Project during construction and operation. This assessment will:

- Identify nearby sensitive receptors;
- Establish existing ambient and background noise levels at the potentially most affected off-site receiver locations;
- Identify sound power levels for each piece of equipment or process;
- Assess operational and construction noise impacts in accordance with the Noise Policy for Industry (2017) and the Interim Construction Noise Guideline respectively;

- Assess traffic noise consistent with EPA's Road Noise Policy; and
- Identify feasible and reasonable noise mitigation measures.

5.5 Soil and Water

The Site and surrounding industrial estate is identified within the LEP and Liverpool City Council planning controls as a low flood risk. The western area of the Site is also categorised as "Flood Planning Area (1% AEP flood plus 0.5 metre freeboard)", which appears to correspond to the area of the Site that does not include the existing building.

The existing stormwater drainage system for the Site would be supplemented, where required, to accommodate the Project and to ensure discharges are within generally agreed expectations of Liverpool City Council.

This assessment will include the identification of potential impacts of the planned activities on surface water and groundwater at the Site and its immediate surrounds and outline the hierarchy of mitigation measures as required. This assessment would include:

- Identifying, assessing and managing any potential risks associated with contamination as a result of uncontrolled release of fuel, leachate or waste waters from processing activities during operation;
- Identifying management for clean surface water;
- Assessment of hydrological conditions for the site and the Project; and
- Identification of management and mitigation measure utilising the hierarchy of mitigation measures to address these issues and incorporate into the Project design.

5.6 Contamination

In accordance with SEPP 55, intrusive investigations and preparation of a Phase 1 and Phase 2 Environmental Site Assessment (ESA) report is to be included in the EIS. The Phase 1 assessment will include an initial desktop study, which includes review of site history, certificate of title, mapping, historical photos and environmental registers and planning certificate for the Site. Intrusive investigations would be undertaken to identify soil and groundwater quality at the Site within a Phase 2 ESA Report.

The Phase 1 and Phase 2 ESA Report will characterise the Site and potential sources of contamination and areas of potential concern at the Site (based upon the intended land use), assess the relative risks of contamination from the identified potential sources on the identified receptors both on and off Site, highlight the key issues driving the contamination risk for the Site and identify the suitability of the Site for the Project.

5.7 Hazards and Dangerous Goods

The EIS would confirm the types, quantities, storage locations and transport movements of hazardous and dangerous goods proposed to be utilised for the Project. Where any exceedance of relevant thresholds are identified, the EIS would include a comprehensive Preliminary Hazard Analysis (PHA) to determine the cumulative risks associated with the Project.

5.8 Human Health Risk Assessment

A Human Health Risk Assessment (HHRA) would be undertaken as part of the EIS to describe the risks from potential emissions generated by the Project that may impact upon human health for both occupational exposure and receptors in close proximity to the facility.

The HHRA will involve an assessment of complete exposure pathways and potential hazards (risks), and a review of potential exposure concentrations based on air quality modelling in relation to published air quality guidelines and in accordance with the framework published by EnHealth (2012).

5.9 Landscape and Visual

Given that the Project will predominantly contain site operations within the existing building within an existing industrial area, it is considered that the Project will have a similar visual impact to current activities on the Site. Views to and from the Site are generally shielded by existing buildings within the Prestons industrial estate.

Assessment of the Project upon landscape and visual amenity would be assessed during the EIS. This would include:

- Identification of the visual qualities present, including the existing landscape character of the region, sensitive locations, catchments and key viewpoints;
- An assessment of the visual impacts of the Project including the magnitude of change to existing views and the visual sensitivity of the viewers; and
- The identification of feasible and reasonable measures to mitigate impacts with identified mitigation measures incorporated in the Project design.

5.10 Fire and Incident Management

While the Site is not located within identified bushfire prone area an assessment of fire and incident management on the Site will be completed for the EIS including identification of the aggregate quantities of combustible waste products to be stockpiled at any one time.

The Fire and Incident Management assessment will include technical information on the environmental protection equipment to be installed on the premises such as air, water and noise controls, spill clean-up equipment and fire (including location of fire hydrants and water flow rates at the hydrant) with management and containment measures.

