

NT BEATON ROAD ENVIRONMENTAL MANAGEMENT PLAN

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INTRODUCTION

PURPOSE AND SCOPE

The management plan prescribed in the following document is relevant to the operations of the Veolia Environmental Services Pty. Ltd. (hereafter referred to as 'Veolia Environmental Services') owned Waste Storage and Treatment Facility (hereafter referred to as 'the site') located at 13 Beaton Road, Berrimah. The Management Plan corresponds to the entire site. The aim of the Management Plan is:

- to provide a Management Plan to meet the licence requirements of the Northern Territory Environment Protection Authority (NT EPA); and
- to describe both the operation and management measures adopted to ensure the effective environmental control is achieved.

The scope of the subject management plan includes the various management control systems which operate simultaneously to ensure effective environmental control. In the event of failure of any one system, effective back-ups are in place to ensure that the environmental control objectives are achieved. These management control systems can be summarised as follows:

- the system for ensuring that there is a limitation on the types of waste to be treated to prevent the treatment of any waste type which would be likely to produce unacceptable environmental conditions;
- the system for design of the infrastructure including buildings, tanks and process equipment with the primary focus on environmental control;
- the operational environmental control system which includes both electronic control and specified standard operational control procedures;
- the quality management system accredited to ISO 9001, requiring that quality documentation and management procedures are adopted and continually improved;
- the environmental management system accredited to ISO 14001, requiring a commitment by management for an ever-improving standard of environmental control; and
- the system for documentation and training in readiness for any emergency situation which could conceivably arise.

LEGAL ISSUES

The Veolia Environmental Services Storage and Treatment facility has not been subject to any legal disputes since it has been in operation.

HISTORY OF ENVIRONMENTAL MANAGEMENT

In mid 2004 Veolia Environmental Services, formally known as Collex Industrial Services applied for development approval to relocate its abrasive blasting and spray painting operations to a site it proposed to lease in Berrimah. The proposed site was located on Portion 1054, Hundred of Bagot, Volume 680, Folio 170, known as 13 Beaton Road, Berrimah, Northern Territory (NT) (Figure 1). The site is located within an industrial estate which under the Darwin Town Plan 1090 is zoned "light industry."

Provisional approval was granted in writing on 11 August 2004 by the Development Consent Authority (DCA) and operations were commenced at the site on 13 August 2004. The provisional approval was made subject to the development and implementation of an Environmental Management Plan (EMP). The approval required the EMP to demonstrate the following:

URS Australia Pty Ltd was commissioned by Collex to complete the EMP document and submit a draft report to the Office of Environment and Heritage (OEH) of the Department of Infrastructure and Environment (DIPE) and the DCA by 30th September 2004. This requirement was agreed following written correspondence with Brett Struck (OEH) dated 19 August 2003 and a meeting with Nigel Green (OEH) on 2 September 2004. It was agreed during the meeting of 2 September that a Draft EMP would be submitted to OEH and DCA for review, and that a finalised EMP, incorporating comments, would be issued and implemented by Collex.

THE SITE DESCRIPTION AND ENVIRONMENTAL SETTING

THE SUBJECT SITE

The subject site is identified as part of 13 Beaton Rd, Berrimah NT 0828. Certificate of Title Volume 680 Folio 170, in the Survey Plan of the area named Berrimah, Hundred of Bagot. The size of the site is approximately 2 hectares 6380 square metres. Appendix A includes a diagram for the Certificate of Title for Title Volume 680 Folio 170.

The site is located within the Berrimah Light Industrial Area, diagonally adjacent to the current Veolia Autoclave and liquid waste handling facility on Dennis Court. The entrance to the Beaton Road Site is off Beaton Road, on the southwest corner of the property as portrayed in Appendix B.

ADJACENT LAND USE

Table 1 shows the immediate surroundings to be commercial and light industrial (Plates 12 to 15). There was some evidence of residential occupation but this is considered a non-complying land use in the light industrial zone. On the southwest side of Hidden Valley road, outside of the industrial zone, there are a number of potentially sensitive land uses.

These include Hidden Valley Caravan Park located 300 m from the entrance of the facility, Banyan House (centre for drug and alcohol rehabilitation) located approximately 150m from the entrance of the facility, an administrative Headquarters for the Catholic Education Office located 250m west of the site entrance and Kormilda College that occurs approximately 1.5 km south of the site.

Table 1: Immediate Surrounding Commercial Land use

Site Neighbour	
Name of company:	Steelcon Constructions Pty Ltd
Type of operation:	Steel Fabrications
Contact Number:	(08) 8947 8500
Geographical location from site (i.e. north):	North
Name of company:	Territory Steel
Type of operation:	
Contact Number:	(08) 8931 0044
Geographical location from site (i.e. north):	North
Name of company:	C&J Filter Wash
Type of operation:	Filters
Contact Number:	(08) 8947 1668
Geographical location from site (i.e. north):	East
Name of company:	Wilhelmsen Ship Services
Type of operation:	Ship Services
Contact Number:	(08) 8947 2882
Geographical location from site (i.e. north):	South East
Site Neighbour	
Name of company:	DJ Hire Pty Ltd
Type of operation:	Civil Works
Contact Number:	(08) 8947 4768
Geographical location from site (i.e. north):	South East

Site Neighbour

Name of company:	Diggamen Civil Contracting
Type of operation:	Excavating & Earth Moving Contractors
Contact Number:	(08) 8947 2112
Geographical location from site (i.e. north):	South West

Site Neighbour

Name of company:	Aluminum Custom Fabrication
Type of operation:	Aluminum Fabrication
Contact Number:	(08) 8947 1441
Geographical location from site (i.e. north):	South West

WATER COURSES AND LOCAL HYDROGEOLOGY

The water courses surrounding the site are located to the southwest and northwest of the site and are the main water discharge points for the site. The water courses are linked as man-made drains that flow towards Hidden Valley and eventually to the Port of Darwin. Surface water flow on the site is as follows:

- Water flowing from the southern boundary fence flows north to the drainage line that is located parallel to the warehouse and from there, west to the southwest drain outside the property;
- Water flowing from the southern side of the warehouse flows south to the drainage line that is located parallel to the warehouse and from there, west to the southwest drain outside the property;
- Water flowing from the east of the warehouse flows to the northeast corner of the site; and
- Water flowing from the north of the warehouse flows in a northerly direction to the drainage line/ man made channel located inside the northern boundary fence (Plate 16). The water from this drainage line/ man made channel flows offsite to northwest drain.

