Packard Goose Pty Ltd Po Box 53 Humpty Doo NT 0836
A.C.N Phone 086 123 471
(08) 8988 1885 Fax (08) 89882669 Mob 0408 895 171

Incorporating
McMinns Pumping Systems
Darwin Waste
Crocodile DUNNEE
Smart Ensuite Hire

McMinns Pumping Systems
Environmental Management Plan
ABN: 16 086 13 471

Plan approved by:

Name	Title	Approved
John Denton	Manager	JD

Details of revisions

Level	Details	Date	Initial
A	Initial draft for review	22/08/2017	JE
B	Redraft after review	12/12/2017	JD

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Introduction

1 Site Diagram

2 Scope

This Environmental Management Plan (EMP) applies to McMinns Pumping for works to collect, transport and store listed waste (Grease trap waste, sewerage sludge and residues including nightsoil and septic tank sludge, waste mineral oils unfit for their original intended use and waste mixture, or waste emulsions, of oil and water or hydrocarbon and water). The EMP is intended to provide a practical and effective management tool to minimise the environmental impacts associated with activities for the operation and maintenance of the works carried out by McMinns Pumping.

2.1 Environmental Objectives and Targets

The Objectives, Targets and Indicators that have been set out below, is to provide guidance for McMinns Pumping activities and performance.

Objective	Target	Key Performance Indicator
Compliance: Ensure the Project operates in accordance with all relevant environmental and heritage related legislation.	Zero penalty infringement notices or prosecutions for breaches of environmental or heritage related legislation. No warning or 'show cause' letters from authorities.	No notices or prosecutions. No warning or show cause letters. Compliance with licences and conditions of approval. Audit and inspection outcomes and corrective actions.
Training: personnel in environmental management.	Implement training and awareness programs that promote compliance improving environmental performance and skill base of staff and workers and minimise environmental risk.	100% of relevant staff receive environmental training.
Ecology: Minimise impacts on flora and fauna on sites.	No unauthorised impact to ecology from McMinns Pumping activities on sites.	No incidents which result in unapproved ecological impacts
Quality: Ensure environmental and related audit actions are closed out within the agreed timeframes.	No overdue audit actions.	# of overdue audit actions.
Weed Control	To minimise weed growth on site all weeds are sprayed periodically with Glyphosphate with appropriate timing to ensure the best results.	Minimal impact of weeds on site, including evaporation ponds and fenclines.

3 Description of Works

McMinns Pumping collects, transport and stores waste from Private residences, Businesses and Communities in Darwin, Palmerston, Surrounding suburbs, and Towns of the Northern Territory, these wastes include, but are not limited to:

- Grease trap waste
- Sewerage sludge
- Septic tank sludge
- Residues including nightsoil and
- Waste mineral oils
- Oil and water

No listed waste is disposed of on site.

All Septic tank, sewage and grease trap waste, as well as wash down water and water separated from oil/water mixtures is disposed of via Power Water Corporation's Palmerston Trade waste ponds under a commercial agreement with PWC.

All used motor oils are disposed of via incineration under an unwritten agreement with Mataranka Lime/Northern Cement.

4 Roles and Responsibilities

This section details the environmental responsibilities and accountabilities of the Company to ensure it is delivered in accordance with all legal and statutory requirements and that industry best practice is applied throughout the works conducted.

4.1 Company Manager/Representative

This said person has the primary responsibility for implementing all aspects of environmental management in the operation and maintenance of the collection and disposal of waste. This includes ensuring corrective actions are implemented and all compliance obligations are met. This said person will:

- Work with and provide support to staff with regard to environmental management
- Prepare/review the EMP
- Ensure that all operational and maintenance environmental licences, statutory obligations and requirements are met
- Provide technical advice to all company personnel as required
- Review all SHEWMS for environmental input
- Develop and maintain Environmental Procedures
- Undertake further environmental risk assessments as required
- Facilitate environmental training/inductions including toolboxes and prestart notifications
- Respond to all environmental incidents
- Prepare reports for internal and external compliance
- Conduct site inspections
- Ensure corrective actions are implemented.

