RODNEY'S TRANSPORT SERVICE

Pollution Incident Response Management Plan (PIRMP)

RODNEY'S TRANSPORT SERVICE

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1. BACKGROUND

This Pollution Incident Response Management Plan (PIRMP) has been developed for Rodney's Transport Service. The plan applies specifically to the company depots where waste product (used batteries) and dangerous goods (unleaded petrol and diesel and bottled gas) are stored.

This plan has been developed in response to amendments to the *Protection of the Environment Legislation Amendment Act 2011* (POELA Act) that require holders of environment protection licences to comply with the new requirements. The POELA Act introduces several changes to improve the way pollution incidents are reported, managed and communicated to the general community. The Act includes a new requirement under Part 5.7A of the *Protection of the Environment Operations Act 1997* (POEO Act) to prepare, keep, test and implement a pollution incident response management plan.

2. OBJECTIVES

The objectives of the plan are as follows:

- To provide a guide for the operations, actions and notifications to be carried out in the event a pollution incident occurs
- To provide clear documentation of pollution risks, communication procedures to authorities and community regarding pollution incidents
- To articulate the testing and training requirements for a pollution response.
- To identify pre-emptive actions to prevent pollution risks

If there is an identified pollution incident that involves material harm or the threat of material to harm to humans and/or the environment, the PIRMP will be implemented.

3. INFORMATION INCLUDED IN THE PRIMP

The PRIMP contains the following sections that comply with the regulatory requirements:

a) DESCRIPTION AND LIKELIHOOD OF HAZARDS

Rodney's Transport Service is a transport and warehousing operation. The company stores bulk dangerous goods and waste products on site as part of the operational requirements of the business. Additionally, repair and maintenance of heavy vehicles is undertaken along with loading and unloading of products on site. The most likely environmental emergencies that may occur are as follows:

- *Chemical spill or leak or leaching that may reach a stormwater or drain. The sources may include but are not limited to:*
    - Underground diesel tanks
    - Underground unleaded tanks
    - Used batteries stored in Battery Shed (refer Section 8 for more detail)

  The potential for a spill or leak of either is restricted to delivery of fuel, malfunction of fuel pump resulting in uncontrolled release or malicious damage.

- *Gas leak that may result in the release of emissions. The sources may include but are not limited to:*
    - Bottled LPG
    - Spills associated with recycled batteries where acid may generate hazardous fumes

- *Fire that may result in the release of emissions. The sources may include bur are not limited to:*
    - Workshop area where oils and other commodities used in the maintenance of heavy vehicles are stored
    - Diesel and unleaded fuel bowsers
    - Battery shed where used batteries are stored containing residual acid (refer section 8 for more detail).
    - Stored Seed Cake in Grain Shed

b) PRE-EMPTIVE ACTIONS TO BE TAKEN

Rodney's Transport Service takes a proactive approach to ensure minimisation of pollutant incidents occur. The following pre-emptive actions have been implemented to assist this process:

- 6 monthly inspections of all Fire Safety Equipment is undertaken on site to ensure equipment is routinely checked and meets the relevant standards and engages National Fire Solutions, Wagga Wagga to complete the inspection and issue the relevant Fire Safety Certificate
- Routine observation and immediate reporting of any damage to fuel pumps to address potential uncontrolled spill from bowsers. If damage is identified, relevant pump is immediately de-activated until repairs occur
- Bunding around diesel bowsers to immediately contain spill should this occur
- Provision of spill kits at bowsers that are routinely audited for compliance
- Loading and unloading areas for used batteries is completed on specially designed concrete that meets EPA requirements to minimise/eliminate leaching should an acid spill occur
- Storage area of used batteries is a specially designed covered shed designed with concrete that meets EPA requirements to minimise/eliminate leaching should an acid spill occur
- PPE kits located in designated areas on site to access clothing and other items of protection that must be warn/used when undertaking activities that may result in risk exposure
- Training of staff to ensure adequate understanding of the contents of the PIRMP and other associated plans/documentation and the ability to comply and abide
- Site is CCTV monitoring 24 hours/day and security access to minimise malicious damage

c) INVENTORY OF POLLUTANTS

The potential pollutants kept on the premises at Rodney's Transport Service are as follows:

- Underground Diesel (see MSDS & map) – 57,000L
- Underground Unleaded Fuel (see MSDS & map) – 40,000L
- Used batteries (Waste – see map) – 6,000t
- LPG in cylinders (see map) – 10 cylinders in cages
- Seed Cake (Canola) – 1,500t

d) NOTIFICATION PROTOCOL

Under Section 148 of the POEA Act, the following people have a duty to notify a pollution incident occurring in the course of an activity that causes or threatens material harm to the environment:

- The person carrying out the activity
- An employee or agent carrying out the activity
- An employer carrying out the activity
- The occupier of the premises where the incident occurs

If a pollution incident occurs which causes or threatens material harm to the environment, the incident must be immediately reported to each of the relevant authorities as listed in Section 3 (f).

If a pollution incident occurs and it presents an immediate threat to human health and property, Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service should be contacted first for emergency assistance. The other response agencies must still be contacted to satisfy notification obligations.

If the incident does not pose an immediate threat to human health and property and does not require an initial emergency contact, an obligation still exists to report the incident to the relevant authorities.

e) SAFETY EQUIPMENT

Personal Protective Equipment (PPE) is available on site at Rodney's Transport Service to all staff working in or around areas where pollutant risks have been identified. This includes but is not limited to:

- Protective glasses/goggles
- Protective masks
- High visibility vests
- Daily use overalls
- Protective gloves and overalls
- Fire extinguishers
- First aid stations and personal first aid kits

Other safety related onsite equipment/information includes:

- MSDS (see appendices 1, 2, 3)
- Spill kits
- Restricted areas
- Appropriate access and chemical identification signage
-

f) EMERGENCY AND COMMUNITY CONTACT DETAILS

The following is a list the required emergency and community contacts in the event a Pollution incident occurs.

Organisation Name	Contact	Title	Phone number
ALL	**Emergencies**	All types	**000**

State Emergency Services (SES)	**NSW Emergency Service**	State based contact	*132500*
Police	**Wagga Local Area Command**	Wagga Police Station	(02) 6922 2599
Fire	**Fire & Rescue NSW**	Wagga Wagga Fire Station	(02) 6921 4375
Ambulance	**NSW Wales Ambulance Service**	Wagga Ambulance Station	(02) 6925 1836
EPA **Waste Spill (Corrosive 8)**	**NSW Office**	Regulatory & Compliance Support Unit	131 555
Workcover (reporting injured workers)	**Wagga Wagga Office**	Workcover Assistance Unit	131050
Wagga Wagga City Council	**Wagga Wagga Office**	General Office number (ask for the Engineering department)	(02) 6926 9100

g) COMMINCATING WITH NEIGHBOURS

Rodney's Transport Service is located in an Industrial Estate surrounded by other businesses. The businesses that butt the boundary of Rodney's Transport Service have a land space that provides a measure of buffer protection from immediate harm should a pollutant incident occur.

Contact details of neighbouring businesses are listed below. In the event of a notifiable pollutant incident with reference to the nature and scale of the incident, immediate neighbouring properties will be contacted using the details provided. This will be undertaken with direction from Emergency Services.