5.11 Cumulative Impacts

The EIS would include an assessment of known cumulative impacts of the Project in relation to the Site and surrounding area. This section of the EIS would:

- Outline how cumulative impacts have been addressed in relation to known strategic planning documentation that affect the Site;
- Acknowledge the inherent cumulative impact assessment built into some established assessment methodologies e.g. for air quality and traffic;
- Determine whether the project, in combination with the other impacts, may cause a significant or unacceptable change to an environmental, social or economic matter, now or in the future; and
- Determine, to the extent possible, the project's relative contribution to those cumulative impacts.

5.12 Further Issues

In addition to the key issues identified in this section, further issues have been considered as part of this Scoping Report for the Project. It is considered these issues have a low to negligible risk and do not require further assessment within the EIS. These issues are as follows.

5.12.1 Biodiversity

Given the Site is located within an existing industrial area and is not identified in the *Liverpool Local Environment Plan 2008* (LEP) as containing Biodiversity values, it is considered the Project will have a negligible impact upon Biodiversity. Therefore, the Proponent has submitted a waiver for a Biodiversity Development Assessment Report (BDAR) for the Project separate to this request for SEARs.

Should the BDAR be required by the SEARs, it would be undertaken as part of the EIS.

5.12.2 Heritage

An Archaeological Survey Report has been completed for the Site, which included the findings of a review of relevant databases, site walkover and field investigation. This report identifies the Project will have negligible impact upon known heritage values due to the location, previous and existing land use and the negligible ground disturbance/excavation of the Project. Based upon this report (provided separately to this request for SEARs) an exemption from preparing an Aboriginal Cultural Heritage Report (ACHAR) for the EIS is sought for the Project.

6.0 COMMUNITY AND OTHER STAKEHOLDER ENGAGEMENT

The Proponent is committed to consulting with stakeholders including government agencies, Liverpool City Council and the local community. This will ensure that stakeholders have the opportunity to understand the Project and its context and can provide appropriate input and feedback to the Project assessment and determination.

During the preparation of the EIS the Proponent will consult with the following:

- Liverpool City Council;
- Environment Protection Authority;
- Department of Planning, Industry and Environment;
- Transport for NSW;
- Local Community Groups; and
- Nearby land owners and occupiers that may be affected by the Project.

The EIS will describe the consultation process, the issues raised and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, adequate explanation will be required in the EIS.

7.0 CONCLUSION

Hi-Quality seek to construct and operate a Waste Treatment Facility (the Project) to be located at 9-13 Whyalla Place, Prestons NSW 2170. The Project proposes to utilise treatment technologies treating waste to a level suitable for reuse, disposal to landfill or disposal to sewer.

The Waste Treatment Facility would process up to 270,000 tonnes of waste per annum primarily generated from industrial processes and contaminated sites and include treatment of:

- Contaminated Soils;
- Contaminated sludges; and
- Liquid Wastes.

New ancillary infrastructure on the Site is proposed by the Project to include:

- Weighbridges and weighbridge office;
- Warehouse extension;
- New driveway;
- Parking; and
- Wheel wash and truck wash down bay.

Hi-Quality would also locate some office functions at this location, utilising existing office space.

The Project would be assessed as SSD under Clause 23 (waste and resource management facilities) of Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011* and as such, requires the preparation of an EIS.

The potential environmental impacts of the Project without mitigation have been identified as part of a preliminary environmental risk assessment (**APPENDIX B**). The potential key impacts of the Project include:

- Waste Management;
- Traffic, Access and Parking;
- Air Quality and Greenhouse Gases;
- Noise;
- Soil and Water;
- Contamination;
- Hazardous and Dangerous Goods;
- Human Health Risk;
- Landscape and Visual;
- Fire and Incident Management, and,
- Cumulative Impacts.

As identified in the Preliminary Risk Assessment, impacts considered low risk for the Project included heritage and biodiversity.

The Preliminary Risk Assessment would be further developed into an environmental risk analysis and provided as part of the EIS. This would incorporate further site investigation, assessment, proposed mitigation and management measures, in addition to issues identified in the SEARs and through community and stakeholder liaison to ensure all issues associated with the Project are addressed appropriately. The EIS would also include the following in accordance with Schedule 1 of the EP&A Regulations:

- A detailed description of the Project including its components, construction activities and potential staging;
- A comprehensive assessment of the potential impacts on the key issues including a description of the existing environment, assessment of potential direct and indirect and construction, operation and staging impacts;
- Description of measures to be implemented to avoid, minimise, manage, mitigate, offset and/or monitor the potential impacts; and
- Identify and address issues raised by stakeholders.