REGIONAL GEOLOGY

The 1:100,000 scale 'Darwin' (1983) Geological Survey of Northern Territory Map, Sheet No. 5073, indicates that the geology underlying the site is likely to include:

- Bathurst Island Formation sediments of the Lower Cretaceous Period, comprising of radiolarian claystone; sandy claystone; clayey sandstone; quartz-sandstone; ferruginous sandstone; glauconitic sandstone; Phosphorite modules; and

- Underlying the Bathurst Island Formation is the Burrell Creek Formation of the Finnis River Group, comprising siltstone; shale; sandstone (quartz arenite, sublitharenite); quartz pebbles conglomerate; metamorphosed to lower greenschist facies.

HYDROGEOLOGY

Groundwater in the Darwin area is typically encountered in low transmissive fractured rock aquifers of the Burrell Creek Formation, with yields of 0.5–5.0 litres/sec. Depths to groundwater vary significantly with the seasons, during the wet season months the water table can be at ground level dropping to 10 to 15 m below ground level (bgl) during the dry season months.

A search of the Department of Infrastructure, Planning and Engineering (DIPE) Land and Water Advisory.

Services records indicated that nine registered bores were located within 0.5 km radius of the site. DIPE do not hold any information as to the current status of the bores.

The available information from five wells indicated that the standing water levels were recorded between 4.26 m and 8.23 m bgl. Limited water chemistry information included one sample from registered bore (RN1720 8/7/70) collected in 1970. This concluded that with the exception of iron, groundwater was suitable for human consumption. Groundwater in the Darwin area is typically of low salinity (500 – 1500mg/L), suitable for human consumption and garden watering with respect to salinity.

Groundwater beneath the site is likely to flow in approximately a southerly direction, ultimately discharging to the Port of Darwin.

WASTE CHARACTERISTICS

WASTE TYPES

Schedules of waste types, which are permitted and/or prohibited are specified in Attachment 1 respectively of the Environment Protection Authority licence application for the Beaton Road Site.

WASTE VOLUMES

The following waste types received onsite are approximate volumes per annum.

Listed Waste	Waste Code	Tonnes	Kilolitres
Quarantine Waste for Treatment	N/A	150	N/A

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Basic solutions or bases in solid form	C100	N/A	150
Clinical and related wastes	R100	35	N/A
Grease trap waste	K110	N/A	1100
Organic solvents excluding halogenated solvents	G110	N/A	60
Sewerage sludge and residues including nightsoil and septic tank sludge	K130	N/A	400
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	T100	2	280
Waste mineral oils unfit for their original intended use	J100	N/A	300
Waste mixtures, or waste emulsions, of oil and water or hydrocarbon and water	J120	N/A	4400

WASTE TRANSPORTATION AND DELIVERY TO SITE

Most waste transport vehicles have a rigid frame, are non articulated and have varying capacities. Tankers are fitted with "vacuuming" or "pump loading" facilities to transfer liquid waste from various tanks.

The transportation of listed waste is only undertaken using company-registered vehicles. It is also ensured that each vehicle used for the transportation of listed waste is included in the company vehicle fleet manifest and where appropriate covered by any requirements of the NT Dangerous Goods (Road and Rail Transport) Act.

All EPA approved vehicles are listed and updated on EPA online Portal - <https://www.ntlis.nt.gov.au/ntepa/epl/overview/5656125#downloadPermit>.

Normally approximately twelve Veolia Environmental Services tanker deliveries will occur each day, but may vary from 12 up to 20 depending on the tanker size and the total volume of work booked in on a particular day.

ACCEPTANCE OF WASTE DELIVERIES

All waste deliveries received by the NT Liquid Plant must have a Waste Manifest Form (WFM) from the customer. This applies to liquid and packaged waste delivered to the NT Liquid Plant. A MSDS (Material Safety Data Sheets) must be provided or sourced from the Chem. Alert system for all relevant substances. Upon reviewing the MSDS for personal protective equipment, safe handling

and storage requirements the liquid plant operator then clearly and visibly labels waste accordingly to Veolia quote number and palletises waste.