Company Name	Contact Number	Company Name	Contact Number
Austrack	02 6971 8754	**Buckman Laboratories**	02 6921 3677
Bomen Hot Spot Cafe	02 6971 7666	**Dickinson Truck Art**	02 6931 9555
Bomen Produce Co	02 6931 7037	**Southern Oil Refinery**	02 5942 3700
Delta Ag	0427 406 873	**Teys**	02 6938 3000
Ecowize Specialised Hygiene Service	02 6971 8677	**DJs Tyres**	0417 725 899
Great Southern Electrical	02 6931 7699	**Points Direct**	02 6921 3372
Ladex Construction Group	02 6925 8477	**Nufarm Australia Ltd**	02 6921 4279
Landmark, agent saleyards	02 6921 9099	**Darling Irrigation**	02 6931 8552
Proway Livestock	02 6932 4000	**Chep Service Centre**	02 6931 7310
Rambler Welding Industries	02 6921 3062	**Tankmasta**	1088 775 000
Renewed Metal Technologies	02 6937 1900	**Murrumbidgee Grain Services**	0448 877 749
Riverina Scrapmetal Processors	02 6971 7626	**Wagga Wagga Livestock Marketing Centre**	02 6923 2711
ROBE	02 5942 3300	**Shell Truckstop**	02 6921 7279
Sita	13 13 35	**Linpac Rotational Mouldings**	02 6921 4297
South West Trailers	02 6931 9499	**Fulton Hogan**	02 6931 1623
Bomen Agricultural Machinery	02 6921 4790	**Steel Supplies**	02 6921 9119

Darling Irrigation	02 6931 8552	**Riverina Engineering**	02 6921 9377
American Laundry Co	02 6971 9942	**Wagga Electrical**	02 6921 1168
AgnVet Services	02 6931 0777	**Elgas Agent**	02 6921 9119
Tasco Petroleum	02 6921 4710	**Suez Wagga Service Centre**	02 6921 4627
H J Heinz Company Australia Ltd	02 6923 2557		

h) MINIMISING HARM TO PERSONS ON THE PREMISES

In the event of Pollution Incident, the Emergency Evacuation procedure will be implemented and must be followed immediately. This is inclusive of the following:

- Alarm (siren will sound) raised; Chief Warden
- Chief Warden locate Emergency Evacuation Kit in strong room and bring to evacuation point
- Area Wardens & Wardens calmly evacuate all staff from the premises using nearest available emergency exits; all staff
- Follow Emergency Warden's instructions; all staff
- Arrive at evacuation location; all staff
- Relevant emergency services authorities contacted; Chief Warden
    - Ambulance – injured staff
    - Fire Service- evidence of flames, smoke of spill so DG listed products
    - Police – if emergency coordination is required
    - Workcover – if injured staff
- Locate and account for all staff; Emergency Wardens
- Alert neighbouring businesses of emergency; Emergency Wardens
- Notify next-of-kin for any injured staff; First Aid Officer

i) ACTIONS TO BE TAKEN IMMEDIATELY AFTER INCIDENT

Actions to be taken following a pollution incident will be influenced by the type and size of incident.

Chemical Spill
A small spill of diesel or unleaded is to be cleaned up using the designated Spill Kit and ensuring the appropriate PPE is worn.

For large spills the MSDS must be followed (see appendices 1, 2 & 3) and emergency services must be contacted as per the PIRMP. Follow the Emergency Evacuation Procedure.

Gas Leak
A gas leak from one or more of the LPG cylinders is to be addressed by:

- Immediately turning off the gas nozzle
- Safely removing the offending cylinder to an outdoor area away from people machinery and other equipment or chemicals that may generate a reaction
- Contacting the supplier of the gas cylinders for collection and replacement

Fire
If the fire is small and can be contained use the on-site manual fire extinguishers or fire hose.

If the fire is large and cannot be contained, immediately contact emergency services as per the PIRMP. Follow the Emergency Evacuation Procedure.

j) MAPS

The following is a site map of Lot 4 Bomen Road, Bomen, Wagga Wagga NSW 2650. This is the primary premises of Rodney's Transport Service and the map indicates the location of the DG, used batteries, LPG and Stored Seed Cake on site and the Emergency Evacuation location.

4. AVAILABILITY OF PIRMP AND ANY ASSOCIATED PLANS/DOCUMENTATION

This PIRMP information has been written to comply with the legislative requirements under the *Protection of the Environment Operations Act 1997* (POEO Act) and the *Protection of the Environment Operations (General) Regulation 2009 s98D*.

This plan has been made publicly available as required within 14 days following the preparation. It can be viewed on the company website at www.rodneytransport.com.au. Additionally should a hard copy be required by a person without access to the company website, a copy will be made available following a written request for same.

Additionally, the PIRMP will be implemented in conjunction with company Emergency Management Plan. A copy of this is also located on the company website.

5. TRAINING OF STAFF

Training of staff in the understanding and implementation of the PRIMP will be provided by the HR Manager with support from the training officer. The training will include but not limited to the following:

- Ensure detailed familiarity with this plan and the Emergency Management Plan
- Ensure learnings from the test evacuation and other emergency management exercises are communicated
- Ensure knowledge of legislative and statutory requirements
- Included as part of site inductions of all personnel
- Use of Toolbox meetings to identify basic training and possible WH&S issues
- Use of Driver Newsletter as a conduit for information updates/changes

Training records will be maintained and kept with a hard copy of the PRIMP (see appendix 4). Training will occur on commencement of employment and then annually unless there is a modification toe the PRIMP within the annual period. Then training will occur relative to the modification.

6. TESTING OF PRIMP

Following the preparation of the PRIMP, it is to be tested using a mock pollution incident to ensure all personnel are aware of the responsive process and responsibilities should a real pollution incident occur.

The Chief Warden is responsible for documenting any issues that emerge during the mock pollution incident and making recommendations regarding any changes that subsequently need to be made to PRIMP.

The testing of the PRIMP will require the attendance sheet (appendix 4) to be completed and the amendment sheet (appendix 5) to be completed if applicable.

All documentation relative to the mock pollution incident including any amendments to the PRIMP is to be retained with the PRIMP and made available to the EPA any time a request is made.

7. IMPLEMENTATION AND REVIEW OF PRIMP

Once the PRIMP has been tested and amendments completed, an annual review of the PRIMP is required. In the event a change occurs that requires the PRIMP to be reviewed within the annual period, this then becomes the revised annual review date. The annual review of the PRIMP will also serve as the annual review of the Emergency Management Plan.

8. TRANSPORT OF TRACKABLE WASTE

The following documentation relates to the Transport of Trackable Waste, *Re-cycled batteries*. This is generated as a separate planning response as required by the EPA but remains aligned and operates in a parallel fashion to the main body of PRIMP and the Emergency Management Plan.

a) WASTE TRANSPORT COMPANY DETAILS

Name of Transport Company
Rodney's Transport Service (Australia) Pty Ltd

ABN
63 054 913 183

Location and details of sites for garaging Waste Transporter Vehicles
Lot 4, Bomen Road
WAGGA WAGGA NSW 2650

Primary address site
Lot 4, Bomen Road
WAGGA WAGGA NSW 2650

Environment Protection Licence Number
12223

Company Business Contact Details

Name:	Graeme Wooller
Positions:	General Manager
Business hours contact:	(02) 6937 9100
After hours contact:	0427 967 030
Email:	graeme@rodneystransport.com.au

Company Website and Plan availability
www.rodneystransport.com.au
A copy of this plan is available on the company website.