8.0 IMPORTANT INFORMATION ABOUT YOUR REPORT

Your attention is drawn to “Important Information Relating to this Report” (LEG04, RL2), which is attached as **APPENDIX C** of this Report. The statements presented in this document are intended to advise realistic expectations of the Report and ensure that all parties who may rely on this Report are aware of the responsibilities each assumes in so doing.

9.0 REFERENCES

Australian Government (2018) “National Waste Policy: Less waste, more resources”

Department of Environment and Climate Change (DECC) (2009), *Waste Classification Guidelines Part 1: Classifying Waste*, DECC NSW

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NSW Department of Planning and Environment (DP&E) (2019), Western Sydney Aerotropolis Discussion Paper on the proposed State Environmental Planning Policy (SEPP Discussion Paper) accessed January 2020 https://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/Western-Sydney-Aerotropolis

Legislation

Biodiversity Conservation Act 2016

Environmental Planning and Assessment Act 1979

Environmental Planning and Assessment Regulation 2000

Environmental Protection and Biodiversity Conservation Act 1999

Liverpool Local Environmental Plan 2008

Protection of the Environment Operations Act 1997

Roads Act 1993

State Environmental Planning Policy No. 33 - Hazardous and Offensive Development

State Environmental Planning Policy No. 55 – Remediation of Land *State Environmental Planning Policy (Infrastructure) 2007*

State Environmental Planning Policy (State and Regional Development) 2011

Waste Avoidance and Resource Recovery Act 2001

Signature Page

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https://golderassociates.sharepoint.com/sites/125733/project files/6 deliverables/20142192-005-r-scoping report/rev0/20142192-005-r-rev0 scoping report.docx

APPENDIX A

Waste Codes

Table A1 : Waste Codes

Waste Code	Waste Description	Solids and Sludge Treatment Technology	Liquid Waste Treatment Technology	Potential Sources
CATEGORY A - Organics (Non Halogenated)				
J100	Mineral Oils	Bioremediation	Separation	TPH Contaminated soils and solids. Pure oils from various sources including machinery maintenance workshop wastes.
J160	Coal Derived Hydrocarbon Contaminated Soils (excludes DNAPL)	Enhanced Bioremediation or Chemical Oxidation	Separation	Gasworks or Gasworks impacted materials
J160	Coal Derived Hydrocarbon Contaminated Soils (includes residual free coal tars)	Enhanced Bioremediation and Immobilisation	Separation of NAPL	Gasworks or Gasworks impacted materials
N120	Soils contaminated with a hazardous substance	Chemical Oxidation Bioremediation Immobilisation	N/A	Soil residues, property development, site remediation, industrial waste, mining waste.
G100	Ethers	Immobilisation	Adsorption	Chemical manufacturer and by-products
N190	Filter cake	Immobilisation / Bioremediation / Chemical Oxidation	N/A	Residues from industrial and mining waste water treatment plants
G110	Organic solvents, other than halogenated solvents	Chemical Oxidation Bioremediation Immobilisation Storage Only	Chemical Oxidation / Adsorption	Solvent manufacture. By product from paint/pigment manufacture. Alcohol by products.
D340	Perchlorates	Bioremediation	Adsorption	Fertiliser manufacture, contaminated soils.
G160	Waste from the manufacture, formulation or use of organic solvents	Immobilisation / Chemical Oxidation / Bioremediation	Chemical Oxidation / Adsorption	Solvent manufacture. By product from paint/pigment manufacture. Alcohol by products.
N140	Fire debris and fire wash waters	Immobilisation / Chemical Oxidation / Bioremediation	Precipitation / Chemical Oxidation	Demolition waste and fire debris and wash waters
CATEGORY B - HALOGENATED including Brominated				
G150	Halogenated organic solvents - Residues from industrial waste treatment or disposal operations	Chemical Oxidation Bioremediation Immobilisation	Chemical Oxidation / Adsorption	Solvent manufacture wastes eg: paint/pigment & alcohol by products.
N205	Contaminated Soils Containing chlorinated Compounds	Chemical Oxidation Bioremediation (anearobic)	N/A	Solid Industrial waste treatment residues, Chemical manufacturing. Contaminated soils from redevelopment
M160	Organo halogen compounds—other than substances referred to in this Table or Table 2	Immobilisation / Chemical Oxidation / Bioremediation	Precipitation / Chemical Oxidation	Manfacturing (various), contaminated site remediation
M160	Oxidising agents	Immobilisation / Chemical Oxidation / Bioremediation	Precipitation / Chemical Oxidation	Manfacturing (various), contaminated site remediation
M100	Waste substances and articles containing or contaminated with polychlorinated biphenyls, polychlorinated napthalenes, polychlorinated terphenyls and/or polybrominated biphenyls	Immobilisation Chemical Oxidation	Precipitation / Chemical Oxidation	Manfacturing (various), contaminated site remediation

