

VACUUM TRUCK ENVIRONMENTAL MANAGEMENT PLAN



ENVIRONMENTAL MANAGEMENT SYSTEM – VACUUM TRUCK OPERATIONS

DOCUMENT REFERENCE:	FPGF-VAC TRUCK ENVIRON	MENTAL MANAGEMENT PLAN V1		
DATE OF ISSUE:	13-APRIL-2023			
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ISSUED BY:	DIRECTOR			
STATUS:	UNCONTROLLED WHEN PR	INTED		
DATE	APPROVED BY	AMENDMENT DESCRIPTION		
13-04-2023	DIRECTOR	V1		
	DIRECTOR	V2 REVIEW UPDATED SECTION 5.6/5.7 APPENDIX A AND B		



Table of Contents

1. INTRODUCTION	3
2. SCOPE	.3
3. OBJECTIVE	.3
4. DETERMINING NEEDS AND EXPECTATIONS OF THE INTERESTED PARTIES	.4
4.1. UNDERSTANDING THE NEEDS AND EXPECTATIONS OF INTERESTED PARTIES	.4
4.2. DETERMINING RELEVANT INTERESTED PARTIES	.4
4.3. SWOT ANALYSIS FOR OPERATIONS OF FLETCHER'S VAC TRUCK	.5
4.4. IMPACTS AND ASPECTS REGISTER	.5
5. ENVIRONMENTAL SAFEGUARDS	.5
5.1. SOIL POLLUTION	.5
5.2. WATER QUALITY	.5
5.3. NOISE AND VIBRATION	.6
5.4. FLORA AND FAUNA	6
5.5. SPILLAGE PREVENTION AND CONTAINMENT	6
5.6. TRUCK WASH DOWN ERROR! BOOKMARK NOT DEFINE	D.
5.7. DISPOSAL OF LIQUID WASTE	7
6. LEADERSHIP	7
6.1. POLICIES	.7
SEE APPENDIX A - ENVIRONMENTAL MANAGEMENT POLICY	. 8
7. COMPLIANCE, LEGAL AND OTHER OBLIGATIONS AND REQUIREMENTS	.8
8. EMERGENCY PERSONNEL RESPONSIBILITIES	.9
8.1. EMERGENCY TRAINING REQUIREMENTS	.9
8.2. EMERGENCY PROCEDURES	10
8.2.1. EVACUATION	10
8.2.2. MEDICAL EMERGENCY	10
8.2.3. FIRE AND EXPLOSION	10
8.2.4. HAZARDOUS MATERIAL SPILL / LEAK	11
8.2.5. EMERGENCY RESPONSE FLOWCHART	11
8.3. REPORTING INCIDENTS AND NONCONFORMANCES	12
8.4. RESPONSIBLE PERSONS, EMERGENCY CONTACTS & RESPONSE	12
APPENDIX A	13
APPENDIX B	14



1. INTRODUCTION

Fletcher's Plumbing and Gas Fitting (FPGF) specialise in plumbing, drainage, and gas fitting in Katherine and the surrounding areas and provide friendly and prompt services.

FPGF is committed to providing quality services and ensuring a safe and healthy workplace. Quality, Safety and Environmental protection are everybody's responsibility and all workers are expected to play their part in maintaining the HSEQ standards at any workplace FPGF workers go to.

2. SCOPE

This plan is an introduction to environmental work practices and safeguards associated to Fletcher's Vac Truck operations in Katherine and surrounding areas.

The organisation is utilising the Vac Truck for the collection and transfer of Industrial Waste. We can carry out safe, efficient, and prompt excavation work whilst keeping distribution to a minimum. The hydro-vac system will ensure all loosened debris is promptly cleared and for the removal of debris around concealed utilities.

3. OBJECTIVE

The objective of the plan is to highlight the environmental precautions required for carrying out Vac Truck operations. This plan will be used in conjunction with our existing Integrated Management Systems Manual written to the guidelines of ISO 14001.



