

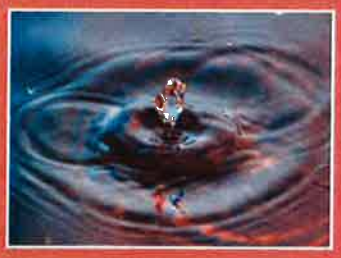

Kiama Municipal Council

Pollution Incident Response Management Plan Minnamurra Waste Disposal Depot

Report E2W-0181 R001b (V1)

16 May 2018

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Client: Kiama Municipal Council

Project: Pollution Incident Response Management Plan

Minnamurra Waste Disposal Depot (EPL No. 5958)

Prepared for:
Kiama Municipal Council
P.O. Box 75 Kiama
NSW 2533

Report: 16 May 2018
Ref: E2W-0181 R001b (v1)

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TABLE OF CONTENTS

FIGURES

PLATES Site Environmental & Safety Equipment (CRC site, fire extinquishers, spill kits, infrastructure-machinery-fire fighting, safety equipment- showers, emergency contact numbers, water tanks, fuel tanks).

APPENDICES

1. Introduction

Earth2Water Pty Ltd (E2W) was engaged by Kiama Municipal Council (KMC) to provide the Pollution Incident Response Management Plan (PIRMP) for the Minnamurra Waste Disposal Depot (MWDD EPL No. 5958). This is the second version (initial September 2012) of the PIRMP by E2W which follows the landfill rehabilitation works (2006) and amendments to the POEO Act in 2011 (i.e. implementation of pollution incident response management plan and notification requirements). The construction of the CRC Building was completed in 2016 (Figure 3).

This PIRPM includes a plan for mitigating site pollution (air, soil, water) and a preliminary hazard and risk assessment for the site. The draft PIRMP (E2W, March 2018) was audited by NSWEPA (May 2018, Appendix A-5) and is now updated with the requested additional information.

The site has existing groundwater pollution associated with the former landfill activities, and current site activities (CRC Building, transfer station, vehicle and materials storage, fuel activities etc) which have potential to impact the site. The MWDD covers an area of approximately 50 acres (~20 ha), while the landfill mound occupies approximately 6 ha (Figure 1). This PIRMP by E2W is to be read in conjunction with KMC overarching site management plan for the Minnamurra Landfill site.

This PIRMP includes a description of the site, existing activities, environmental setting, control measures, training, monitoring, reporting and notification requirements. As part of the EPL for the site, KMC is required to prepare, keep, test and implement a PIRMP for the site (commencing 6 February 2012).

1.1 General Requirements of the Plan

The content of this EMP is based on the *NSW EPA Pollution incident response management plans: Proposed amendments under the POEO (General) Regulation 2009.*

The POEO Act (2011) 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.

The objectives (se per Section 153C of the Amendment Act) of these plans are to:

- ensure comprehensive and timely communication about a pollution incident to staff at the premises, the Environment Protection Authority (EPA), other relevant authorities specified in the Act (such as local councils, NSW Ministry of Health, WorkCover NSW/Safe Work Australia, and Fire and Rescue NSW) and people outside the facility who may be affected by the impacts of the pollution incident
- minimise and control the risk of a pollution incident at the facility by requiring identification of risks and the development of planned actions to minimise and manage those risks

- ensure that the plan is properly implemented by trained staff, identifying persons responsible for implementing it, and ensuring that the plan is regularly tested for accuracy, currency and suitability.

The specific requirements for pollution incident response management plans are set out in Part 5.7A of the POEO Act and the Protection of the Environment Operations (General) Regulation 2009 (POEO (G) Regulation). In summary, this provision requires the following:

- All holders of environment protection licences must prepare a pollution incident response management plan (section 153A, POEO Act).
- The plan must include the information detailed in the POEO Act (section 153C) and be in the form required by the POEO(G) Regulation (clause 98B).
- Licensees must keep the plan at the premises to which the environment protection licence relates or, in the case of trackable waste transporters and mobile plant, where the relevant activity takes place (section 153D, POEO Act).
- Licensees must test the plan in accordance with the POEO(G) Regulation (clause 98E).
- If a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened, licensees must immediately implement the plan (section 153F, POEO Act).