INFRASTRUCTURE

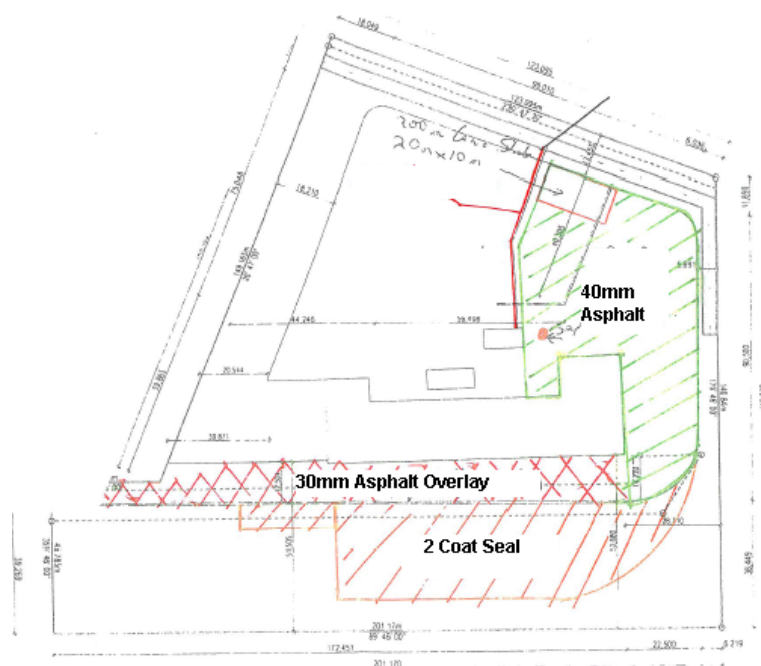
ENCLOSURES AND BUILDINGS

The site has security fences on all sides with access being through security gates located on the South West of the site as portrayed in Appendix C. There are two structures on site; 1) reception and office building and, 2) a shed that houses the operational activities.

SURFACING OF SITE AND CONTAINMENT

The general surface of the site is a mixture of bitumen, asphalt overlay and dirt as portrayed in the Figure below. All operations are undertaken in the main building as portrayed in the proposed site layout in Appendix C. The main process/storage tanks and equipment are situated in areas surrounded by raised concrete bunds. The bund height is sufficient so as to avoid loss of wastewater in the event of an emergency situation such as leakage or spillage of wastewater from tanks or equipment. In Summary, all leakage or spillage of waste material is contained, no matter whether the spillage, leakage or storm water occurs inside or outside the raised concrete bunds.

Figure 1: Surfacing of Site



LAYOUT OF TANKS AND PROCESSING EQUIPMENT

The site has:-

- One reception and office area;
- Three main operations being Bailing, Autoclave Treatment & Liquid Waste Treatment/ Transfer all contained within the site shed;
- Dangerous Goods Storage.

Systems have been proposed for tanks, mechanical equipment, pumps and instrumentation. A schedule of tanks including the name, description, and agitation method and odour control provision is included in Appendix C (ii) and (iii).

An overall site plan for the Beaton Road Site is portrayed in Appendix C (i). The locations of all existing tanks are clearly shown. The general plant layout indicates the locations at which each of the main processing functions is conducted.

CALCULATIONS OF BUND CAPACITY TO CONTAIN SPILLAGES AND CONTAMINATED STORMWATER

Bund capacity for liquid plant is as follows:

Bund volume in accordance with EPA guidelines = 120%

for flammable = 133%

Packaged storage = 25% of total stored volume

Electro DAF Section

Largest tank volume = electro DAF at 41 KL

Bund holding capacity = $41 \times 1.2 = 49.2$ KL

Displaced area = 4m^2 IBC's + $(4 \times 9.6\text{m}^2)$ Tanks + 2.5m^2 PH Tank = 45m^2

Bund area = 222m^2

final bund area available = $222 - 45 = 177\text{m}^2$

Bund height = $V/A = 49200/177 = 0.278\text{m}$

Oily Water Receival Area and liquid storage

Largest tank volume = 80 KL

Bund holding capacity = $80 \times 1.2 = 96$ KL

Displaced area = $(9.6\text{m}^2 \times 5)$ Tanks + 15m^2 IBC Storage + 30m^2 IBC storage = 93m^2

Bund area = 454m^2

final bund area available = $454 - 93 = 361\text{m}^2$

Bund height = $96000/361 = 0.266\text{m}$

MANAGEMENT CONTROLS

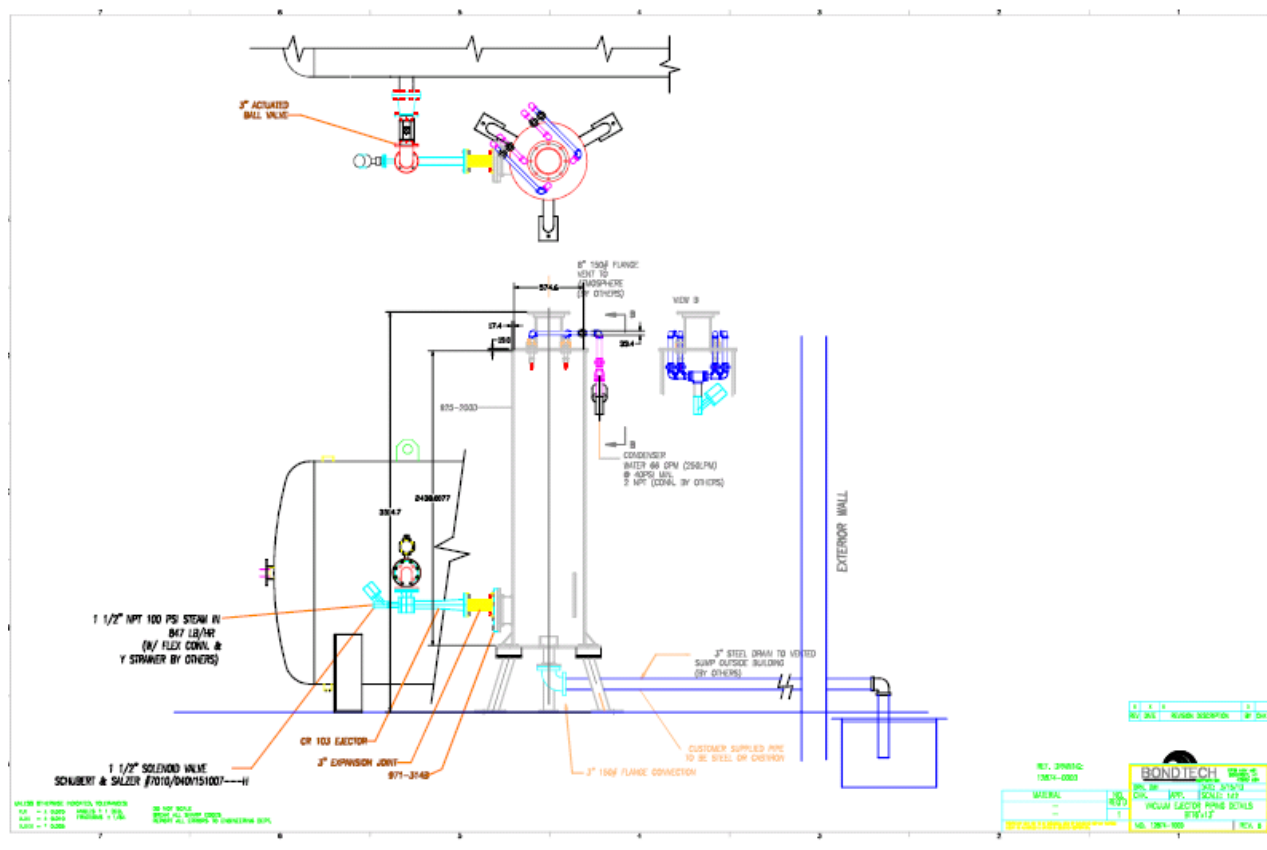
The following controls correspond to the aspects identified in the Environmental Aspect Impact Register for Beaton Road. (FILE NO. to be allocated).