The Vac Truck Management Plan objective is to

- Responsibly manage water pollution
- Responsibly control noise pollution
- Responsibly manage air pollution
- Manage hazardous waste



4. DETERMINING NEEDS AND EXPECTATIONS OF THE INTERESTED PARTIES

4.1. Understanding the needs and expectations of interested parties

FPGF is driven by the aim to meet our client's current and future needs and ensure there is a robust platform to deliver merging regulatory and procedural requirements that meet broader community standards. We ensure that significant environmental aspects are considered in establishing, implementing and maintaining a management system.

4.2. Determining relevant interested parties

Through the operation of our Vac Truck we identify that are several interested parties both internal and external to the organisation.

Needs and expectations of FPGF relevant interested parties constitute the input toward the design of our Vac Truck Management Plan. Consideration is given to those needs that are obligatory and stated, and also those which are generally implied or expected as normal. Interested parties and their expectations include:

Relationship	Interested party	Needs and expectations
By responsibility	 Clients Customers	• Expect FPGF to manage its environmental risks and opportunities that can affect their operations.
By proximity	• Community	• The community expect Fletcher's is capable of handling large scale liquid and sludge clean up, commonly in sewer and septic system maintenance.
By dependency	EmployeesJoint venture partners	 Expect Fletcher's to provide sufficient training to manage risks and emergency situations. Truck and components are serviced regularly and has no leakage. Business expectations around emergency management and incident resolution.
By authority	 NTG Regulatory or statutory agenci PWC Local Council Municipality 	 Expect demonstration of legal compliance. Ensure waste or spillage is prevented from entering local waterways. Expect Fletcher's to a be competent cleaning contractor.
FPGF understa there	nds that Internal and external issu fore, our VTMP is designed so we	ies are dynamic in nature, and subject to change; can monitor and review these changes.
	Inputs	Outputs
Request for Quotes Customer Feedback Community Expectations Staff Meetings Non-Conformances Inspection Records / Audits Reports Daily Prestart Checks		Management Review Meeting Records Actions Register Permits Collection and Delivery Docket Workshop Maintenance and Repair Records Environmental Incident Investigation Report Environmental Corrective Actions Report



4.3. SWOT Analysis for Operations of Fletcher's Vac Truck

Strengths	Weakness
Extensive experience in Vac Truck Operations A documented environmental system for the operations of Vac Truck Vac Truck risk assessment Vac truck daily prestart checks Environmental inspections Use of designated washing bays Use of approved disposal facilities Trained staff and management Monthly toolbox talks and upskilling	Failure from lack of consideration of incompatible mixtures Failure from not complying to equipment washing requirements Oversight in regular maintenance and repairs reported needed due to busy schedule New operators under training Change in regulation and legislation Incorrect conditions on permit
Opportunities	Threats
Obtain substance SDS and research on risk prior Obtain quantity prior Obtain location Obtain hazardous material transport permits Understand the flashpoints Monitor pH and understand that 12.5 pH and above are classified as hazardous waste Understand wastes of PH less than 2.0 or greater than 12.5 are considered corrosive	Materials co-mingled with materials from previous collection Workers exposed to hazardous waste with high pH levels Chemical leaks and spills Noise pollution Damage to the environment through incorrect practices resulting in contamination

4.4. Impacts and Aspects Register

See Appendix A.

As part of the IMS Manual FPGF maintains an updated Environmental Risk Register (as per section 7.1.4 of the IMS).

As part of the IMS Manual FPGF maintains the Risk Matrix (as per section 7.1 of the IMS).