Names, positions and 24-hour contact details of individuals responsible for activating the plan

Contact number 1

Name:	Graeme Wooller
Positions:	General Manager
Business hours contact:	(02) 6937 9100
After hours contact:	0427 967 030
Email:	graeme@rodneystransport.com.au

Contact number 2

Name:	Paul Tye
Positions:	Workshop Manager
Business hours contact:	(02) 6937 9100
After hours contact:	0409 619 549
Email:	workshop@rodneystransport.com.au

Names, positions and 24-hour contact details of individuals responsible to notify the relevant authorities under Section 148 of the POEO Act plan

Name:	Graeme Wooller
Positions:	General Manager
Business hours contact:	(02) 6937 9100
After hours contact:	0427 967 030
Email:	graeme@rodneystransport.com.au

Names, positions and 24-hour contact details for individuals responsible for managing the response to the a pollution incident

Name: Paul Tye
Positions: Workshop Manager
Business hours contact: (02) 6937 9100
After hours contact: 0409 619 549
Email: workshop@rodneystransport.com.au

b) RESPONSE AND RECOVERY

Define the likely pollution incident that will cause material harm to the environment. The trackable waste stored on the premises at Rodney's Transport Service is re-cycled batteries. The details of this product are as follows:

Product Name: Wet Filled With Acid

Accidental Release Measures

Minor spills

- Clean up spill immediately
- Secure product if safe to do so
- Bundle recoverable product
- Collect remaining materials in containers with covers for disposal at an accredited disposal site

Major spills

- Clear area of personnel and move upwind
- Alert the Fire Brigade and advice location and nature of incident (see emergency contact list page 6)
- Wear breathing apparatus and protective gloves
- Prevent spill from entering drains
- Stop the leak if safe to do so
- Contain the spill with sand or earth
- Collect recoverable product into suitable containers
- Wash area and prevent run-off
- If any contamination of drains occurs, advise emergency services (see emergency contact list page 6)

Follow the steps of the PRIMP 3g through 7 for completion of the requirements under the *Transport of Trackable Waste.*

APPENDICES

1. *MSDS - DIESEL*

RODNEY'S TRANSPORT SERVICE
MATERIAL SAFETY DATA SHEET

1. IDENTIFCATION OF THE SUBSTANCE/PREPARATION & COMPANY/UNDERTAKING

Material Name	**Shell Diesel**
Product Use	Fuel for on-road diesel powered engines
Product Code	002D1791
Manufacturer/Supplier	The Shell Company of Australia Limited 8 Redfern Road Hawthorn East, VIC 3123
Emergency Telephone Number	1800 651 818 (within Australia only)

2. HAZARD IDENTIFICATION

HAZARDOUS SUBSTANCE	NON-DANGEROUS GOODS Classified as hazardous according to the criteria of NOHSC and not classified as Dangerous
Symbol(s)	Xn harmful N Dangerous for the environment
R-phrase (s)	R40 Limited evidence of carcinogenic effect. R65 Harmful: may cause lung damage if swallowed R66 Repeated exposure may cause skin dryness or cracking R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in aquatic environment
S-Phrase(s)	S2 Keep out of reach of children S36/37 wear suitable protective clothing and gloves S61 avoid release to the environment S62 If swallowed, do not induce vomiting: seek medical advice immediately
Health Hazards	Slightly irritating to respiratory system. Breathing of high vapor concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache and nausea. May cause moderate irritation to skin. Repeated exposure may cause skin dryness or cracking. Harmful: may cause lung damage if swallowed. Limited evidence of carcinogenic effect. If material enters lungs, signs and symptoms may include coughing,
Signs & Symptoms	If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. The onset of respiratory symptoms may be delayed for several hours after exposure. Defating dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance.

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Safety Hazards	May ignite on surfaces at temperatures above auto-ignition temperature. Vapor in the headspace of tanks and containers may ignite and explode at temperatures exceeding auto-ignition temperature where vapor concentrations are within the the flammability ranges. Not classified as flammable but will burn. Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire.
Environment Hazards	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Preparation Description	Complex mixture of hydrocarbons consisting of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons with carbon numbers predominantly in the C9 - C25 range. May also contain several additives at <0.1% v/v each. May contain cetane improver (Ethyl Hexyl, Nitrate) at <0.2% v/v. May contain catalytically cracked oils in which polycyclic aromatic compounds mainly 3-ring but some 4 - 6 ring species are present.

Hazardous Components

Chemical Identity	CAS	EINECS	Symbols(s)	R-phrase(s)	Conc.
Fuels, diesel, no. 2	68476-34-6	270-676-1	Xn, N	R40; R65: R66: R51/53	<100.00%

4. FIRST AID MEASURES

Inhalation	Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
Skin contact	Remove contaminated clothing. Immediately flush skin with large amounts of water for at least 15 minutes and follow by washing with soap and water if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment.
Eye Contact	Flush eye with copious amounts of water. If persistent irritation occurs obtain medical attention.
Ingestion	If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear in the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (37° C) shortness of breath, chest congestion or continued coughing or wheezing.

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel

Specific Hazards	Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulars and gases (smoke). Carbon monoxide. Oxides of Sulphur. Unidentified organic and inorganic compounds. Carbon monoxide may be evolved if incomplete combustion occurs. Will float and can be reignited on surface water. Flammable vapors may be present even at temperatures below the flash point.

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Suitable Extinguishing Media	Foam, water spray of fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable Extinguishing media	Do not use water jet.
Protective Equipment for Fire fighters	Wear full protective clothing and self-contained breathing apparatus.
Additional Advice	Keep adjacent containers cool by spraying with water

6. ACCIDENTAL RELAEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment use Chapter 8 of this MSDS. See Chapter 13 for information on disposal. Observe all relevant local and international regulations. Evacuate the area of all non-essential personnel. Ventilate contaminated area thoroughly.

Protective Measures	Do not breath fumes, vapor. Do not operate electrical equipment. Shut off leaks if possible without personnel risk. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and firefighting water) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth or other appropriate barriers. Attempt to disperse the vapor or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment.
Clean up Methods	For small liquid spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. Shovel into a suitable clearly marked container for disposal or reclamation in accordance with local regulations.
Additional Information	Notify local authorities if any exposure to the general public or the environment occurs or is likely to occur. Local authorities should be advised if significant spillage cannot be contained.