QUARANTINE OPERATION

The Quarantine operations are proposed to be undertaken within an enclosed area segregated by Colorbond steel fence 2.1m high with barbed security wire as portrayed in Appendix C (ii). The transportation vehicles are proposed to load/unload bins through the first access gates of the Quarantine Area and access the proposed quarantine vehicle wash facility through the second gate. A 100 micron filtration & oily water/solids separator has been proposed to treat the water captured by the blind sump/soil trap placed in the bin wash and vehicle wash facility.

The autoclave emissions are proposed to be diverted through a condenser system that aims to reduce the temperature of the steam rapidly thus condensing the emissions into liquid form as portrayed by the image below:

Figure 2: Condenser System



Furthermore, autoclave boiler fuel tank proposed to be placed with a 3m exclusion zone surrounded by bollards to create obstruction for any moving objects. All quarantine operations are designed to be undertaken within fully bund area to enable containment of any spills or wash down water.

QUARANTINE VEHICLE WASH FACILITY

A 20m² area allocated for bin wash and vehicle wash facilities is proposed to be enclosed by 3.5m high splash walls. A 100 micron filtration & oily water/solids separator has been proposed to treat the water captured by the blind sump/soil trap placed in the bin wash and Vehicle wash facility.

LIQUID TRANSFER STATION, STORAGE AND TREATMENT

The transporting vehicle is provided with designated loading/unloading zones in the Liquid treatment plant section of the Beaton Road Site as portrayed in Appendix C (iii). The proposed loading and unloading zones are located in covered, concreted area surrounded by roll over bunds. When sufficient waste is receipted and palletised (approximately 20 pallets), the liquid plant operator will provide the administrator with information for each pallet on a Waste Manifest form including the following:

- Pallet number
- Item description of what is on the pallet
- Packaged type. i.e drums or IBC
- Relevant COL number and
- If a Liquid or Solid Product.
- DG Code and any safety signs associated with the code (if relevant)
- Safety Data sheets

The liquid plant administrator then formalizes the Waste Manifest form ensuring the correct DG class and UN numbers are provided and in the comments section adds the COL for each pallet. The WMF is then saved according to the next sequential consignment number in electronic form. All palletised waste is transferred to the SA Liquid Treatment Plant with a coded waste manifest and Waste Transport Certificate. Consignment authorization numbers are matched with relevant items. Transport of this waste is normally by rail using NQX. All details are recorded on a master record list electronically for a minimum period of 3 years.

During the transfer transition period, a dedicated DG storage container has been included in the proposed layout for the purpose of storing dangerous goods and hazardous chemicals to be transported to SA Liquid treatment plant. This storage contained is designed to contain any spills within the container and can be used as segregated storage for different classes of Dangerous Goods.

For the purpose of processing oily water, 4 20KL tanks for holding Oily water have been proposed to be placed within a concrete bund 300 high in order to withhold any spillages. Furthermore, two self bunded oil storage tanks are proposed to cater for the potential expansion of the Liquid transfer station, storage and treatment facility.

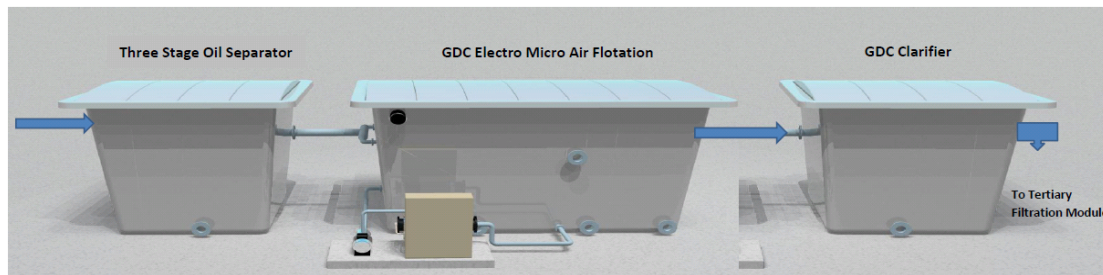
VEHICLE WASH BAY

For the purpose of the liquid plant, a designated vehicle wash pad (12m by 10m) bunded and covered by a dome shelter is proposed with the effluent from the wash bay directed to electro DAF Oily Water and Emulsified oil processing system. The dome shelter will enable the wash pad activities to be contained with no potential contamination to stormwater or groundwater systems. The electro DAF processing system will enable adequate treatment of water, with treated effluents directed to 3 holding tanks for the purpose of water reuse or authorized release of water to trade waste discharge. The 3 treated effluent holding tanks are proposed to be positioned in concrete bunds as portrayed in Appendix C (iii)

ELECTRO DAF OILY WATER TREATMENT PROCESS

The Electro DAF Oily Water Treatment process utilises electrochemical reactions that will separate up to 50% of hydrocarbons in water. The process will remove free and emulsified

hydrocarbons and other organic and inorganic contaminants in water to provide a clear clean effluent of a high quality suitable for potential reuse.