E2W consider that the Minnamurra site is relatively low risk given the recent landfill rehabilitation works (2006) and current activities at the site (CRC Building and recycling). The site is currently controlled and managed by KMC staff.

The PIRMP has been tested by KMC (Tony Hardy) on several occasions since 2013 (Appendix A-1).

2. Site Information & Environmental Setting

The Minnamurra Waste Disposal and Recycling Depot (MWDD) is located 1 km north of the Minnamurra town ship (Figures 1 and 2). The site is located within a swamp environment, bounded to the west by the rail line and Riverside Drive (formerly a part of the Princes Highway), and to the north and east by the confluence of Rocklow Creek and Minnamurra River. The site is approximately 1 km west of Mystics (Minnamurra) Beach (Figure 1).

KMC has owned and operated the MWDD from the 1960's until its closure in October 2006. The MWDD operated as a Solid Waste Class 1 Landfill under the EPL No. 5958. The MWDD formerly comprised a night soil depot for liquid pump out sullage, which ceased in 1998. The existing licence and amendments required the submission of a Landfill Closure Plan (LCP), which was completed by E2W in October 2005. Landfill rehabilitation works were completed by KMC in 2006 and 2007.

As of October 2006, Minnamurra Landfill only accepts green waste and small loads of recyclable materials. All general waste materials are diverted to the waste facility at Shellharbour (Dunmore Waste Disposal Depot).

In 2016, the CRC Building was constructed to recycle and store/dispose house hold waste from the community (Figure 3 and Appendix B).

Environmental policies and procedures are in place for the site operations, including monitoring at the landfill site. Surface and groundwater monitoring is conducted on a quarterly basis at the site to assess actual or potential impacts associated with the MWDD on the surrounding aquatic environment. Gas monitoring is undertaken by KMC to measure the performance of landfill rehabilitation works (i.e. EPL 5958 conditions).

The MWDD covers an area of approximately 50 acres (~20 ha), while the landfill mound (capped and rehabilitated) occupies approximately 6 ha. At present, the MWDD comprises the following features:

- An elevated landfill mound (capped) ranging from 1 to 14 m AHD. The landfill mound was rehabilitated in 2006/2007 according to the LCP submitted by E2W in October 2005,
- A weighbridge and administration office/toilet block,
- KMC truck parking area,
- KMC storage sheds,
- Dog impounding facility,
- Night soil deposit, which historically accepted night soil sludge; and
- CRC Building (since 2016, Appendix B)

2.1 KMC Current Site Activities

- Activities and Maintenance of landfill mound and mulching, material storage, landscaping
- Waste transfer station
- KMC storage facilities
- CRC Building for recycling domestic materials
- Wash bay for KMC machinery (including oily water interceptor)
- Above ground fuel storage
- Administration building

The CRC Building was constructed in 2016 and is 36 metres long x 11 metres wide. The following materials are received at the CRC: The Fire extinguishers and Spill Kits are available within the CRC building.

- Water Based Paint, Oil Based paint, Engine Oil, Other Oils, E-Waste, Mixed recycling, Drum Muster Containers, Silage Wrap, Clothing, Polystyrene, Car batteries, Household batteries, Mobile Phones, Smoke Detectors, Pressure Pack Cans, X Rays, Toner Cartridges, Gas Bottles, Fire Extinguishers.

Toxfree Pty Ltd provides sealed containers lined with heavy duty plastic bags for the following receivable material;

- Water/oil based paints, Oils

Toxfree Pty Ltd provide 20 litre plastic buckets lined with heavy duty plastic bags for the following.

- Household batteries, mobile phones, smoke detectors.

Toxfree provide 200 litre sealed containers lined with heavy duty plastic bags for the following;

- Pressure pack spray can

Toxfree Pty Ltd provide suitable containers for the following receivable materials.

- E-waste, Fluor Tubes, Light bulbs, Gas bottles.

Car Batteries are stored on sealed leak-proof pallets.