7. HANDLING AND STORAGE

General Precautions	Avoid breathing vapors or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Chapter 8 of the MSDS. Use the information in this MSDS as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material. Air-dry contaminated clothing in a well-ventilated area before laundering. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Prevent spillages. Use local exhaust ventilation if there is a risk of inhalation of vapors, mists ore aerosols. Never siphon by mouth. Contaminated leather articles including shoes cannot be decontaminated and should be destroyed to prevent re-use. Classified as C1

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	(COMBUSTIBLE LIQUID) for the purpose of storage and handling in accordance with the requirements of AS 1940.
Handling	Avoid inhaling vapor and/or mists. Avoid prolonged or repeated contact with skin. When using do not eat or drink. Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. Earth all equipment. Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. The vapor is heavier than air, spreads along the ground and distant ignition is possible.
Storage	Tanks must be specifically designed for use with this product. Bulk storage should be diked (bunded). Locate tanks away from heat and other sources of ignition. Must be stored in a diked (bunded) well-ventilated area, away from sunlight, ignition sources and other sources of heat. Vapors from tanks should not be released to the atmosphere. Breathing losses during storage should be controlled by a suitable vapor treatment system. The vapor is heavier than air. Beware of accumulation in pits and confined spaces. Keep in a bunded area with a sealed (low permeability) floor, to provide containment against spillage. Prevent ingress of water.
Product Transfer	Avoid splash filling. Wait 2 minutes after tank filling before opening hatches or manholes. Wait 30 minutes after tank filling (for large tanks) before opening hatches or manholes. Do not use compressed air for filling, discharge or handling.
Recommended Materials	For container linings use mild steel, stainless steel. Aluminium may also be used for applications where it does not present an unnecessary fire hazard. Examples of suitable materials are: high density polyethylene (HDPE) and Viton (FKM) which have been specifically tested for compatibility with this product. For seals and gaskets use: graphite, PTFE, Viton A, Viton B.
Unsuitable Materials	Examples of materials to avoid are: natural rubber (NR), nitrate rubber NBR), ethylene propylene rubber (EDPM), polymethyl methacrylate (PMMA), polystyrene, polyvinyl chloride (PVC), polyisobutylene.
Container Advice	Containers, even those that have been emptied, can contain explosives vapors. Do not cut, drill, weld or perform similar operations on or near containers.
Additional Information	Ensure that all local regulations regarding handling and storage facilities are followed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Naphthalene	AU OEL	TWA	10 ppm	52 mg/m3
	AU OEL	STEL	15 ppm	79 mg/m3
Oil mist, mineral	AU OEL	TWA (Mist)		5 mg/m3

Additional Information	In the absence of a national exposure limit, the American Conference of Governmental Industrial Hygienists (ACGH) recommends the following values for Diesel Fuel: TWA - 100 mg/m3 Critical effects based on Skin & Irritation.
Exposure Controls	The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on risk assessment of local circumstances. Appropriate measures include: Use sealed systems as far as possible. Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Local exhaust ventilation is recommended. Eye washes and showers for emergency use.

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Personal Protective Equipment	Personal Protective Equipment (PPE) should meet recommended national standards. AS/NZS 1337: Eye protectors for industrial applications. AS/NZS 2161: Occupational Protective Gloves. AS/NZS 1715: Selection Use & Maintenance of respiratory protective devices. AN/NZS 1716: Respiratory protective devices.
Respiratory Protection	If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health., select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Where air-filtering respirators are unsuitable (i.e. airborne concentrations are high, risk of oxygen deficiency) use appropriate positive pressure breathing apparatus. Where filtering respirators are suitable, select an appropriate combination of mask and filter. All respiratory protection equipment and use must be in accordance with local regulations.
Hand Protection	Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended. Suitability and durability of a glove is dependent on usage e.g. Frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity Contaminated gloves should be replaced. Select gloves used to relevant standard. When prolonged or repeated frequent occurs, Nitrile gloves may be suitable. For incidental contact/splash protection Neoprene, PVS gloves may be suitable.
Eye Protection	Chemical splash goggles approved to EU Standard EN 166.
Protective Clothing	Chemical resistant gloves/gauntlets, boots and apron (where risk of splashing)
Environmental Exposure	Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapor.

9. PHYSICAL AND CHEMICALS PROPERIIES

Appearance	Yellow, Pale straw, Colourless, Liquid
Odour	May contain a deodorant
Initial Boiling Point & Range	170 - 390 °C / 338 - 374 °F
Flash Point	Typical 63 °C / 145 °F (ASTM D-93 / PMCC)
Lower/Upper Flammability or Exposure Limits	1 6 %(V)
Auto-Ignition Temperature	> 220 °C / 428 °F
Vapor Pressure	< 1 hPa at 20 °C / 68 °F
Density	Typical 84 g/cm3 at 15 °C / 59 °F
n-octanol/water partition coefficient (log Pow)	3 - 6
Kinematic viscosity	2 4.5 mm2/s at 40 °C / 104 °F

10. STABILITY AND REACTIVITY

Stability	Stable under formal conditions of use
Conditions to Avoid	Avoid heat, sparks, open flames and other ignition sources.

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Material to Avoid	Strong oxidising agents
Hazardous Decomposition Products	Hazardous decomposition products are not expected to form during normal storage. Thermal exposure is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

11. TOXICOLOGICAL INFORMATION

Basis for Assessment	Information given is based on product data, a knowledge of the components and the toxicology of similar products.
Acute Oral Toxicity	Lox toxicity: LD50 > 2000 mg/kg, Rat. Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.
Acute Dermal Toxicity	Low toxicity: LD50 > 2000 mg/kg, Rabbit
Acute Inhalation Toxicity	Low toxicity: LD50 > 5 mg/l / 4, Rat. High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.
Skin Irritation	May cause moderate skin irritation (but insufficient to classify). Prolonged/ repeated contact may cause defating of the skin which can lead to dermatitis.
Eye irritation	Slightly irritating.
Respiratory Irritation	Slightly irritating.
Sensitisation	Not a skin sensitiser
Repeated Dose Toxicity	Kidney: caused kidney effects in male rats which are not considered relevant to humans
Mutagenicity	In-Vitro mutagenicity studies show that mutagenic activity is related to 4-6 ring polycyclic aromatic content.
Carcinogenicity	Limited evidence of carcinogenic effect. Repeated skin contact has resulted in irritation and skin cancer in animals.
Reproductive and Developmental Toxicity	Not expected to be a developmental toxicant.

12. ECOCOLIGICAL INFORMATION

Information given is based on a knowledge of the components and the ecotoxicology of similar products. Fuel are typically made from blending several refinery streams. Ecotoxicological studies have been carried out on a variety of hydrocarbon blends and streams but not on those containing additives.

Acute Toxicity	Toxic: LL/EL/lL50 1 - 10 mg/l (to aquatic organisms) (LL/EL 50 expressed as the nominal amount of product required to prepare aqueous test extract).
Mobility	Floats on water. Partly evaporates from water or soil surfaces, but a significant proportion will remain after one day. Large volumes may penetrate and could contaminate groundwater. Contains volatile constituents.
Persistence/degradability	Major constituents are inherently biodegradable. The volatile constituents will oxidise rapidly by photochemical reactions in air.
Bioaccumulation	Contains constituents with the potential to bioaccumulate
Other adverse effects	Films formed on water ay effect oxygen transfer and damage organisms.

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13. DISPOSAL CONSIDERATIONS

Material Disposal	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or water courses. Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater contamination. Water arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor.
Local Legislation	Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

14. TRANSPORT INFORMATION

ADG

This material is not classified as dangerous according to the Australian Dangerous Goods Code.