5. ENVIRONMENTAL SAFEGUARDS

5.1. Soil Pollution

- Petrol, oils, lubricant and other chemical areas will be maintained is accordance with AS 1940.
- Storage and handling of flammable and combustible liquids will be in accordance with AS 3780
- The storage and handling of corrosive substances will be in accordance with AS 4681
- Bunds around the fuel and chemical storage will be in accordance with AS 1940.
- Refuelling and maintenance activities will only undertake in approved areas.
- Fletcher's personnel will be trained in the use of spill kits.
- Refer to section **5.5 Spillage Prevention and Containment** for spill management, reporting and monitoring requirements on this project. This section further highlights steps to be taken for corrective actions and waste disposal methodology in event of a spill.
- Isolate pump, secure the scene, isolate the affected area.

5.2. Water Quality

• Works will be postponed prior to, during or immediately following heavy rainfall.





- Water quality control measures will be implemented to prevent any materials entering drain inlets and waterways.
- Visual water quality inspections after suction activities.
- Drip trays will be utilised when refuelling plant and equipment on the job site.
- Chemicals will be handled and stored following regulatory requirements and as noted in current Safety Data Sheets (SDS). These chemicals will be kept to a minimum when on site.
- Appropriate size spill kits will be available if in the event of a spill.
- Hydo excavation waste will be controlled and directed away from natural water sources.

5.3. Noise and Vibration

- Most Vac Truck works will be between 6 am and 6 pm.
- All plant and vehicles are maintained in line with manufacturers recommendations.
- Noise suppressors and exhausts are fitted to the Vac Truck and pump as required by manufacturers recommendations.
- Non-urgent hydro excavation works will occur during suitable times where specified by the Client.
- Any noise complaints to be logged within the management system database and actions as required by the Client.

5.4. Flora and Fauna

- Access to the location of the work will be managed/restricted to authorised workers.
- Defined and approved hydro excavation boundaries and buffer zones will be established.
- All native wildlife will be protected.
- If fauna is discovered within the project footprint, where is has a potential for harm, trained fauna handlers shall be sourced to relocate as required.
- Manage run-off, spills, and sediment to avoid impacts on nearby waterways and Nationally Important Wetlands.
- Trenches and excavations will not to be left open overnight where possible or ramped at one end to allow animals to escape if they fall in. All excavations are to be checked each day prior to the commencement of work.
- If a threatened species be identified onsite, works will be stopped in the immediate area, the Client will be notified, and temporary protective barriers will be installed to protect the species.
- Waste will be managed daily as to not attract feral pest species identified in the area to site facilities as this will in turn increase the threat to native and threatened fauna onsite.
- No domestic animals will be brought to site throughout Vac Truck operations.
- Injured wildlife identified during Vac Truck Operations shall be transported to the closest veterinary care, for recuperation and eventual release.

5.5. Spillage Prevention and Containment

Refuelling operations will not be left unattended. Appropriate temporary bunding will be in place when refuelling or maintenance of plant and equipment on site are required.

Before discharging any water from bunded areas, verify that the water complies with any applicable legislation or water quality criteria nominated by the Client. Arrange appropriate treatment if the water quality is not suitable for discharge.

- Spill clean-up equipment and materials, appropriate for the type and quantities of chemicals used on site, must be kept on-site at all times during the works and in a readily accessible location.
- The equipment and materials for spill clean-up and containment must be maintained and replenished as needed.



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- All Fletcher's personnel must be trained in the use of spill clean-up equipment, and containment of materials, including appropriate storage of chemicals if materials must be on site whilst any works are conducted on-site. All site personnel must know the location of spill kits on sites.
- Clean up all chemical spills immediately. This may require the excavation of contaminated soil and appropriate remediation or disposal at the waste disposal facility. If spills result in an environmental incident, ensure that the incident is reported in accordance with reporting procedures and legislative requirements.
- Do not dispose of hazardous materials by flushing down any sewer, stormwater system or natural waterway.
- Keep records of all water quality checks, discharges and any remedial actions.

5.6. Managing the Cleaning of Vac Truck

The wash down of the vac truck is conducted at the Katherine Sewer Ponds and wastewater goes back into the ponds. The trucks shall be cleaned before leaving the site and entering the roadway to avoid contaminants falling onto the roadway and entering stormwater.