TREATMENT SYSTEM

Current systems in the marketplace use chemical treatment requiring high energy and consumable use to achieve trade waste sewer discharge criteria. Chemical treatment generates excess sludge, introduces WHS risks and is very labour intensive. In addition, the systems can be a bottleneck to a facility due to the high retention periods for treatment.

The Electro DAF system is a low energy non chemical cracking process eliminating WHS risks associated with hazardous chemicals and requires minimal labour to operate and maintain. Treatment retention times are also lower making it more cost effective to process waste water. Final polishing provides a water quality suitable for reuse as wash down or dust suppression water.

The system shown comprises three processing tanks 2m high with an approximate footprint of 10m x 3m. Free oils coalesce at the first stage and large suspended solids settle using a patented porous multi layer packing, similar in function to a conventional plate separator. Microscopic oxygen and hydrogen gas bubbles generated through a reactor are introduced at stage 2 to coagulate suspended solids and commence cracking of any emulsified oils in the water. Further reactions take place at the final clarification stage for suspended fines and Total Petroleum Hydrocarbons removal.

SECURITY OF PREMISES

LOCKING OF GATES

The access gate to the site is on the Beaton Road entrance on the western side. The entrance is locked, along with the Reception building and the Quarantine Shed at any time the depot is unattended and security patrols are in place.

SECURITY FENCE

The site is enclosed by a security fence as outlined by the site plan outlined in Appendix C.

RESPONSIBLE PERSON

At all times while the depot, baling and quarantine area is opened for receipt and dispatch of waste the site Manager, along with the operations manager and liquid plant manager present at the site is responsible for the control and operation of the site and his/her duties include but are not limited to:

- controlling the reception, storage and removal of waste,
- controlling all employees working in the depot, and
- supervising all persons entering the depot.

**MONITORING, TESTING AND RECORD KEEPING FOR WASTE
DESPATCHES****RECORDS OF DISPATCHES**

The site keeps and maintains a record of all wastes leaving the depot and includes the following information:

- date of collection;
- description of the waste;
- quantity of waste;
- origin of waste;
- intended destination of waste; and
- method of storage, waste treatment including recycling and/or disposal.

DESPATCHES OF CONTROLLED WASTE

The Plant ensures that all Controlled wastes leaving the Plant are undertaken in accordance with the requirements of the current EPA licence.

DELIVERY TO LICENSED DEPOT

The site instructs transporters to ensure that waste removed from the premises is only taken to a depot licensed by the appropriate environmental regulatory authority in the State or Territory of the receiving depot.

MONITORING, TESTING AND RECORD KEEPING FOR RELEASE TO AIR

Based on the proposed site layout portrayed in Appendix C, release to air occurs at three points:

- Autoclave condenser flue
- Boiler flue
- Boiler blow-down flue

The flues will go from equipment to vent through building roof extending to a distance of approximately 10 metres. The Autoclave will vent for approximately 5 minutes at the end of each cycle when pressure is released. Sampling of steam from vent of existing Autoclave (ASW37) concluded that; “Based on the emissions testing undertaken and subsequent air dispersion modelling, the predicted ground level concentrations of the pollutants measured are well below the health-based criteria used and would not be considered to pose a risk to the health of surrounding communities or workers” (Pacific Environment Limited report 20/03/2013).

While sampling results were positive, for the new Autoclave we have additionally increased the length of the flue and the height at which it vents, and also attached a condenser unit that will spray clean water at a rate of 250 litres per minute to maximize condensation of the steam from the Autoclave treatment process. Water droplets created by condenser will be captured and piped into a low profile concrete tank before being pumped into the Electro DAF that will remove free and emulsified hydrocarbons and other organic and inorganic contaminants and allow for reuse or discharged to trade waste. As a result, initial testing proposal will be developed to test the emissions released from the three discharge points; in order to ensure that the operation of the autoclave does not adversely impact the environment by monitoring emissions and any potential harm is minimised by implementing the appropriately identified controls.

Furthermore, an industrial grade extraction fan has been engineered to sit over the area where the Autoclave opens to remove treated waste and where there is potential for residual steam to be released. This extraction fan will be ducted to a filtration system (likely activated carbon). To further the investigation, initial tests would also be conducted for the emissions released from the autoclave once the autoclave doors swing open.

INITIAL TESTING

The initial test is based on the advice from Pacific Environment Monitoring Pty Ltd and the Northern Territory EPA. The initial test parameters were suggested on the listed wastes contained in the VES licence application. The test parameters are as follows:

Table 3: Test Parameters

PARAMETER	METHOD	NUMBER OF DETERMINATIONS
Sample plane criteria	AS 4323.1	1 per release point
Gas velocity, temperature & volume flow rate	USEPA Method 2	1 per release point
VOCs – speciated	USEPA Method 18	1 per release point
Phenol	NIOSH tube	1 per release point
Formaldehyde	NIOSH tube	1 per release point
Acid gases (HCl, HF, Cl ₂ , NH ₃)	NIOSH tube	1 per release point

NEGATIVE INITIAL TEST RESULTS

If the initial tests results come back below the emission standards set by the NT EPA, VES proposes to carry out one follow-up test within 12 months of the initial test date. If the subsequent test is also below the emissions standards then testing would only take place on the renewal of the EPA licence application.