IMDG

Identification Number	UN 3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S
Technical name	(Gas oil - unspecified)
Class / Division	9
Packing Group	III
Marine Pollutant	Yes

IATA

UN No.	3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s
Class / Division	9
Packing Group	III

Additional Information	Not classified under ADG 07 regulations as special provision AU 02 applies

15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

SUSDP Schedule	Not scheduled. When packed in containers having capacity of greater than 20 litres. S5. When packed in containers having capacity of less than 20 litres.
AICS	All components are listed or exempt.
Classification Triggers	Contains fuels, diesel
Other Information	National Code of Practice for the Preparation of Material Safety Data Sheets (NOHSC:2011) List of Designated Hazardous Substances (NOHSC: 10005), Approved Criteria for Classifying Hazardous Substances (NOHSC: 1008). Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment (NOHSC: 1003). Australian Dangerous Goods Code.

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Standard Uniform Scheduling of Drugs and Poisons.

16. OTHER INFORMATION

Additional Information	This document contains important information to ensure the safe storage, handling and use of this product.
R-Phrase(s)	
R 40	Limited evidence of carcinogenic effect.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed
R66	Repeated exposure may cause skin dryness or cracking
Review Date:	May 2020

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2. *MSDS – UNLEADED*

RODNEY'S TRANSPORT SERVICE
MATERIAL SAFETY DATA SHEET

1. IDENTIFCATION OF THE SUBSTANCE/PREPARATION & COMPANY/UNDERTAKING

Material Name	**Shell Unleaded Petrol**
Product Use	Fuel for spark ignition engines designed to run on unleaded fuel
Other Names	Gasoline
Product Code	002D1810
Manufacturer/Supplier	**The Shell Company of Australia Limited** 8 Redfern Road Hawthorn East, VIC 3123
Emergency Telephone Number	1800 651 818 (within Australia only)

2. HAZARD IDENTIFICATION

HAZARDOUS SUBSTANCE	DANGEROUS GOODS Classified as hazardous according to the criteria of NOHSC and as Dangerous Goods according to the Australian Dangerous Code
Symbol(s)	F+ Extremely flammable. T Toxic N Dangerous for the environment
R-phrase (s)	R12 Extremely flammable R38 Irritating to skin R45 May cause cancer R46 May cause heritable genetic damage R63 Possible risk of harm to unborn child R65 Harmful: may cause lung damage if swallowed R66 Repeated exposure may cause skin dryness or cracking R67 Vapors may cause drowsiness and dizziness R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in in the aquatic environment
S-Phrase(s)	S2 Keep out of reach of children S29 Do not empty into drains S45 In case of accident or if you feel unwell, seek medical advice immediately. S53 Avoid exposure. Obtain special instructions before use. S61 Avoid release to the environment S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label
Health Hazards	Vapors may cause drowsiness and dizziness. Slightly irritating to respiratory system. Irritation to skin. Moderately irritating to eyes. Harmful: may cause lung damage if swallowed. Possibility of organ or organ system damage from prolonged

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	exposure: see Chapter 11 for details. Target organ(s): Blood-forming organs. Peripheral nervous system. May cause heritable genetic damage. Possible risk of harm to the unborn child. A component or components of this material may cause cancer. This product contains benzene which may cause leukemia (AML - acute myelogenous leukemia). May cause MDS (Myelodysplastic Syndrome).
Signs & Symptoms	Skin irritation signs and symptoms may include a burning sensation, redness, swelling and/or blisters. Eye irritation signs and symptoms may include a burning sensation and a temporary redness of the eye. If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. The onset of respiratory symptoms may be delayed for several hours after exposure. Breathing of high vapor concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death. Damage to blood-forming organs may be evidenced: a) fatigue and anemia (RBC), b) decreased resistance to infection and/or excessive bruising and bleeding (platelet effect). Peripheral nerve damage may be evidenced by impairment of motor function (un coordination, unsteady walk or muscle weakness in the extremities and/or loss of sensation in the arms and legs). Auditory system effects may include temporary hearing loss and/or ringing in the ears.
Safety Hazards	Extremely flammable. Electrostatic charges may be generated during handling. Electrostatic discharge may cause fire. Liquid evaporates quickly and can ignite leading to a flash fire or an explosion in a confined space.
Environment Hazards	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Additional Information	This product is intended for use in closed systems only. S5. When packed in containers
SUSMP Schedule	having a capacity of 20 litres of less.
SUSMP Schedule	Not scheduled when packed in containers having capacity of greater than 20 litres.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture Description Complex mixture of hydrocarbons consisting of paraffins, cycloparaffins, aromatic and olefine hydrocarbons (including benzene at 1.0% v/v maximum), with carbon numbers predominantly in the C4 to C12 range. May also contain several additives at <0.1% v/v each.

Hazardous Components

Chemical Identity	CAS	EINECS	Symbols(s)	R-phrase(s)	Conc.
Gasoline, low boiling point	86290-81-5	289-220-8	F+, Xi, T, Xn, N	R12; R38; R45; R46; R63; R65; R67; R51/53	90.00-100.00%

Additional Information Contains Benzene, CAS # 71-43-2. Contains Toluene, CAS #108-88-3. Contains Ethyl benzene, CAS # 100-41-4. Contains n-Hexane, CAS # 110-54-3. Contains Naphthalene, CAS # 91-20-3. Contains Cyclohexane, CAS # 110-82-7. Contains Tri-methyl-benzene (all isomers), CAS # 25551-13-7, Contains Xylene (Mixed Isomers), CAS # 1330-20-7. Refer to Chapter 16 for full text of EC-R phrases.

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4. FIRST AID MEASURES

Inhalation	Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
Skin contact	Remove contaminated clothing. Immediately flush skin with large amounts of water for at least 15 minutes and follow by washing with soap and water if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment. When using high pressure equipment, injection of product can occur under the skin. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop.
Eye Contact	Flush eye with water while holding eye lids open. Rest eyes for 30 minutes. If redness, burning, blurred vision or swelling persist transport to the nearest medical facility for additional treatment.
Ingestion	If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3° C), shortness of breath, chest congestion or continued coughing or wheezing.
Advice to Physician	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel

Specific Hazards	Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. The vapour is heavier than air, spreads along the ground and distant ignition is possible. Will float and can be reignited on surface water.
Suitable Extinguishing Media	Foam, water spray of fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable Extinguishing media	Do not use direct water jets on the burning product as they could cause a steam explosion and spread of the fire. Simultaneous use of foam and water n the same surface is to be avoided as water destroys the foam.
Protective Equipment for Fire fighters	Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.
Additional Advice	If the fire cannot be extinguished the only course of action is to evacuate immediately. Keep adjacent containers cool by spraying with water. If possible remove containers from the danger zone. Contain residual material at affected sites to prevent material from entering drains (sewers), ditches and waterways.

6. ACCIDENTAL RELEASE MEASURES

Observe the relevant local and international regulations. Avoid contact with skin, eyes and clothing. Evacuate the area of all non-essential personnel. Ventilate contaminated area thoroughly. Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance on selection of personal

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protective equipment uses Chapter 8 of this MSDS. See Chapter 13 for information on disposal. If contamination of sites occurs remediation may require specialist advice. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Take precautionary measures against static discharges.