- Wheels and wheel bay, and
- External body

5.7. Disposal of Liquid Waste

Any liquids held within the truck are disposed of at the Katherine wastewater treatment plant managed by Power and Water following the site processes.

6. LEADERSHIP

FPGF's top management provides leadership and commitment to the Vac Truck Operations by ensuring accountability.

FPGF demonstrates its accountability with;

- Be knowledgeable in the operation of Vac Trucks, understand the requirements and support environmental practices.
- Apply and obtain relevant permits before work.
- Provide suitable training to Vac Truck Operators and certify operators are suitable for duties and maintain records.
- Review environmental and other legal documents at a minimum annually.
- Conduct environmental inspections and field audits.
- Carry out an investigation relating to Vac Truck operations.
- Maintain the Vac Truck, pump and other equipment to the manufacturer's specification.
- Retention of environmental records for a minimum of 7 years.

FPGF has ownership on customer focus. Top management actively provides leadership by identifying and ensuring statutory and customer requirements are met, risks and opportunities that might affect the products and services are determined and addressed and customer satisfaction is enhanced.

6.1. Policies

The policies for the environmental management system are regarded by management as appropriate for FPGF, are written with a commitment to meet our statutory and client requirements and continually improve, to set the framework for objectives (and EMS targets), are communicated in a manner to be understood, available as documented information and available to interested parties.



See Appendix A - Environmental Management Policy

7. Compliance, Legal and Other Obligations and Requirements

Commonwealth Legislation

- Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) and Regulations 2000 (EPBC Regulations)
- Native Title Act 1993
- Aboriginal and Torres Strait Islander Heritage Protection Act 1984
- National Environment Protection Council Act 1994
- National Environment Protection Measures (Implementation) Act 1998
- National Environment Protection (Assessment of Site Contamination) Measure 1999
- National Environment Protection Ambient Air Quality Measures (NEPM)
- National Environment Protection (Movement of by Controlled Waste between States and Territories) Measures (NEPM) 1998
- Ozone Protection and Synthetic Greenhouse Gas Legislation Management Act 2003
- Quarantine Act 1908
- Commonwealth Work Health and Safety Act 2011
- Defence Act 1903

Northern Territory Legislation & Regulations that are relevant to the Project are as follows:

- Aboriginal Land Act
- Bush Fires Act & Regulations
- Bushfires (Volunteer Bushfire Brigades) Regulations
- Dangerous Goods Act (2012) & Regulations
- Environment Protection (National Pollutant Inventory) Objective
- Environmental Assessment Act (1982) & Procedures
- Environmental Assessment Administrative Procedures
- Environmental Offences & Penalties Act (1996)
- Fire and Emergency Act & Regulations
- Fisheries Act (1988) & Regulations
- Heritage Conservation Act (2011) & Regulations
- Litter Act
- Mining Act & Regulations
- Mining Management Act 2001 & Regulations
- National Environment Protection Council (Northern Territory) Act
- National Trust (Northern Territory) Act
- Northern Territory Aboriginal Sacred Sites Act (1989) & Regulations
- Ozone Protection Act (NT) & Regulations
- Planning Act (1999) & Regulations
- Public Health Act
- Public Health (General Sanitation, Mosquito Prevention, Rat Exclusion and Prevention) Regulations
- Soil Conservation and Land Utilisation Act 1969)
- Territory Parks & Wildlife Conservation Act (1993) & Regulations
- Waste Management & Pollution Control Act 1998 & Administration Regulations