Table A1 : Waste Codes

Waste Code	Waste Description	Solids and Sludge Treatment Technology	Liquid Waste Treatment Technology	Potential Sources
CATEGORY C - Metals & Metalloids (excludes solid waste slags derived from metal processing industries)				
D130	Arsenic, arsenic compounds (requires valency assessment)	Immobilisation	Precipitation	Soil residues, property development, timber treatment residues, industrial waste, mining waste
D170	Antimony and antinomy compounds	Immobilisation	Precipitation	Electrical processing factories, flame retardant
D290	Barium compounds (excluding barium sulphate)	Immobilisation	Precipitation	Soil residues, property development, industrial waste, mining waste
D160	Beryllium and beryllium compounds	Immobilisation	Precipitation	Soil residues, property development, industrial waste, mining waste
D310	Boron and boron compounds	Immobilisation	Precipitation	Soil residues, property development, timber treatment residues, industrial waste, mining waste
D150	Cadmium and cadmium compounds	Immobilisation	Precipitation	Soil residues, property development, industrial waste, mining waste
D140	Chromium compounds (hexavalent and trivalent)	Immobilisation	Precipitation	Soil residues, property development, timber treatment residues, industrial waste, mining waste
D190	Copper compounds	Immobilisation	Precipitation	Copper refinery residues. Soil residues, property development, timber treatment residues, industrial waste, mining waste
N150	Fly ash	Immobilisation	N/A	Power stations
A100	Waste from surface treatment of metals & plastics	Immobilisation	Precipitation / Neutralisation	Galvanisers, electroplating industry, plastics manufacturing
D220	Lead; lead compounds	Immobilisation	Precipitation	Lead refinery waste. Soil residues, property development, service station remediation, industrial waste, mining waste
D120	Mercury; mercury compounds	Immobilisation	Precipitation	Soil residues, property development, demolition waste from chlor alkali plants, industrial waste, mining waste
D100	Metal Carbonyls	Immobilisation	Precipitation / Adsorption	Nickel refineries, steel mill, chemical manufacture
D210	Nickel, nickel compounds	Immobilisation	Precipitation	Nickel refinery waste. Soil residues, property development, industrial waste, mining waste
D300	Non-toxic salts	Immobilisation	N/A	Industrial, manufacturing and mining by-products
H110	Organic phosphorous compounds	Immobilisation	Precipitation	Industrial waste, mining waste, fertiliser manufacture.
M250	Surface active agents (Surfactants)	Immobilisation / Bioremediation / Storage	Chemical Oxidation / Adsorption	Detergent manufacture. NON PFAS fire fighting foam.