Protective Measures	Vapor can travel for considerable distances both above & below the ground surface. Underground services (drains), pipelines, cable ducts) can provide preferential flow paths. Do not breath fumes, vapor. Take measures to minimise the effects on groundwater. Contain residual material at effected sites to prevent material from entering drains (sewers), ditches, and waterways. Shut off leaks, if possible, without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and firefighting water) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth or another appropriate barrier. Attempt to disperse the vapor or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment.
Clean up Methods	For large liquid spills (> 1 drum), transfer by mechanical means such as a vacuum truck to a salvage tank for recovery or safe disposal. Allow residues to evaporate or or soak up with an appropriate absorbent material and dispose of safely. Remove Remove contaminated soil and dispose of safely. For small liquid spills (<1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.
Additional Information	Notify local authorities if any exposure to the general public or the environment occurs or is likely to occur. Local authorities should be advised if significant spillage cannot be contained.

7. HANDLING AND STORAGE

General Precautions	Avoid breathing vapors or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Chapter 8 of the MSDS. Use the information in this MSDS as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material. Air-dry contaminated clothing in a well-ventilated area before laundering. Contaminated leather articles including shoes cannot be decontaminated and should be destroyed to prevent reuse. Turn off all battery operated portable electronic devices (ie mobile phone, pagers) before operating gasoline pump. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. For comprehensive advice on handling, product transfer, storage and tank cleaning refer to the product supplier. Do not use as solvent or other non-motor uses. Vehicle fueling and workshop areas - Avoid inhalation of vapors and contact with skin, when filling or emptying a vehicle.
Handling	When using do not eat or drink. Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. Never siphon by mouth. The vapor is heavier than air, spreads along the ground and distant ignition is possible. Avoid exposure
Storage	Tanks must be specifically for use with this product. Bulk storage should be diked

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	(bunded). Locate tanks away from heat and other sources of ignition. Cleaning, inspection and maintenance of storage tanks is a specialist operation, which requires the implementation of strict procedures and precautions.
Product Transfer	Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<= 1 m/sec until fill pipe submerged to twice its diameter, then <= 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharge or handling operations. Wait 2 minutes after tank filling (for tanks such as those on road tanker vehicles) before opening hatches or manholes. Wait 30 minutes after tank filling (for large storage tanks) before opening hatches or manholes.
Recommended Materials	For container & container linings use mild steel or aluminum. Aluminum may also be used for applications where it does not present an unnecessary fire hazard. Examples of suitable materials are high density polyethylene (HDPE), polypropylene (PP) and Viton (FKM) which have been specifically tested for compatibility with this product. For seals and gaskets use graphite, PTFE, Viton A, Viton B. For container linings use amine-adduct cured epoxy paint.
Unsuitable Materials	Some synthetic materials may be unsuitable for containers or container linings depending on the material specifications and intended use. Examples of materials to avoid are natural rubber (NR), nitrate rubber (NBR), ethylene propylene rubber (EDPM), polymethyl methacrylate (PMMA), polystyrene, polyvinyl chloride (PVC), polyisobutylene. However, some may be suitable for glove materials.
Container Advice	Containers, even those that have been emptied, can contain explosives vapors. Do not cut, drill, weld or perform similar operations on or near Gasoline containers must not be used for storage of other products.
Additional Information	Ensure that all local regulations regarding handling and storage facilities are followed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Material	Source	Type	ppm	mg/m3	Notation
Gasoline, low boiling point, naphtha	ACGIH	TWA	300 ppm		
	ACGIH	STEL	500 ppm		
Naphthalene	AU OEL	TWA	10 ppm	52 mg/m3	
	AU OEL	STEL	15 ppm	79 mg/m3	
	ACGIH	TWA	10 ppm		
	ACGIH	STEL	15 ppm		
	ACGIH	SKIN_DES			Can be absorbed through the skin
Cyclohexane	ACGIH	TWA	100 ppm		
	AU OEL	TWA	100 ppm	350 mg/m3	
	AU OEL	STEL	300 ppm	1,050 mg/m3	
Xylene	ACGIH	TWA	100 ppm		
	ACGIH	STEL	150 ppm		
	AU OEL	TWA	80 ppm	350 mg/m3	

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3. *MSDS – CORROSIVE 8*

RODNEY'S TRANSPORT SERVICE
MATERIAL SAFETY DATA SHEET

1. IDENTIFCATION OF THE SUBSTANCE/PREPARATION & COMPANY/UNDERTAKING

Product Name	BATTERIES, WET, FILLED WITH ACID electric storage
Other Name	Lead Acid Battery
Product Use	Power source for electric start motors Charging hazard, completion of charging process includes evolution of highly flammable and explosive hydrogen gas which is readily detonated by electric spark. No smoking or naked lights. Do not attach/detach metal clips or operate open switches during charging process because arcing/sparking hazard. Overcharging to excess results in vigorous hydrogen evolution (boiling) which may cause generation of corrosive acid mist. Large installations must be constructed of acid resistant materials and be well ventilated.
UN Number	2794
Dangerous Goods Class	8
Packing Group	Nil
Subsidiary Risk	Nil
Hazchem Code	2W
Poisons Schedule Number	Except
Supplier	Enirgi Group Corporation 509 Byrnes Rd Bomen WAGGA WAGGA NSW 2650
Emergency Telephone Number	02 69379525

2. HAZARD IDENTIFICATION

HAZARDOUS SUBSTANCE	HAZARDOUS
Appearance	Rectangular plastic casing with exposed terminals for electrical connections. High weight to ratio volume The hazard of lead acid batteries include: corrosive contents short circuit; accidental discharge. Current low by external heat may boil battery acid with evolution of large amounts of highly corrosive acid mist/vapour. Boiling may develop internal pressure and cause explosion with scattering of acid contents. Battery circuits must include electrical fusible links- terminals and external metal parts must be insulated. So not clean terminals or battery top with conducting liquids. SPILL - damage to casing or overturning may cause corrosive acid contents to spill, causing skin burns on contact. Acid reacts quickly with many metals, generating highly flammable and explosive hydrogen gas; may also weaken metal structures. Chemical hazards relate to the contents of the battery.

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Hazard Ratings	Flammability	0
	Toxicity	0
	Body Contact	3
	Reactivity	0
Scale	Min/Nil	0
	Low	1
	Moderate	2
	High	3
	Extreme	4

Boiling Point (deg C)	Not Applicable
Melting Point (deg C)	Not Applicable
Vapour Pressure (deg C)	Not Applicable
Specific Gravity	1.2-1.3 (acid)
Flash Point (deg C)	None
Lower Explosive Limit (%)	Not Applicable
Upper Explosive Limit (%)	Not Applicable
Solubility in water (g/L)	Not Applicable

R-phrase (s)	R20/22 Harmful if inhaled or ingested R33 Danger cumulative effect R35 Causes severe burns R58 May cause long term adverse effects in the environment R61 May cause harm to unborn children R62 Possibility of impaired fertility
S-Phrase(s)	S1/2 Keep locked up and out of reach of children S26 contact with eyes, rinse immediately and seek medical advice S30 Never add water to this product S45 In case of accident, seek medical advice immediately S53 Avoid exposure; obtain special instructions before use