- Water Act (1992)
- Weeds Management Act (2001) & Regulations

Australian Standards

- AS/NZS/ISO 14001 Environmental Management Systems Requirements with guidance for use
- AS 1940 The storage and handling of flammable and combustible liquids
- ANZECC (2000) Guidelines for Fresh & Marine Water Quality in Australia & New Zealand
- International Erosion Control Association (IECA) Australasia Best Practice Erosion and Sediment Control. <u>http://www.austieca.com.au</u>
- Gazetted list of Declared Weeds 20/12/2006
- National Environmental Protection (Ambient Air Quality) Measure 1998
- National Environmental Protection (Assessment of Site Contamination) Measure 1999
- National Environmental Protection (Diesel Vehicle Emissions) Measure
- National Environmental Protection (National Pollutant Inventory) Measure 199

8. Emergency Personnel Responsibilities

Designated emergency personnel are appointed (e.g. wardens, emergency coordinators etc.) to receive additional training in emergency procedures appropriate to their allocated emergency response responsibilities and the degree of risk.

Responsibilities

Management –

Ensure that emergency procedures are in place to cover those emergency situations that may be reasonably expected to occur. Provide training and instruction for emergency procedures through induction to all workers, sub-contractors and any other person who may be at risk, to ensure in any incident, all persons have sufficient knowledge to be able to respond appropriately.

Workers/ Subcontractors/ Visitors

Follow all reasonable instructions given during any emergency incident. Provide information and assistance if qualified to support management during any emergency incident, actively participate in emergency drills and provide proactive feedback with a view to improve FPGF emergency preparedness.

8.1. Emergency Training Requirements

Identifying site first aid equipment requirements and emergency equipment requirements must be trained in First Aid and Fire Warden and has completed the internal training modules of HIRAC and Emergency Preparedness and Response as a minimum.

All personnel normally working in any of the sites run by FPGF shall be inducted in the following emergency management information:

- The general information contained within this document
- The key personnel roles and responsibilities
- Emergency exit locations and paths
- Assembly/Muster point locations
- Fire Fighting equipment locations and
- The written procedures applicable for the emergency or evacuation.



All staff will be asked, at the completion of the induction, to sign a statement advising that they have read the emergency evacuation procedures, understood the emergency evacuation procedures, had any questions they had answered adequately by the organisation/manager, and understand their responsibilities and role, in the event of an emergency.

8.2. Emergency Procedures

8.2.1. Evacuation

Fletcher's Supervisor will take the following issues into consideration when determining if and when to evacuate;

- The severity of the incident
- The likelihood of escalation; and
- The incident becoming uncontrollable beyond the resources available.

The following emergency procedures shall be carried out in response to the specific emergencies of;

- Medical Emergency
- Fire and Explosion
- Hazardous Material Spill/Leak; and
- Bomb Threat.

8.2.2. Medical Emergency

Should a medical emergency occur, such as a heart attack, stroke, epileptic fit, seizure, burns etc

- The first staff member on the scene should assess the situation and if they do not have first aid training, immediately notify the Manager, Supervisor or Senior First Aid trained personnel
- Notify Emergency Services on 000, and request an ambulance
- Apply first aid as trained:
 - A staff member to meet the Ambulance at the entrance to the site, and take them to the medical emergency;
 - At least one staff member is to remain with the injured person until the Emergency Services personnel arrive and take control of the incident;
 - Complete an incident / accident report form.

8.2.3. Fire and Explosion

- Assess the situation and the potential for evacuation;
- Remove anyone in the immediate vicinity, if it is safe to do so;
- If trained in the use of fire extinguishers, and if fire or smoke is localised endeavour to extinguish the fire;
- Notify the Site Manager/Supervisor/Foreman;
- Site Manager/Supervisor/Foreman to assess situation, and commence evacuation if deemed necessary:
 - Notify all persons to leave the work area calmly and assemble at muster points;.
 - Notify emergency services via 000.
- If trained in the use of fire extinguishers, the Site Manager/ Supervisor/Foreman may endeavour to extinguish the fire, with the assistance of other staff under his or her direction, only if it is deemed safe to do so by the Chief Fire Warden;
- Staff to ensure that all persons are moved towards the assembly/ muster point/s;
- Ensure no person re-enter the site
- Wait for Emergency Services to arrive and assess;
- Wait for the "ok" from Emergency Services before re-entering the building/ site or allowing any person entry;

Vac Truck Environmental Management Plan V2



- NEXT REVIEW BY APRIL 2025 FPGF-DOC
- Should any personal belongings of the persons be within the building/ site, (after the Emergency Services "ok" has been given) re-enter the building/ site and obtain personal belongings; and
- Complete an incident / accident report form.