This Site currently operates as follows:

- Office, Monday to Friday - 8am to 4pm
- KMC Truck Operations, Monday to Friday (5am to 4pm), Saturday/Sunday (5am to 10 am)

2.2 Environmental Setting

The environmental setting of the site is summarised as follows:

- The long-term mean and median rainfall values available for the Kiama Bowling Club (Latitude 344033 N and Longitude 1055103E) between 1897 and 2001 indicate that average yearly rainfall at the MWDD is 1261 mm/year.
- A plan of the existing site topography and surrounds is presented in Figure 1. The site is located within mangrove tidal flats, an estuarine environment associated with Rocklow Creek and Minnamurra River. Local relief is less than 3 m AHD around the footprint of the landfill (except southern wall), with slopes generally less than 5%. The landfill forms a mound, which reaches a maximum of 14 m AHD above the surrounding low-lying ground surface (approximately 1 m AHD).
- The site is located within Quaternary alluvial sediments comprising sands and silts. The geology is dominated by fine to medium sandy sediments with minimal sandy silt and sandy clays. In most places, the sand is overlain by a 0.5 m thick organic silty loam.
- The hydrogeology at the site is dominated by a semi-confined sandy aquifer. Groundwater is encountered at depths of approx 1 m below natural ground level (~0.5 m AHD) along the west, north and east sides of the landfill mound. The groundwater quality at the site varies from potable to saline. Groundwater generally becomes more saline in the vicinity of mangroves and tidal saline water bodies (i.e. Rocklow Creek and Minnamurra River).The predominant groundwater flow direction at the site is considered to be north-east and towards the confluence of Rocklow Creek and Minnamurra River.
- The contamination of deep and shallow groundwater arises from nutrient enrichment at the MWDD and has been reported on in previous annual monitoring reports by Ecoengineers Pty Ltd (2004) and E2W (2005 to 2011). The leachate plume originating from the MWDD is likely to persist for years after landfill remediation due to the age (1960s) of the waste mound. Improvements in groundwater quality is expected over the short to medium term (up to ~10 years) reflecting the rate of groundwater flushing effects from rainfall recharge.
- The hydrology of the area is dominated by Rocklow Creek and Minnamurra River. Groundwater discharge, with possible leachate from both the Minnamurra and Shellharbour landfills, may be contributing to the nutrients detected in Rocklow Creek (Figure 1).The Minnamurra River drains a catchment of approximately 142 km^2. Rocklow Creek catchment has an area of 23 km^2 and occupies the northern most portion of the Minnamurra River catchment. Rocklow Creek flows into the main arm of

the Minnamurra River downstream of the MWDD, approximately 2 km upstream of the river entrance.

The groundwater at the Minnamurra site is vulnerable to pollution due to the permeable sands and shallow depth to groundwater. The Minnamurra River and Rocklow Creek together (& associated wetlands -marine water) are located immediately downhill and receive storm water runoff from the site area. Groundwater and surface water monitoring is conducted at the site as per EPL conditions. The hazard and risk assessment for the site is presented in Appendix A-2 and A-3.

3. Pollution Incident Response Management Plan (PIRMP)

As the purpose of plans is to improve the management of pollution incidents and facilitate better coordination with the relevant response agencies, they must be able to be provided in written form, and be available at the premises and able to be provided to an authorised EPA officer on request. While plans can be prepared and stored in other forms, a written copy must be available to an authorised EPA officer and to any person who is responsible for implementing the plan.

The responses to the EPA audit (May 2018) is presented in Appendix A-5.

Potential (example) circumstances which would trigger or activate this PIRMP for the Minnamurra site is as follows:

- Landfill collapse (significant erosion of batter slopes) and debris/waste exposure and escape on the landfill mound and/or collapse of groundwater holding dams,
- Excessive landfill gas generation/accumulation, strong odour and potentially explosive atmosphere in proximity to buildings, subsurface pits/structures near the landfill mound,
- Significant spillage of stored fuel or chemicals (>5L) which can spread into drainage tracts or offsite water ways,
- Midnight or unauthorised dumping of waste soils/asbestos waste at the site or site boundary/entrance.
- Transport/heavy machinery incidents at site/site entrance involving release of liquids or unknown chemicals (pesticides, gases, oils).
- Incidental spillage/liquid released from CRC Building.