5 Environmental Management

5.1 Identification of Aspects and Impacts

Aspect	Potential Impact	Environmental Control
Compliance Ensure the Project operates in accordance with all relevant environmental and heritage related legislation.	• Dust and Air Quality • Potential for complaints • Visual • Respiratory (Health) impacts • Cumulative with other activities in the locality	• Speed restrictions on site to minimise dust • All complaints must be directed to office staff, who will in turn, handle and process all relevant complaints • Site is to be kept tidy at all times • Site is appropriate in being in an industrial

Aspect	Potential Impact	Environmental Control
		area
Dangerous Goods and Hazardous Materials	• Contamination of surface water, ground water or land • Breach in manifest quantities	• No release into the environment will be tolerated • Accurate recording on manifests ensures correct record keeping
Flora and Fauna	• Spread of weeds • Detrimental impacts to native fauna • Introduction or increase in pest species • Contamination of surface water, soil or ground water	• All weeds on site are controlled by spraying with Glyphosphate, to minimise and eradicate unwanted weeds and pest species • There is no chance of contamination from this process as product is used as directed.
Noise and Vibration	• Impact to community • Increased cumulative impacts with all other activities in the area • Increased noise emissions, potential for complaints	• Sufficient buffer from adjacent properties • Activity on site is minimal • Noise levels on site are kept to a minimum • The site is in an industrial sub-division
Sewage Sludge	• Overflow of sewage resulting in contamination of surface water, ground water or land • Odours	• All loading/unloading of trucks takes place in bunded areas • Due diligence and trained operators will prevent any spill occurring • All product stored on site is also within a bunded area • Any product with a particularly offensive odour will be removed and disposed of once recognised
Waste	• Contamination of surface water, ground water or land • Cross contamination of waste streams • Poor storage resulting in ponding of water on site	• No waste product can migrate off site due to appropriate storage, bunding and due diligence • Cross contamination of waste streams is controlled by

Aspect	Potential Impact	Environmental Control
	• Waste build up and odours	ensuring correct handling and due diligence • Proper grading and stormwater control prevents ponding of rainwater on site • All waste is disposed of as soon as practical, odorous products are removed from site once identified

5.2 Environmental Controls

5.2.1 Dangerous Goods and Hazardous Materials

Any chemicals or hazardous materials brought to site must be approved by Company Management. The following information must be kept:

- A current Australian Safety Data Sheet (SDS)
- Quantity and storage information
- Emergency Procedure Guide
- Confirmation of any applicable Northern Territory licence if required

The Company will manage dangerous goods and hazardous materials in the following ways:

- A updated Hazardous Substances Register will be reviewed monthly to ensure all SDSs are current
- All containers holding hazardous materials must be labelled in accordance with Section 247(1) of the Work Health and Safety (National Uniform Legislation) Act 2011
- Any containers that are incorrectly labelled will not be accepted until correct packaging or labels are received from the suppliers
- All products will be segregated according to relevant segregation requirements and standards (AS1940)

5.2.2 Spill Prevention and Response

Any areas containing waste may pose a risk of spills. To help prevent spills, McMinns Pumping will implement the following:

- All personnel will attend a site induction
- All trucks will;
  - Have the appropriate licence and certificates
  - Be checked daily by the operator before use as part of the Daily Plant Inspection Checklist (pre-starts) to identify any leakages
  - Be serviced and maintained as part of a scheduled maintenance program. Records will be available on request, see attached sample records and programme

- All vehicle washing occurs in the bunded area south end of shed. The waste water from these operations is captured in the bunded area, treated via a septic system and then stored for final disposal. This is for general cleanliness of all vehicles and there are no listed waste products included in this process
- Carry appropriate spill kits in each truck suitable for the product being handled

- Any or all spills of any product must be reported to the office and the NT EPA if deemed appropriate. Any spill must be contained as to not enter any drain or waterway, collected by the truck on site or another truck must be used to assist in the cleanup, final cleanup of the site with quick break detergent and water is permissible
- Storage of all hazardous chemicals and dangerous goods will be in compliance with Australian Standards AS1940-2004, and others such as AS3959 and AS2507-1998. Additional guidance can come from The Dangerous Goods Act 1985 and Dangerous Goods (Storage and Handling) Regulations 2012
- Regular maintenance of plant and equipment should only be carried out in designated servicing locations.
- Water/product levels in the evaporation ponds are to be monitored at all times. The construction and raising of pond 2 walls has resulted in a pond with much higher capacity than actually required, and an overflow/spill is to be considered a low risk. In the unlikely event the pond may be near capacity, due to heavy rainfall, water may be removed with a Vacuum Truck for either disposal or storage in tanks on site for later disposal. Monitoring is essential, as is monitoring actual rainfalls and observation
- Stormwater runoff from site is rain water only and no pollution from pond # 2 can occur due to the above paragraph
- Pond # 1 is only used for cleaning dirt/debris build up from the actual Vacuum Tanks. The water used is minimal and evaporates quickly, wherein the pond is cleaned and reconstructed for further use. Proper monitoring will prevent overflows and escape of product

5.2.3 Sewage Sludge/Waste

The key aspects of the sewage collection and disposal during operation are:

- The sewerage collection captures sewage from three main sources; Portable toilets ablution blocks, local businesses and private residences septic tanks.
- The sewage is then transferred by road via pump trucks to PWC's Palmerston Trade Waste Ponds for final disposal.
- Temporary storage on site in bunded steel tanks is allowed, for final disposal at a later time.