8.2.4. Hazardous Material Spill / Leak

Hazardous Substances stored on site, or that may come onto site for periods of time, consist of but are not limited to the following:

- Oils (hydraulic, lubricants;
- Gas (oxygen; acetylene, refrigerants)
- Disinfectant/Sanitiser/Cleaning products; and
- Fuel (cars, generators, service vehicles)
- Paints/adhesives

The procedure to be carried out must be as follows:

- Staff member who finds such a spill, or is notified by any other person of such a spill is to notify the Manager/ Supervisor;
- At the direction of the Manager/Supervisor, evacuate the building, if the nature of the spill warrants such an evacuation;
- Identify the source and amount of any released materials and section off the area such that workers or the public can't gain entry;
- If necessary:
 - Notify Emergency Services;
 - Evacuation of part all of the site;
 - Stop any further spill;
 - Turn off electrical equipment/gas within the area of the spill; and
 - Soak up material using spill kit, mop or similar and contain spilled material for disposal to an appropriate landfill facility.
- Manager/Supervisor to complete an incident report.

8.2.5. Emergency Response Flowchart



8.3. Reporting Incidents and Nonconformances

Fletcher's Plumbing and Gas Fitting ensures that products provided which does not meet requirements are identified, controlled where possible to prevent unintended use or delivery to the customer, and corrected if they have been delivered.

Under the Work Health and Safety Act (NT), Fletcher's Plumbing and Gas Fitting is required to notify NT WorkSafe immediately after becoming aware of a notifiable incident at their workplace. Fletcher's Plumbing and Gas Fitting is also responsible for implementing procedures to ensure work health and safety incidents are promptly brought to the relevant individual's attention, for example, a manager and then notified to the Regulator, if required.

All workers / Subcontractors are required to report incidents to their immediate supervisor or manager at the first opportunity. An *Incident Report Form* is to be completed immediately upon becoming aware of the incident, notifiable incidents include:

- A death of a person
- A serious injury or illness of a person), or
- A dangerous incident

Notification must be done by the fastest possible means by either calling **1800 019 115**, or completing the appropriate 'incident notification form', and faxing it to **8999 5141**, or emailing it to **ntworksafe@nt.gov.au**.

Following the initial notification by phone, an 'Incident notification form' will be submitted to NT WorkSafe within 48 hours from the time they notified the incident by phone as required by the WHS regulations

All environmental incidents that may have caused or threatened danger or environmental harm will be reported to **NT EPA Pollution Hotline 1800 064 567**. A written notice will follow after the initial phone call.

8.4. Responsible persons, emergency contacts &	response
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EMERGENCY CONTACTS				
EMERGENCIES	000 (112-mobile phones)			
FIRE	000 or 8946 4107			
POLICE	000 or 131 444			
AMBULANCE	000 or 8922 6200			
FIRST AIDER (Lawrence Fletcher)	0428239797			
Director (Lawrence Fletcher)	0428239797			
Site Supervisor (Lawrence Fletcher)	0428239797			
HSE Consultant (Vipin Chandran)	08 8941 8227			
NT EMERGENCY SERVICE (NTES) Rescue from heights	131 444 (or 000 landline / 112 mobile phones)			
KATHERINE DISTRICT HOSPITAL	08 8973 9211			
ROYAL DARWIN HOSPITAL	08 8922 8888			
PALMERSTON REGIONAL HOSPITAL	08 7979 9200			
NT WorkSafe (Incident Notification)	1800 019 115			
EPA / Pollution Hotline	1800 064 567 or 8999 3747			
SNAKES ON SITE / SNAKES NT	1800 453 210 / 0409 326 307			
HEALTH DIRECT 24-hour medical advice	1800 022 222			
NT Parks and Wildlife – Crocodile sightings	0419 822 859			
National Security Hotline	1800 123 400			