Identification of pollution incidences is required by KMC and immediate liaison with site manager for activation of the PIRMP (refer to Appendix A-1 and contact information). Should the site manager not be immediately contactable then KMC staff is required to contact "000" (if combat emergency is required) and/or other appropriate authorised agencies as per Appendix A-1 (note: training of staff is required to assist with activation of the PIRMP).

The PIRMP has been tested by KMC (Tony Hardy) on an annual basis since 2013 (Appendix A-1).

The PIRMP for the site is to be incorporated into KMC overarching site management plan. The new requirements for the Minnamurra site are outlined in the subsections below:

3.1 Procedures for Notification Pollution Incidence

The objective of the plan is to "Ensure comprehensive and timely communication about a pollution incident to staff at the premises, the Environment Protection Authority (EPA), other relevant authorities specified in the Act (such as local councils, NSW Ministry of Health, WorkCover NSW/Safe Work Australia, and Fire and Rescue NSW) and people outside the facility who may be affected by the impacts of the pollution incident".

- A list of all relevant authorities for reporting pollution incidences are presented in Appendix A-1. The contact details (phone and email- as available) are included together with authorised KMC staff. The KMC managers (or delegated persons which are contactable 24/hr basis) are responsible for the notification of "all" authorities, with initial response depending on the incidence (combat agency- fire, Ambulance etc). The notification of pollution incidence is to be documented by KMC to verify that procedures were adequately implemented, and also for future testing purposes.

Protocol for Industry Notification

1. Call "000" if the incident presents an immediate threat to human health or property. Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service are the first responders, responsible for controlling and containing incidence.

2. If the incident does not require an initial combat agency, or once the "000" call has been made, notify the relevant authorities in the following order (Refer to Appendix A-1);
    a. The ARA (usually Council or NSW EPA)
    b. Public Health Unit
    c. Workcover Authority/Safe Work Australia
    d. Fire and Rescue NSW

The date/timing and content of the notification is to be formally documented by KMC (records kept on file). The response, co-ordination and actions to a pollution incident are to be determined by KMC authorised staff in collaboration with the appropriate regulatory agency.

The arrangements for minimising risks of harm to people at the site is required following a pollution incidence (i.e. early warnings, updates, training requirements, documentation and mapping of pollution or impacted area, and identifying potential neighbours). Appropriate follow up actions from the pollution incidence would include the assessment of circumstances, effectiveness of PIRMP, and corrective actions (training, changes to equipment used or instrument faults) to eliminate or minimise possible future pollution incidences from re-occurring.

3.1.1 Risk Mitigation & Implementation of the Plan

Risk Assessment approach has been adopted to "minimise and control the risk of a pollution incident at the facility by requiring identification of risks and the development of planned actions to minimise and manage those risks".

- A preliminary risk assessment has previously been completed by KMC (site management plan) and by E2W as part of the developing this PINPR for the

Minnamurra site. The hazards and risks (general, biological, chemical, physical) and the relevant control measures for the site are outlined in Appendix A-2, A-3 and A-4.

- The results of EPA Audit (May 2018) and responses are provided in Appendix A-5.

E2W and KMC have collaborated during the development of the plan to "ensure that the plan is properly implemented by trained staff, identifying persons responsible for implementing it, and ensuring that the plan is regularly tested for accuracy, currency and suitability".

- E2W and KMC prepared the PIRMP using the following approach:
  - Identifying hazards and risk at the site,
  - Compiling a list and contact details of the local regulatory authorities,
  - Referring to the guidance documents (e.g. NSW EPA 2012. Environmental guidelines: preparation of pollution incident response management plans),
  - Peer review of the document by KMC and E2W.
  - Providing copies of the plan to appropriate site staff and keeping a public copy onsite,
  - KMC management involved in implementing and training staff for use of the plan; and
  - Scheduled update of the plan will be conducted periodically by KMC or E2W (annually- or as required) and tested for accuracy, currency and suitability for the site. The plan is to be reviewed 1 month after a pollution incidence to allow for feedback and corrections.

3.2 Environmental Controls and Containment

KMC site team and management are required to exercise due diligence in carrying out their tasks on the Site so as to avoid, so far as possible any leak, spill or other escape of any substance . Figure 3 highlights the pollution sources at the site.