POSITIVE INITIAL TEST RESULTS

If the initial test results come back exceeding the emission standards set by the NT EPA, then VES will follow the guidance from the EPA. VES will undertake an Environmental Risk Assessment in conjunction with the NT EPA so as to identify appropriate controls, which may involve potential change in emission system or any regular monitoring that is Required.

MONITORING, TESTING AND RECORD KEEPING FOR RELEASE TO LAND

Based on the proposed layout portrayed in Appendix C release to land occurs at points of discharge to land:

- Waste water from boiler blow-down,
- Water from autoclave (sterilized),
- Water from autoclave condenser (sterilized),
- Water from wash bay

First Three discharge points will be captured and piped into a low profile concrete tank before being pumped into the Electro DAF for treatment, and reuse or discharged to trade waste.

The water from the wash bay will also be captured in a dedicated blind sump, filtered for solids and processed through an oil water separator before discharged to Trade Waste. Oil captured will be reused in other commercial processes where appropriate. All discharge and capture points are contained within a bund.

Prior to discharging the wastewater, tests would be conducted to assess the adequacy of the water quality for trade waste disposal. The wastewater will be tested by an accredited laboratory to perform analysis for the following as a minimum:

- Acidity/Alkalinity
- Total Dissolved Solids
- Hard Metals
- Biochemical Oxygen Demand (5)
- Total Organic Carbon (TOC)
- Total Petroleum Hydrocarbons
- pH
- PpH

GROUNDWATER AND STORMWATER

All operations conducted on the Beaton Road site are proposed to be undertaken in covered, impermeable surfaces, thus resulting in no releases to land with no impact on the groundwater system.

RESPONSE TO POTENTIAL IMPACTS ON THE WIDER COMMUNITY

SCOPE

The Plant has in place a comprehensive system of management procedures designed to avoid potential situations which could have an impact on the local and the wider community. There are two important components:

- avoidance, i.e. take all steps necessary to ensure avoidance of external adverse impacts response, i.e. ensure that the Plant responds quickly and effectively in the event of an incident or emergency. It is also essential to thoroughly investigate such occurrences, establish the causes and take effective action to ensure that a repeat incident cannot happen;
- As mentioned above in Section 6 of this Management Plan, the management system of the Plant has been accepted as meeting the strict requirements necessary for receiving the following accreditation;

- NCS International Pty Ltd. issued Certification for Compliance with International Standards Organisation ISO14001:2004 Environmental Management Systems;
- NCS International Pty Ltd. issued Certification for Compliance with International Standards Organisation ISO9001:2008 - Quality Management Systems.

The system taken as a whole is one of the most important aspects of environmental control on the Plant. The issue of avoidance of environmental impacts has been the prime purpose of much of the discussion in the earlier sections of this Management Plan. Equally important is being prepared and ready to act in the event of an unforeseen emergency. Special reference is made in the following subsections to specific issues for which response procedures have been developed.

COMPLAINTS

PROCEDURES

The site in operation has a set of procedures to ensure that all complaints are effectively recorded, investigated and acted upon wherever possible.

KEEPING A LOG

The Plant keeps a log of complaints which are entered into the Safety Management System and includes the following information:

- date and time of the complaint;
- date and time of the occurrence of matters causing the complaint;
- name and position of the person receiving the complaint;
- name and address of complainant (if known);
- action taken in response to the complaint;
- action taken to prevent a re-occurrence of the circumstances leading to the complaint.

INSPECTION AND FORWARDING OF INFORMATION IN THE LOG

The log of complaints is to be available for inspection by an Authorised Officer appointed under the Act at any time on demand.

ENVIRONMENTAL INCIDENTS

PROCEDURES

The site has in operation a set of procedures to ensure that all incidents are effectively reported, recorded, investigated and acted upon wherever possible. If the circumstances giving rise to environmental harm or potential environmental harm occurs during business hours, the licensee under the conditions of the EPA licence is obligated to notify the Pollution Response Line (1800 06 4567) and provide the following information:

- the identity of the person giving notice;
- the time and date of the circumstance;
- the circumstance causing or threatening to cause environmental harm;
- the place where the circumstance occurred or is likely to occur;
- how the environmental harm occurred, is occurring or may occur; and
- action taken to prevent, reduce control, rectify, or clean up the pollution or resultant environmental harm caused or threatening to be caused by the circumstances