Appendix A – Environmental Policy

OUR COMMITMENT

Our organisation is committed to undertaking its works and services in a responsible manner whereby the impact and effects of the environment are identified, assessed and effectively managing. Our organisation will manage its work and services in a manner that is consistent with the principles of ecologically sustainable development and will deliver continuous improvement in bettering our environmental performance.

We are dedicated to achieving the standards set out in the policy to promote sustainable environmental awareness and limit the environmental impact of our business operations. This will be achieved through the following methods:

As part of our compliance processes, Fletcher's Plumbing and Gas Fitting is absolutely committed to the Prevention of Pollution and Management of the Environment in accordance with:

- the requirements of ISO 14001
- > our legislative, regulatory and other obligations

Throughout all of our activities, Fletcher's Plumbing and Gas Fitting will:

- Identify our legislative, regulatory and other obligations
- Create systems and processes which control our environmental obligations
- Set and review environmental Objectives and Targets at relevant functions and levels
- Continually improve our environmental performance
- Communicate with stakeholders regarding our environmental obligations and our environmental performance
- Engage with our customers to meet their environmental requirements and expectations.
- Reduce and recycle waste materials where possible and dispose of other waste material in a responsible manner.
- All incidents however minor is reported to management so that appropriate action can be undertaken to prevent a repetition or to minimize the risk and impact;
- Make arrangement to make sure all employees and contractors attend appropriate training courses for the type of work that they undertake so that they may complete their tasks in a competent and safe manner;

APPENDIX B - Environmental Impacts and Aspects identified with the works mentioned below.

ACTIVITY/PRODUCT /SERVICE	ENVIRONMENTAL ASPECT	ACTUAL AND POTENTIAL ENVIRONMENTAL IMPACTS	RISK AND OPPORTUNITIES THAT NEEDED TO BE ADDRESSED	PLANNING TO TAKE ACTION	RISK RATING
VAC TRUCK OPERATION - WASTE COLLECTION AND TRANSPORT	Soil and sand pollution	Uncontrolled release of hazardous waste Hydro carbon spills Biological waste being released into the ground	 Risks Heath risk from exposure to hazmat Soil contamination Chemical contamination resulting in damage to flora and fauna Damage to ecosystem 	Implement operational controls to retain spill run off. Implement emergency plans to mitigate uncontrolled runoff. Develop a clean-up response. Control runoff, reduce messy practices while collecting debris from hydo excavation maintaining high level of housekeeping. Designated disposal areas only used.	
CHEMICAL HANDLING AND USE	Uncontrolled released during fire and explosion (emergency situation)	Air pollution. Water Pollution Soil Contamination Injury to humans	 Risks Clean-up-cost Fines Detrimental publicity 	Implement, monitor and review Emergency Management Procedures. Wear correct and recommended PPE. Train operators to deal with uncontrolled release of chemicals	
MOBILE PLANT (VAC TRUCK) OPERATIONS	Fuel use	Depletion of non- renewable fossil fuels	RisksFuel availabilityHigher fuel costsOpportunitiesUse alternative fuel(CNG/LNG)Reduce fuel costs	Establish environmental objectives to reduce fuel use. Switch engine and pump off when not in use.	
	Emission of nitrogen oxides	Air pollution. Global Warming and Climate Change	 Risk Introduction of stricter fuel emission standards 	Research methods to reduce emissions	