3. COMPOSITION/INFORMTION ON INGREDIENTS

Ingredients	Lead; CAS Number 7439-92-1; average proportion by weight = 30-60% Lead dioxide; CAS Number 1309-60-0; average proportion by weight = 10-30% Sulphuric Acid; CAS Number 7664-93-9; average proportion by weight = 20-40%

4. FIRST AID MEASURES

Swallowed	If this product is swallowed - rinse mouth with plenty of water. If poisoning occurs, contact doctor or the Poisons Information Centre. If swallowed, DO NOT induce vomiting. Give glass of water.
Eyes	If this product comes into contact with the eyes, immediately hold the eyes open and wash continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting upper and lower lids. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury

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Eyes continued	eye injury should only be undertaken by skilled personnel.
Skin	If this product comes into contact with the skin, immediately flush body and clothes with large amounts of water using safety shower if available. Quickly remove all contaminated clothing, including footwear. Wash affected areas with water (and soap (if available) for at least 15 minutes. Transport to local hospital or doctor.
Inhaled	If this product is inhaled, remove to fresh air (if fumes or combustion products are inhaled). Lay patient down. Keep warm and rested. If available, administer medical oxygen by trained personnel. If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Transport to hospital or doctor without delay.
Advice to Doctor	For acute or short term repeated exposures to strong acids, airway problems may arise from laryngeal oedema and inhalation exposure. Treat with 100% oxygen initially. Respiratory distress may require cricothyroidotomy if endotracheal intubation is contraindicated by excessive swelling. Intravenous lines should be established immediately in all cases where there is evidence of circulatory compromise. Strong acids produce a coagulation necrosis characterised by formulation of coagulum (eschar) as a result of dissipating action of the acid on the proteins in specific tissues.
Ingestion	Immediate dilution (milk or water) within 30 minutes post ingestion is recommended. Do not attempt to neutralise the acid since exothermic reaction may extend the corrosive injury. Be careful to avoid further vomit since re-exposure of the mucosa to the acid is harmful. Limit fluid to one or two glasses in an adult. Charcoal has NO place in acid management. Some authors suggest the use of lavage within in 1 hour of ingestion.
Skin	Skin lesions require copious slain irrigation. Treat chemical burns as thermal burns with non-adherent gauze and wrapping. Deep second degree burns may benefit from topical silver sulfadiazine.
Eyes	Eye injuries require retraction of the eyelids to ensure thorough irrigation of the conjunctival cul-de-sac. Irrigation should last at least 20-30 minutes. Do not use neutralising agents or any other additives. Several litres of saline are required. Cycloplegic drops (1% cyclopentolate for short-term use; 5% homatropine for longer term use), antibiotic drops, vasconstrictive agents or artificial rears may be indicated dependent on severity. Steroid eye drops should only be administered with the approval of a consulting ophthalmogist.

5. FIRE FIGHTING MEASURES

Fire/Explosion Hazard	Non combustible dangerous hazard when exposed to heat, flame and oxidisers. May omit corrosive fumes. Decomposes on heating and produces acrid and toxic fumes of sulphuric acid (H2S04) and sulphuric oxides (Sox). Contact with readily oxidisable organic material may cause ignition/fire.

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Heating may cause expansion or decomposition leading to violent rupture of containers.
Reacts with metals producing flammable/explosive hydrogen gas.

6. ACCIDENTAL RELEASE MEASURES

Minor Spills

Clean up all spills immediately.
Avoid breathing vapours and contact with eyes and skin.
Control personal contact by using protective equipment.
Neutralise, contain and absorb spill with sand, earth, inert material or vermiculite.
Wipe up. Place in suitable labelled container for waste disposal.
Use soda ash or slaked lime to neutralise.

Major Spills

Do not touch the spill material. Clear the area of personnel and move upwind.
Alert the Fire Brigade and advise the location and nature of the hazard.
May be violently or explosively reactive. Wear full body protection with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Consider evacuation.
Stop leak if so to do so.
Contain spill with sand, earth or vermiculite
Collect recoverable product into labelled containers for recycling
Neutralise/decontaminate residue.
Collect solid residue and seal in labelled drums for disposal.
Wash area and prevent run off into drains.
After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.
If contamination of drains or waterways occurs, advise emergency services.
Do not use water or neutralising agents indiscriminately on large spills.
Use soda ash or slaked lime to neutralise.

7. HANDLING & STORAGE

Storage and Transport

Check containers are clearly labelled, packaged and strapped.

Storage Incompatibility

Protect form accidental short circuit.

Storage Requirement

Keep dry. Store in original containers. Keep containers securely sealed.
No smoking, naked lights or ignition sources.
Store in a cool, dry, well ventilated area.
Store away from incompatible materials, including combustibles, organise materials and strong reducing agents.
Protect containers against physical damage. Check regularly for leaks.
Observe manufacturers storing and handling recommendations.
Incompatibility avoid strong reducing agents, sulphur trioxide gas, strong oxidizer.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Acute Health Effects

Health effects relate to the corrosive sulphuric acid battery contents.

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Swallowed	Considered an unlikely route of entry in commercial/industrial environments. The liquid is highly discomforting and corrosive if swallowed and capable of causing burns to mouth, throat, oesophagus with extreme discomfort and pain. Ingestion may result in nausea, abdominal irritation, pain and vomiting.
Eye	The liquid is extremely discomforting and corrosive to the eyes and any contact may cause rapid tissue destruction and is capable of causing severe damage with loss of sight. The material may produce severe irritation to the eye causing pronounced inflammation.
Inhalation	The vapour/mist is highly discomforting and corrosive to the upper respiratory tract if inhaled.
Skin contact	The liquid is highly discomforting and corrosive to the skin and contact may cause tissue destruction i.e. chemical burns.
Chronic Health Effects	Principal routes of exposure are skin contact with acid contents, eye contact with acid contents, inhalation of acid mists generated when overcharging occurs. Repeated minor exposure to acid mist can cause erosion of teeth and inflammation of the upper respiratory tract leading to chronic bronchitis. There is evidence that the corrosion of teeth enamel occurs at 1 mg/m3 but that acclimatized workers may tolerate 3-4 times that level. Workers chronically exposed to sulphuric acid may show skin lesions, tracheobronchitis, stomatitis, conjunctivitis and gastritis. Occupational exposure to strong inorganic acid mists containing sulphuric acid is designated by IARC to be carcinogenic. Increased risk of laryngeal cancer being seen with chronic exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Material	% by Weight	CAS Number	Exposure OSHA	Limits ACGIH
Lead	51.4	7439-92-1	0.05mg/m3	0.15mg/m3
Electrolyte (Sulphuric Acid)	19-44	7664-93-9	1mg/m3	1mg/m3
Lead Dioxide (Pb02)	20.8	1309-60-0	0.05mg/m3	0.05mg/m3
Non-Hazardous Ingredients	8.2			

10. STABILITY AND REACTIVE DATA

Stability	Not Applicable
Incompatible Materials	Many common metals.
Conditions of Reactivity	Exposure to battery acid (electrolyte)
Hazardous Decomposition products	For battery acid - if heated above 340oC, sulphuric acid may decompose to sulphur trioxide, carbon monoxide, sulphuric acid mist, sulphur dioxide and hydrogen.