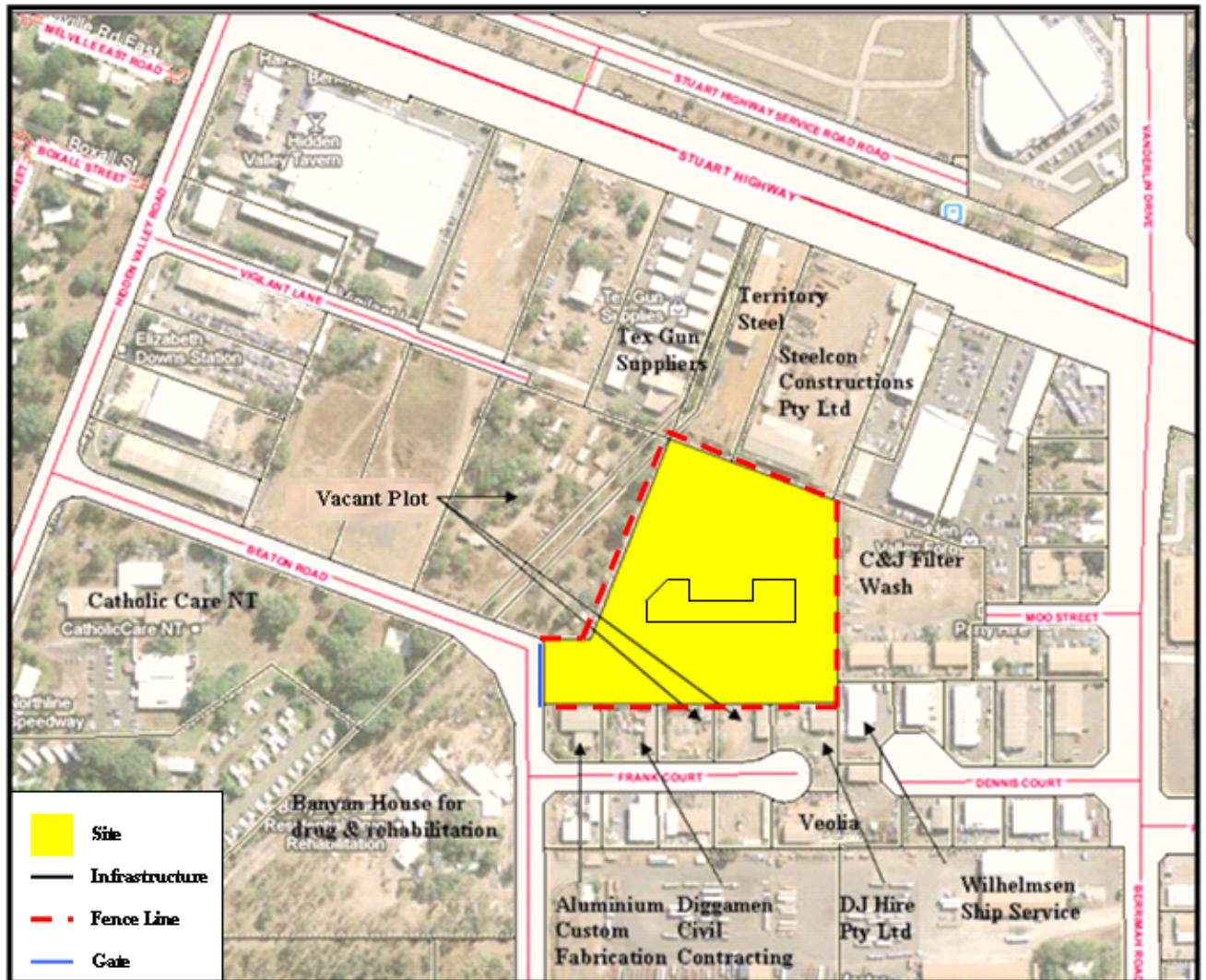
All incidents must be recorded in an incidents log including all the information stated above for a minimum period of 3 years.

EMERGENCY PROCEDURES

The Plant has in operation a set of procedures to ensure that emergencies are managed effectively. The detailed procedures are included in the NT Beaton Road Site Plant Emergency Response Plan.

ACTION TO BE TAKEN IN THE EVENT OF A SPILLAGE

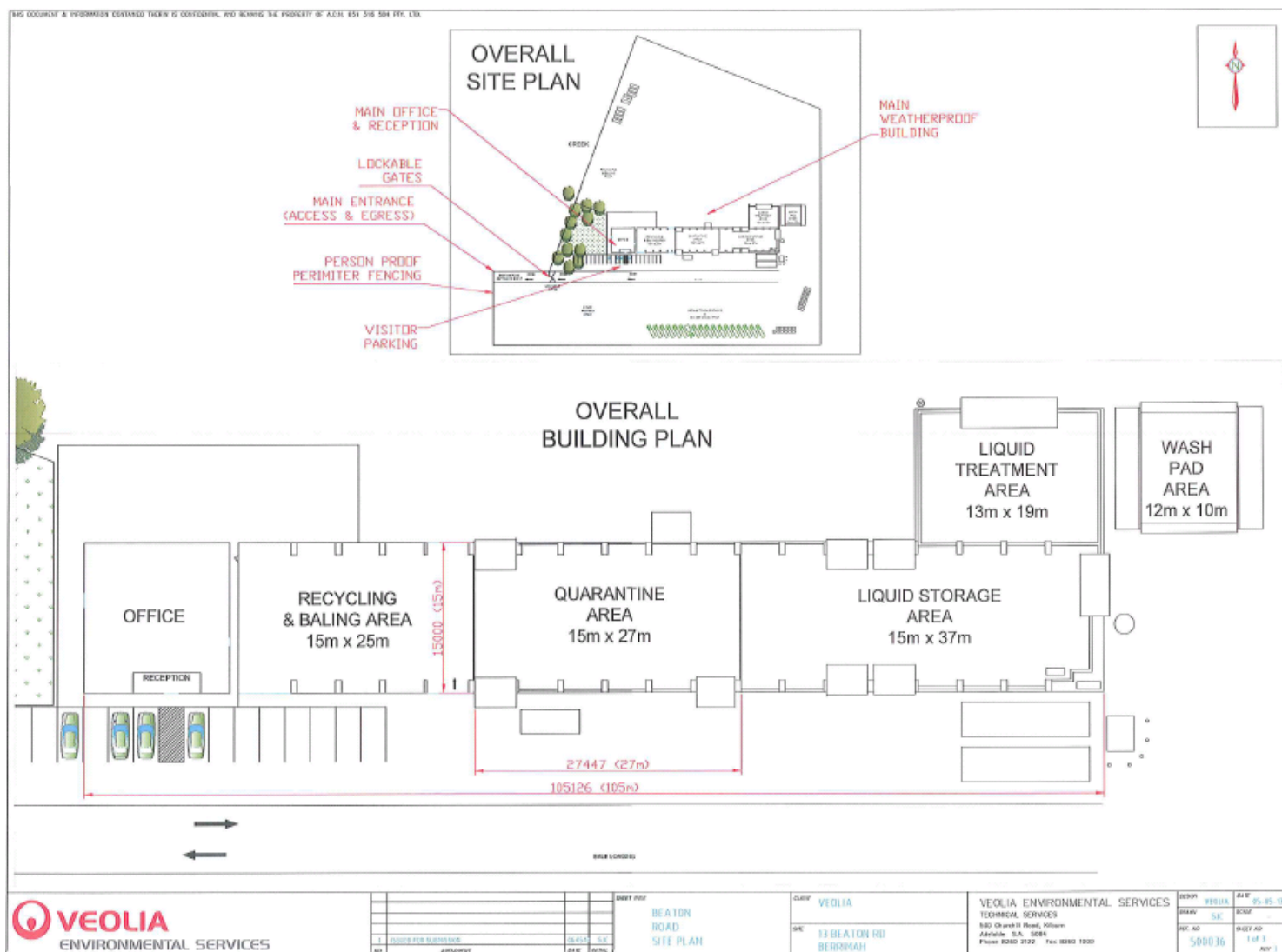
The Plant has in operation processes and equipment to ensure that the loss of containment of materials is managed effectively. The detailed procedure is included in SA/NT Spill Response.