Vac Truck Environmental Management Plan V2 NEXT REVIEW BY APRIL 2025 FPGF-DOC

	Generation of waste oil	Soil Contamination Injury to humans	 Risks Clean-up-cost Fines Detrimental publicity 	Manage oily waste in conformity with requirements	
	Generation of noise	Discomfort or inconvenience to community and workers.	RisksDetrimental publicity	Provide operators with training. Impose strict operation hours for noisy works. Reduce prolonged use where possible.	
	Spills to ground and water	Truck rollover	RisksClean-up-costInjury to driverLoss of machineFines	Operators to hold HR licence and VOC. Only use truck on level surfaces. Plan route to and from location. Avoid unwanted stops. Ensure tyres are in good condition. Adhere to safe working load of the truck.	
EMERGING LEGAL REQUIREMENTS	Legislative framework	Improve Environmental Management	 Risks Failure to identify and comply with new or changing compliance obligations can damage the organization's reputation and can lead to fines 	Develop control processes to ensure that the monitoring of the regulatory landscape is effective to improve the identification of emerging requirements	
EXTREME WEATHER EVENTS	Uncontrolled release of chemicals or other hydro excavation material	Air pollution Pollution Soil Contamination Injury to humans	 Risk Climate change increases likelihood of extreme weather events. 	Implement, monitor and review Emergency Management Procedures. Work under Fletcher's Cyclone Management Plan.	



			 Business losses due to service disruptions Insurance concerns Opportunities Apply Business Continuity Management to ensure business survivability post extreme weather 		
DECONTAMINATION OF MACHINERY	Cross Contamination from previous collection	Contamination of preserved area Chemical reaction from hazardous substance co- mingling	 Risk Business losses due to service disruptions Insurance concerns Detrimental publicity Fire Ground contamination 	Implement monitor and review decontamination procedure, including weed and seed control requirements as required. Utilise designated wash bays. Clean truck after each collection.	
DISPOSAL OF SEWAGE EFFLUENTS	Contamination of ground waterway quality from spillage	Animals and humans coming in contact with biological waste and harmful microorganisms	 Risk Polluted waterways Clean-up cost Fines Pollution Negative publicity Opportunities Mix lime Double bag waste in heavy duty clean up 	Implement monitor and review relevant council's waste management procedure. Work to Council's waste management guidelines. QHSE Consultants engaged for advice on environmental matters. Implement and maintain robust environmental management systems	



			bags and dispose off at authorised facilities	
ENERGY / POWER USE	Electricity	Emission of greenhouse gases. Global warming.	 Opportunities Turn off computer, lights etc when not in use Unplug idle electronics Service air conditioner regularly and set to factory recommended temperature for least power consumption Use more battery powered tools and equipment that are rechargeable 	Aim to reduce use of electricity in all our offices by 3% in 2023
SOURCING OF MATERIALS	Resources	Waste of fuel Carbon emissions. Air pollution	 Opportunities Reduce carbon footprint by buying products from a local supplier Less transportation and outsourcing saving fuel use and minimising pollution 	Proactive research into local supplier availability and product quality Company to maintain a preferable supplier register



AIR QUALITY	Contamination of atmosphere	Exhaust emissions to atmosphere Odours, fumes, dust emissions Exposure to Asbestos	 Resource soil locally from approved supplier Opportunities Ensure truck is regularly serviced, prestart checks completed daily, reported defects are fixed timely Develop collection procedure, use protective clothing, double bag, follow decontamination procedure Obtain an asbestos register prior to works and 'stop work' if asbestos is discovered until approval is received form Supervisor to 	Carry out regular environmental inspections. Heath surveillance for workers conducted as required. Use a qualified asbestos removalist where required.	
			proceed	Follow and implement Council's poise manitoring	
NOISE CONTROL	Generation of noise	Noise nuisance to community	 Opportunities Vac Truck is regularly serviced and generally used between the hours of 6am and 6pm Monday to Saturday 	Poliow and implement Council's noise monitoring requirements. During regular inspection, monitor equipment and plant for noise and review for acceptable levels of control. Fit truck and pump with noise dampers if available.	



	Source truck that	
	has controls in place	
	for reduced noise	