11. TOXICOLOGY PROPERTIES

Exposure Limits	Blood lead levels above 50 ppm is considered at risk.
Inhalation	May cause irritation.

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Skin Contact	May cause rash or irritation
Eye Contact	May cause eye damage.
Ingestion	May cause irritation or burning
Chronic effects	Battery Acid (electrolyte) and lead are poisonous.
Carcinogenicity	Lead and lead dioxide are listed as carcinogens, however there is little or no possibility of exposure under normal conditions of use.
Other Reproductive Effects	Long term exposure to high Blood Lead Levels may cause birth defects.
Sensitization to materials	Product is not known to cause allergies.
Synergistic materials	None known.

12. DISPOSAL CONOSIDERATIONS

Disposal	Acid Contents: recycle wherever possible. Consult State Land Waste Management Protective Gloves. AS/NZS 1715: Selection Use & Maintenance of respiratory protective devices. AN/NZS 1716: Respiratory protective devices.
Material disposal	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical propertied of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or water courses.
Local Legislation	Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

Class 8
Class 1
Class 4.3
Class 5.1

Class 6	regulations, preferably to a recognised collector or contractor.
Class 7	Radioactive substances; foodstuffs and foodstuff empties.
Class 8	Strong Alkalis.

Packaging	Group Number 3. Insulate terminals against short circuiting. Packed with insert cushioning materials in a fibreboard box - package gross 40 kg: wooden box or wooden slatted crate -package gross 225kg.

13. TRANSPORT INFORMATION

ADG
This material is not classified as dangerous according to the Australian Dangerous Goods Code.

Class 8	Corrosive shall not be loaded in the same vehicle or packed the same freight containers as the following:
Class 1	Explosives
Class 4.3	Dangerous when wet substances

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Class 5.1	Oxidizing agents
Class 5.2	Organic peroxides
Class 6	Poisonous (toxic) substances (where poisonous substances are cyanides and corrosives are acids).
Class 7	Radioactive substances; foodstuffs and foodstuff empties.
Class 8	Strong Alkalis
Class / Division	9
Packaging	Group Number 3 Insulate terminals against short circuiting. Packed with insert cushioning materials in a fibreboard box - package gross 40 kg. Wooden box or wooden slatted crate - package gross 225kg.

14. OTHER INFORMATION

Additional Information	This document contains important information to ensure the safe storage, handling, transport and use of this product.
Review Date:	May 2020

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4. *MSDS – BULK CANOLA MEAL*

RODNEY'S TRANSPORT SERVICE
MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & COMPANY/UNDERTAKING

Product Name	NON-GM Canola Meal (solvent) Extracted
Other Name	Seed Cake
Product Use	Animal Stock Geed
UN Number	1386
Dangerous Goods Class	4.2 Spontaneously Combustible
Packing Group	III
Subsidiary Group	
Hazchem Code	1Y
Poisons Schedule Number	N/A
Supplier	Riverian Oils and BioEnergy (ROBE) 177 Trahairs Road BOMEN NSW 2650
Emergency Phone Number	03 9490 1700

2. HAZARD IDENTIFICATION

Hazardous Substance	Classified as dangerous Goods, Non-Hazardous Substance. Hazard classification according to criteria of NOHSC. Dangerous goods classification according to the Australia Dangerous Goods Code
Appearance	Coarse Brown Powder
Odour	Grainy type odour
Bulk Density, kg/ m³	Approx. 55
Oil Content	Maximum 5.0%
Moisture Content	Maximum 12.0% Combination of Oil & moisture not to exceed 17.0%
Auto Ignition	75°C

3. COMPOSTION/INFORMATION INGREDIENTS

Ingredients	Canola Meal; CAS Number 121957-95-7; proportion = 100%

4. FIRST AID MEASURES

Inhalation	Inhalation is unlikely to occur. If inhaled blow the nose to clear the nasal passages. If discomfort persists seek medical attention
Eyes	Flush thoroughly with copious amounts of running water. If symptoms persist, seek medical attention
Skin	If skin contact occurs flush with running water. If discomfort continues seek medical attention.
Advice to Doctor	Treat symptomatically

5. FIRE FIGHTING MEASURES

Fire/Explosion Hazard	Use carbon dioxide, dry powder foam. Combustible material may auto ignite if stored above 75℃. Produces combustion products carbon monoxide, carbon dioxide. Use inert gas in closed storage. In open areas use water spray whilst turning over smouldering product.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Spillages may cause slipping hazard if the spill becomes wet. Wear appropriate protective equipment and clothing to minimise exposure. Contain all spills – Prevent product from entering storm water drains. Recover as much product as possible. If not contaminated return to storage for resuse. If contaminated dispose of in manner which meets all local regulatory requirements.

7. HANDLING & STORAGE

Precautions for safe handling	Keep dry in well ventilated storage. Establish good housekeeping practices in storage areas.
Conditions of safe handling	Store away from direct sunlight at ambient temperatures in ventilated steel tanks/silos/bins or plastic drums.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

National Occupational	Not assigned by NOHSC
Exposure Limits	No Exposure limits
Biological Limits Values	No Biological limit available
Engineering	General room ventilation should be adequate. Bins should be ventilated; gas and temperature monitoring should be carried out. Oxidation processes may lead to a life-threatening shortage of oxygen
Personal Protection	Overalls, goggles and gloves

9. PHYSICAL AND CHEMICAL PROPERTIES

Material	% by Weight
Oil content	5.0%
Moisture Content	12.0%
Combination of Oil and moisture not to exceed 17.0%	
Auto Ignition	75°C

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Conditions to avoid	High temperature storage

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Incompatible Materials	Strong acids, alkali or oxidising agents
Hazardous	Carbon dioxide and carbon monoxide may form when heated
Hazardous Polymerization	Will not occur

11. ECOLOGICAL INFORMATION

Ecotoxicity	No Ecotoxicity data available
Persistence/Degradability	Avoid product entering waterways
Mobility	Not available
Environment Protection	Do not discharge product unmonitored into the environment

14. TRANSPORT INFORMATION

Transport Information	Classified as a Dangerous Good, according to the Australian code for the Transport of Dangerous Goods by Road and Rail (7th Edition)
UN Number	1386
Dangerous Goods Class	4.2 Spontaneously Combustible
HS Code	1208.90.00
Proper shipping name	Seed Cake
Packing Group	III
HAZCHEM CODE	1Y
Poisons Schedule	Not applicable
Containers	Keep dry, at ambient temperatures, well ventilated

15. REGULATORY INFORMATION

Regulatory Information	Classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia Non Hazardous Substance according to the criteria of WorkSafe Australia. Not assigned by NOSHC
Poisons Schedule	Not Scheduled

Review Date: May 2020

MSDS Canola Meal, Version 3, May 2019

5. *ATTENDANCE TRAINING SHEET*

TRAINING ATTENDANCE SHEET

Select 1 of the following				
Induction training	☐	Date:	Trainer Name	
Mock Emergency Training	☐	Time	Trainer Signature	

Division	Employee Name	Employee Signature

Attendance Sheet, Emergency Plan, Version 1, May 2019

6. *AMENDMENT SHEET*

EMERGENCY PLAN AMENDMENTS

New Issue Number	Issue Date	Section/Page Number	Description of Change	Name	Signature