Plans relating to the management and mitigation of pollution in various media (surface water/groundwater, soil and air) are provided in Appendix A-4. The plans are structured to provide an overview of the goals, actions, key performance indicators (KPIs), targets and associated monitoring tasks and improving environmental performance for each of the key issues outlined above.

KMC staff has responsibility and general duty of care to prevent environmental harm and in a situation where the individual cannot prevent the environmental harm, they must report it to someone that can take corrective action.

3.2.1 Hazardous Substances

The site has the following hazardous substances (Figure 3, Appendix B);

- Above Ground Diesel Fuel Tank (11,200L) located near the administration building and wash bay area (note: tank has a roof construction and spill containment system).
- ADBLUE tank (3,000L).
- Cleaning fluids (<20L, MSDS available in cleaning storage sheds).
- Oils and Lubricants (storage shed, approximately 50 L with MSDS).

3.2.5 Incident Management and Emergency Response Systems

All KMC team members have a duty to report all incidents or near misses that occur on the Site. Reporting must be detailed so as to provide relevant departments with appropriate information needed to conduct investigations and implement procedures to minimise the risk of a similar incident occurring in the future.

When an emergency or incident occurs on the Site, the team Member/s will first utilise their emergency response training in determining what immediate steps need to be conducted to ensure the safety of all persons on the Site and to ensure any damage to the Site and surrounding environment is controlled and if possible, prevented. For example, this may includes actions such as containing the spill, pressing the emergency stop button to stop machinery/all pumps etc, or using the fire extinguishers on the Site to extinguish or prevent a fire, using the spill kit to clean up any fuel spills and prevent any spills from entering drains, etc. and contacting the relevant authorities and emergency service (e.g. Fire Brigade, NSW EPA, NSW Public Health, Workcover/Safe Work Australia, refer to Appendix A-1).

KMC site staff should consider health and safety risks associated with pollution incidences and not to take unnecessary risks (e.g. confined space entry, entry of deep pit excavations, combating a large fire with a fire extinguisher, correct use of PPE such as respirators).

The hazardous chemicals are appropriately stored and kept within designated areas with safeguards (i.e. bunding around fuel tank, oils/degreasers kept in designated and locked cabinets). A "Spill Kit" available onsite for clean up of small oil spills (Figure 3). The relevant site photographs of safety equipment are included in Plates.

All buildings have fire extinguishers, with eye wash facility is installed in cleaning storage building. First aid kits are available onsite together with qualified personnel onsite.

Amenities and showers are contained within the administration building (internet, phone, facilities, refer to Figure 2).

3.2.2 Stormwater

In accordance with the values and principles established in the Environmental Protection Act 1994, the overall objective of the Environmental Protection (Water) Policy 1997 is to protect the environmental values of water. Hardstand and drainage tracts for stormwater are to remain free of debris and contamination (chemicals etc).

Water from the site and CRC are directed into dams. The stormwater from the CRC is directed into the downgradient pond/dam.

3.2.3 Soil and Groundwater

In accordance with the environmental values established in the Environmental Protection (Water) Policy 1997 and Environmental Protection Act 1994 Site measures seek to minimise the infiltration of wastewater to the groundwater and minimise the like hood of land being affected by a contaminant. Any soil pollution (stained, discoloured, odours/vapours) is to be investigated, managed and or remediated to minimise harm to human health and the environment.