Table A1 : Waste Codes

Waste Code	Waste Description	Solids and Sludge Treatment Technology	Liquid Waste Treatment Technology	Potential Sources
D360	Phosphorus compounds	Immobilisation	Precipitation	Industrial waste, mining waste, fertiliser manufacture.
D240	Selenium and selenium compounds	Immobilisation	Precipitation	Contaminated soils
D250	Tellurium and tellurium compounds	Immobilisation	Precipitation	Contaminated soils
D180	Thallium and thallium compounds	Immobilisation	Precipitation	Industrial by-products, Contaminated soils
H170	Waste from the manufacture, formulation or use of wood preserving chemicals	Immobilisation / Chemical Oxidation / Bioremediation	Precipitation / Chemical Oxidation	Soil residues, Timber treatment plants, chemical manufacturing plants
D270	Vanadium compounds	Immobilisation	Precipitation	Vanadium pentoxide Catalysts from fertiliser manufacture or petroleum processing. Contaminated soils.
D230	Zinc compounds	Immobilisation	Precipitation	Soil residues, property development, industrial waste, mining waste
CATEGORY D - OTHER (inorganic, specialist waste streams)				
C100	Basic (alkaline) solutions or bases (alkalis) in solid form	Dissolve and treat as liquid	Dissolve / Neutralise	Industrial waste, Mining Waste
B100	Acidic solutions or acids in solid form	Solids would be dissolved	Dissolve / Neutralise	Industrial waste, Mining Waste
T100	Chemical waste arising from a research and development or teaching activity	Immobilisation	Precipitation / Adsorption / Chemical Oxidation	Laboratory wastes from industry, schools, university, government organisation
D350	Chlorates	Immobilisation / Storage	Adsorption	Disinfection by products from water treatment
N160	Encapsulated, chemically-fixed, solidified or polymerised wastes	Immobilisation	N/A	Waste from treatment facilities
M220	Isocyanate compounds	Storage / Immobilisation	N/A	Polymer manufacturing
R120	Waste pharmapheudicals, drugs and medicines	Storage	Storage	Waste mineral oils unfit for their original intended use
J120	Oil and water mixtures or emulsions, or hydrocarbon and water mixtures or emulsions	N/A	Separation / Adsorption	Petroleum refineries, workshops, petrol stations, rolling mills and from edible oil and soap factories
M230	Triethylamine catalysts for setting foundry sands	Immobilisation	N/A	Foundries
E100	Waste containing peroxides other than hydrogen peroxide	Immobilisation	Precipitation / Adsorption	Industrial waste, Mining Waste

Table A1 : Waste Codes

Waste Code	Waste Description	Solids and Sludge Treatment Technology	Liquid Waste Treatment Technology	Potential Sources
H100	Waste from the manufacture, formulation or use of biocides or phytopharmaceuticals	Immobilisation / Chemical Oxidation / Bioremediation	Chemical Oxidation / Adsorption	Biocide manufacture. Cooling tower decommissioning.
F100	Waste from the manufacture, formulation or use of inks, dyes, pigments, paints, lacquers or varnish	Immobilisation / Chemical Oxidation / Bioremediation	Chemical Oxidation / Adsorption	Solvent manufacture. By product from paint/pigment manufacture. Alcohol by products.
T120	Waste from the manufacture, formulation or use of photographic chemicals or processing materials	Immobilisation / Chemical Oxidation / Bioremediation	Precipitation / Chemical Oxidation	Photograph developers. Product destruction.
F110	Waste from the manufacture, formulation or use of resins, latex, plasticisers, glues or other adhesives	Immobilisation / Chemical Oxidation / Bioremediation	Precipitation / Chemical Oxidation / Adsorption	Chemical manufacturers, resin, latex and adhesive manufacturing.
R140	Waste from the manufacture or preparation of pharmaceutical products	Immobilisation / Chemical Oxidation / Bioremediation	Precipitation / Chemical Oxidation	Pharmaceutical manufacturing. Product destruction.
N220	Contaminated Soils Containing Asbestos	Immobilisation	N/A	Contaminated soils derived from redevelopment / remediation programs
N220	Pre Packaged Asbestos Waste Prepared for Disposal	Storage & Disposal Only	N/A	Demolition Wastes
A100	Waste resulting from surface treatment of metals and plastics	Immobilisation / Chemical Oxidation / Bioremediation	Precipitation / Chemical Oxidation	Electroplaters, galvanisers, plastis manufacturers
A110	Waste from heat treatment and tempering operations containing cyanide	Immobilisation / Chemical Oxidation / Bioremediation	Precipitation / Chemical Oxidation	Manfacturing (various), contaminated site remediation
E100	Waste containing peroxides other than hydrogen peroxide	Immobilisation	Immobilisation	Manfacturing (various), contaminated site remediation
D110	Inorganic fluorine compounds excluding calcium fluoride	Immobilisation	Immobilisation	Manfacturing (various), contaminated site remediation
N100	Containers and drums that are contaminated with residues of substances referred to in this list	Immobilisation / Chemical Oxidation / Bioremediation	Precipitation / Chemical Oxidation	Manfacturing (various), contaminated site remediation
D200	Cobalt compounds	Immobilisation	Precipitation	Manfacturing (various), contaminated site remediation
D330	Inorganic sulfides	Immobilisation	Precipitation / Chemical Oxidation	Manfacturing (various), contaminated site remediation
G110	Organic solvents excluding halogenated solvents	Immobilisation / Chemical Oxidation / Bioremediation	Precipitation / Chemical Oxidation	Manfacturing (various), contaminated site remediation
N230	Ceramic-based fibres with physico-chemical characteristics similar to those of asbestos	Immobilisation / Chemical Oxidation / Bioremediation	Precipitation / Chemical Oxidation	Manfacturing (various), contaminated site remediation
M150	Phenols, phenol compounds including chlorophenols	Immobilisation / Chemical Oxidation / Bioremediation	Precipitation / Chemical Oxidation	Manfacturing (various), contaminated site remediation
M270	Per-and poly fluoroalkyl (PFAS) contaminated materials including waste PFAS-containing prodcts and contaminated containers (Soils & Liquid Streams)	Immobilisation (Proprietary Stabilisation Products)	Adsorption (Activated carbon, ion exchange)	Airports, defence sites, Manfacturing (various), contaminated site remediation