APPENDIX B: LOCALITY MAP


NT ENVIRONMENTAL MANAGEMENT PLAN

23/07/2018

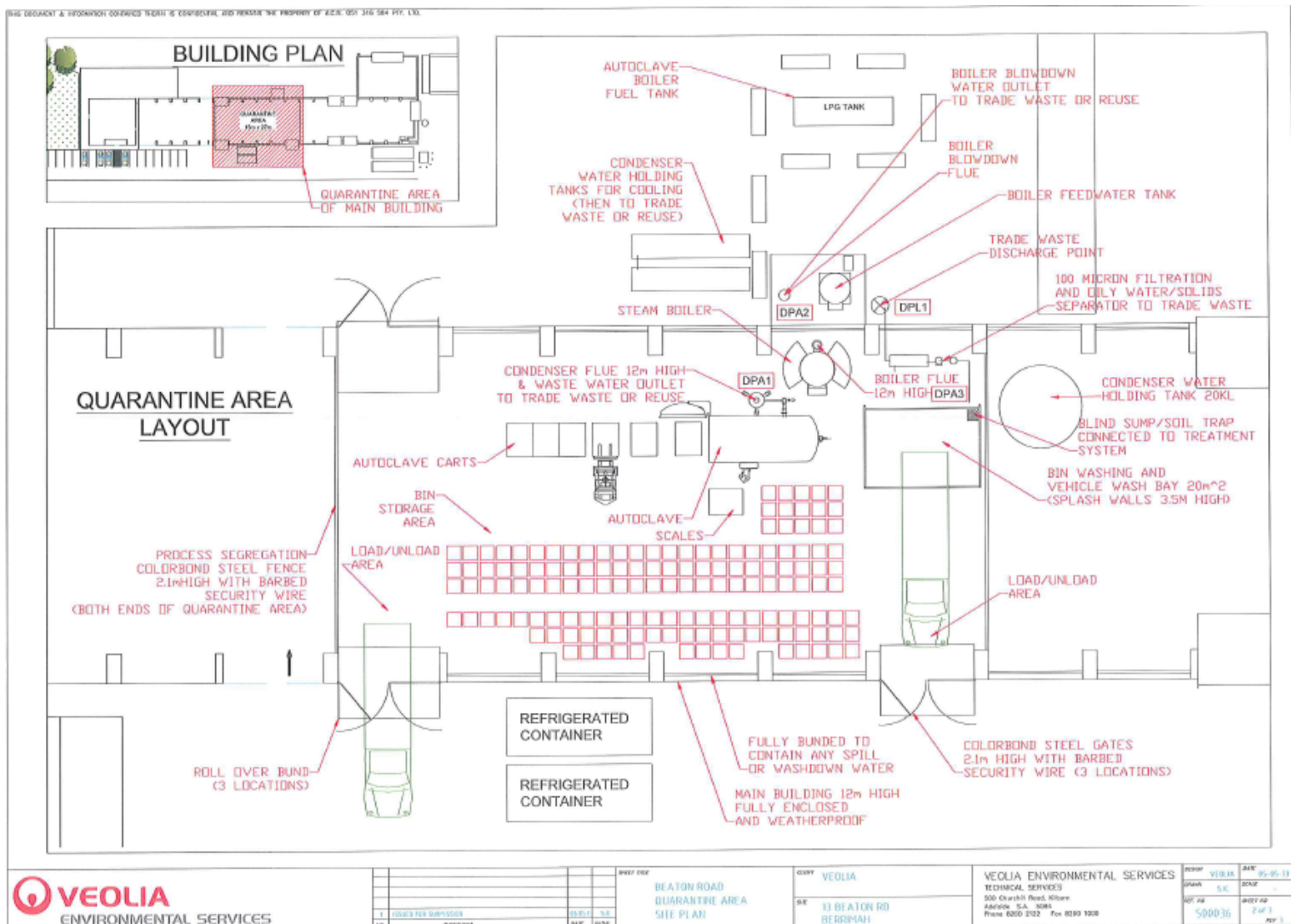
APPENDIX C: SITE PLAN (i)



NT ENVIRONMENTAL MANAGEMENT PLAN

23/07/2018

APPENDIX D: SITE PLAN (ii)



APPENDIX D: SITE PLAN (iii)