Wastewater Discharge

- All washout water from McMinns activities and equipment wash-down water should be captured. This means all vehicles are washed in a bunded area, and all waste water is treated via a septic system, and disposed of as required.
- This water may need to be removed off-site to a treatment plant if necessary.
- Contaminants must not be directly or indirectly released to any surrounding waters. All loading/unloading of tanker trucks takes place in bunded areas. All product stored on site is kept in tanks within an appropriate bunded area

5.2.4.1 - Weed Management

- All weeds on site are controlled by spraying with Glyphosphate with appropriate timing to achieve best results. This includes all areas, fence lines, gardens and all evaporation ponds.
- Olive Hymenachne present in pond 2, was successfully eradicated by the use of glyphosphate after identification by NT EPA Staff in 2016

5.2.4.2 - Ground Water Contamination

- Ground Water migration through the floor of the evaporation ponds is minimal as the base is constructed of compacted road base gravel/clay which would be considered almost impervious as it is a tried and tested method of lining Dams/Ponds
- Lining of the existing ponds with PVC or a similar pond liner remains an option, as is moving the pond onto a concrete slab with properly constructed concrete bund walls.

5.2.4.3 - Used tyres and Batteries

- All used tyres are stored away from fence lines, buildings and any combustible materials, and are kept on site awaiting collection by an appropriately licenced contractor.
- Used lead acid batteries are stored on pallets under cover, awaiting collection by an appropriately licenced contractor.

6 Environmental Training

6.1 Induction

All personnel and visitors will attend a Company or visitors induction. Before commencing any works. All personnel who will be performing specific environmental tasks will need to show proof of competency prior to being permitted to work.

6.2 Pre-start Toolbox Talks

As part of standard operations, pre-start meetings are daily at the beginning of the work day/shift. Environmental issues, notices or feedback will be raised at this meeting by the environment team or supervisors as required Environmental Training.

7 Incident Response and Reporting

7.1 Environmental Incident Reporting

Environmental incident reporting and investigation will be conducted in accordance with the NTEPA.

Environmental events (incidents) will include the following:

- Non-compliance – failure to comply with a condition, commitment or requirement of an environmental plan, procedure or approval
- Incident event – an unplanned event, action or occurrence that causes or has potential to cause harm or impact to the environment, reputation, social or cultural heritage, or legal compliance

- Hazard event (near miss) – a set of conditions or circumstances that has potential to cause harm or impact to the environment, reputation, social or cultural heritage, or legal compliance HAZOB – environmental hazard observation. (an environmental hazard with a potential severity/consequence of F)
- Minor environmental event – event with an actual severity/consequence classified as E or F or potential/worst severity/consequence classified as D, E or F
- Major environmental event – event with an actual severity/consequence classified as A, B, C or D or potential/worst severity/consequence classified as A, B or C, and events notified by McMinns to the NT EPA

See Attachment 1 for Consequence/Severity (Risk Matrix)

All environmental events require reporting and entered into McMinns system.

Where a non-conformance is identified and raised, the Environment team will liaise with the appropriate Project personnel or qualified person(s) to determine the most appropriate corrective action to implement. All relevant incidents, complaints and non-conformances are to be recorded and discussed where possible with the work force. Any worker of McMinns Pumping can contribute and provide suggestions to any required or appropriate preventive action.

Spill Incidents

All spill incidents will be managed and reported to McMinns Manager or Office to be recorded and acted on in accordance with NTEPA.

8 Emergency Contacts

8.1.1 McMinns Pumping Systems Emergency Contacts

JOHN – 0408 895 171

OFFICE – 8988 1885

8.1.2 Offsite Emergency Contacts

Royal Darwin Hospital (General Enquiries)	**(08) 8999 2400**	
Fire Brigade	**Emergency**	**000 (Triple zero)**
	Non-emergency fire assistance	131 444
	Southern Region	131 444
	Northern Region	131 444
	After Hours	131 444
Ambulance	**Emergency**	**000 (Triple zero)**
	Non-Emergency	NA
Police – Humpty Doo Arnhem Highway, NT 0836	**Emergency**	**000 (Triple zero)**
	Non-Emergency	**13 14 44**

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Poisons Information Service	**131 126**
State Emergency Services Emergency help in fire, flood, cyclones	**132 500**
WorkSafe NT	**1800 019 115**
NTEPA Pollution Hotline	**1800 064 567**
Cyclone information	**1800 cyclone or 1800 292 5663**