Table A2 : Waste Codes - Storage Only no Treatment

Waste Code	Waste Description	Solids and Sludge Treatment Technology	Waste Water Treatment Technology	Potential Sources
A130	Cyanides (inorganic)	Storage Only	Storage Only	Transformers
M210	Cyanides (organic)	Storage Only	Storage Only	Transformers
M100	Material containing polychlorinated biphenyls ((PCB's), polychlorinated naphthalene's (PCN's), polychlorinated terphenyls (PCT's) and/or polybrominated biphenyls (PBB's)	Storage Only	Storage Only	Transformers
M260	Highly odorous organic chemicals (including mercaptans and acrylates)	Storage Only	Storage Only	
M180	Polychlorinated dibenzo-p-dioxin (any congener) Reactive Chemicals	Immobilisation / Chemical Oxidation / Bioremediation	Precipitation / Chemical Oxidation	Manfacturing (various), contaminated site remediation

APPENDIX B

Preliminary Risk Register

Identified Risk	Description	Unmitigated Risk
Waste management	Receipt of non-conforming wastes at the Site not permitted to be handled. Unplanned disruption to operations resulting in large quantities of residual waste from waste processing being stored on site.	Medium
Traffic and Transport	Increase in traffic congestion and reduced network efficiency during construction	Medium
Air Quality and Greenhouse Gas	Increased vehicle and plant emissions increasing contribution to greenhouse gas emissions during construction and operation.	Medium
	Dust from construction and operations reducing local air quality.	Medium
	Odours from waste during operations.	Medium
Noise	Noise impacts on the amenity of sensitive receivers during construction and operation.	Medium
Soils and Geology	Soil erosion due to operation and construction activities.	Medium
	Contamination of soil as a result of uncontrolled release of leachate or waste waters from increased processing activities during operation.	Medium
	Unexpected contamination finds	Low
Water Quality, Hydrogeology and Flood	Sediment laden runoff during construction and operation.	Medium
	Contamination of surface water or groundwater as a result of uncontrolled release of waste waters from processing activities.	Medium
	Flooding impacts from development of the site.	Medium
Hazards and Dangerous Goods	Storage of hazardous and Dangerous Goods having the potential to impact upon the site and surrounding area.	Medium
Human Health Risk	Health conditions from exposure to contaminants during operation.	Medium

Identified Risk	Description	Unmitigated Risk
Landscape and Visual	Road user and sensitive receivers' views are permanently altered during construction and operation.	Low
Fire and Incident Management	Risk of fire during operation or construction.	Medium
Cumulative Impacts	Potential for cumulative impacts of the project and other impacts on and off site to impact upon the surrounding area.	Medium
Biodiversity	Potential to impact upon existing biodiversity	Low
Social	Potential changes in market and property values due to development of the Project.	Low
Cultural Heritage	Impacts to unanticipated heritage items during construction and operation.	Low

APPENDIX C

Important Information Relating to This Report

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