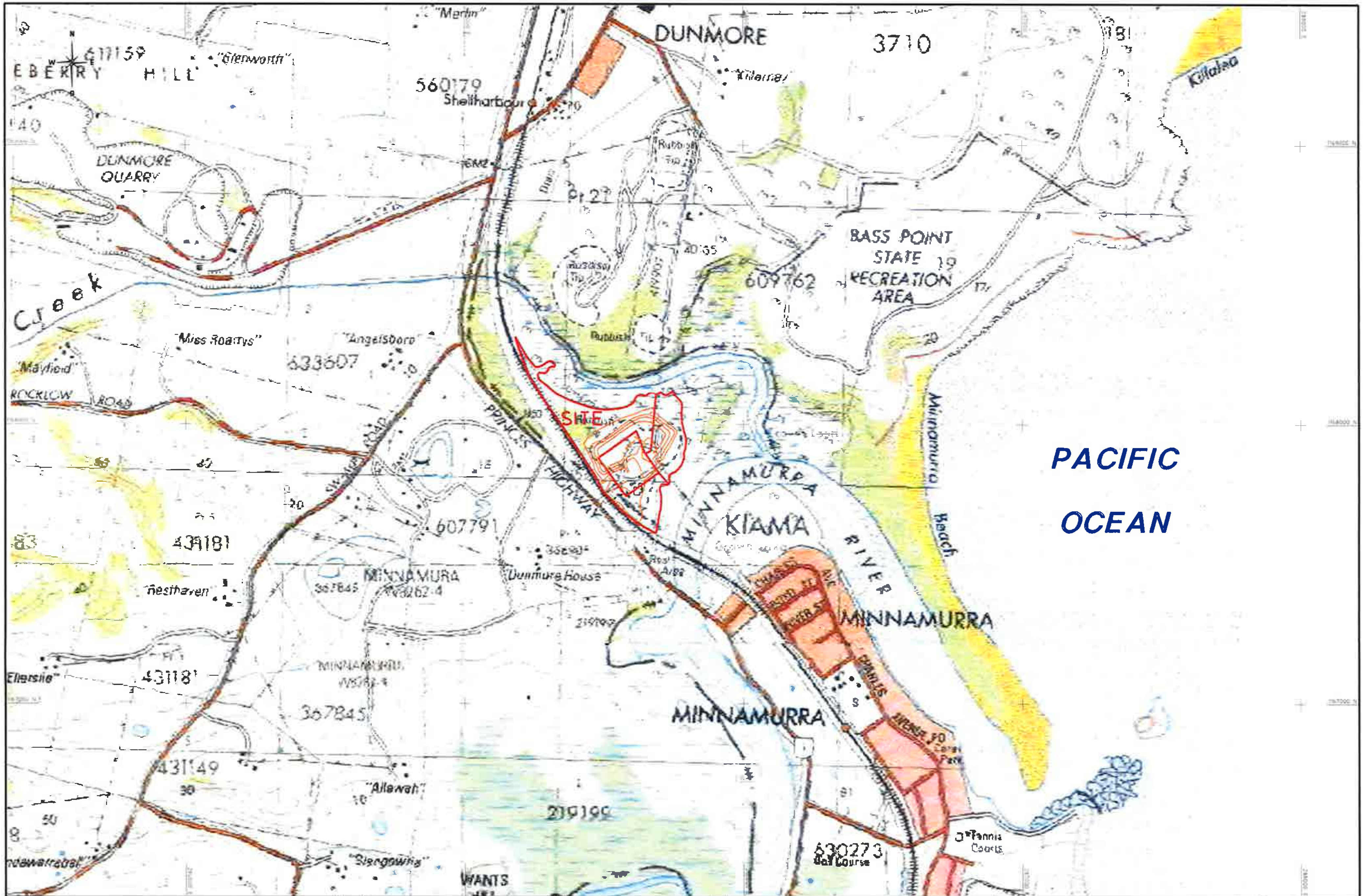
3.2.4 Environmental Monitoring and Reporting

As part of the site operations the KMC Manager is required to review and test the suitability of the PIRMP. A register outlining dates, training, review and testing is required as part of implementing the PIRMP for the site. KMC team members at site must report pollution incidents (i.e. any environmental concerns observed on the Site) in accordance with KMC and NSW EPA notification requirements (section 148, POEO Act).

KMC has contact details available for the appropriate regulatory authorities (Appendix A-1). Record keeping must be undertaken (environmental management records include environment reports, incident reports and due diligence documents available for third party review).

Opportunities for environmental improvement are to be identified at the site. If a valid complaint does occur, then the system of review and corrective action is to be implemented to alleviate the improper conditions and improve procedures to help ensure that the conditions causing the complaint are not repeated.

Figures



earth2water.

COUNCIL OF THE MUNICIPALITY OF KIAMA

NCPL

SCALE 1 : 6000 AT A1 SIZE / 1 : 12000 AT A3 SIZE

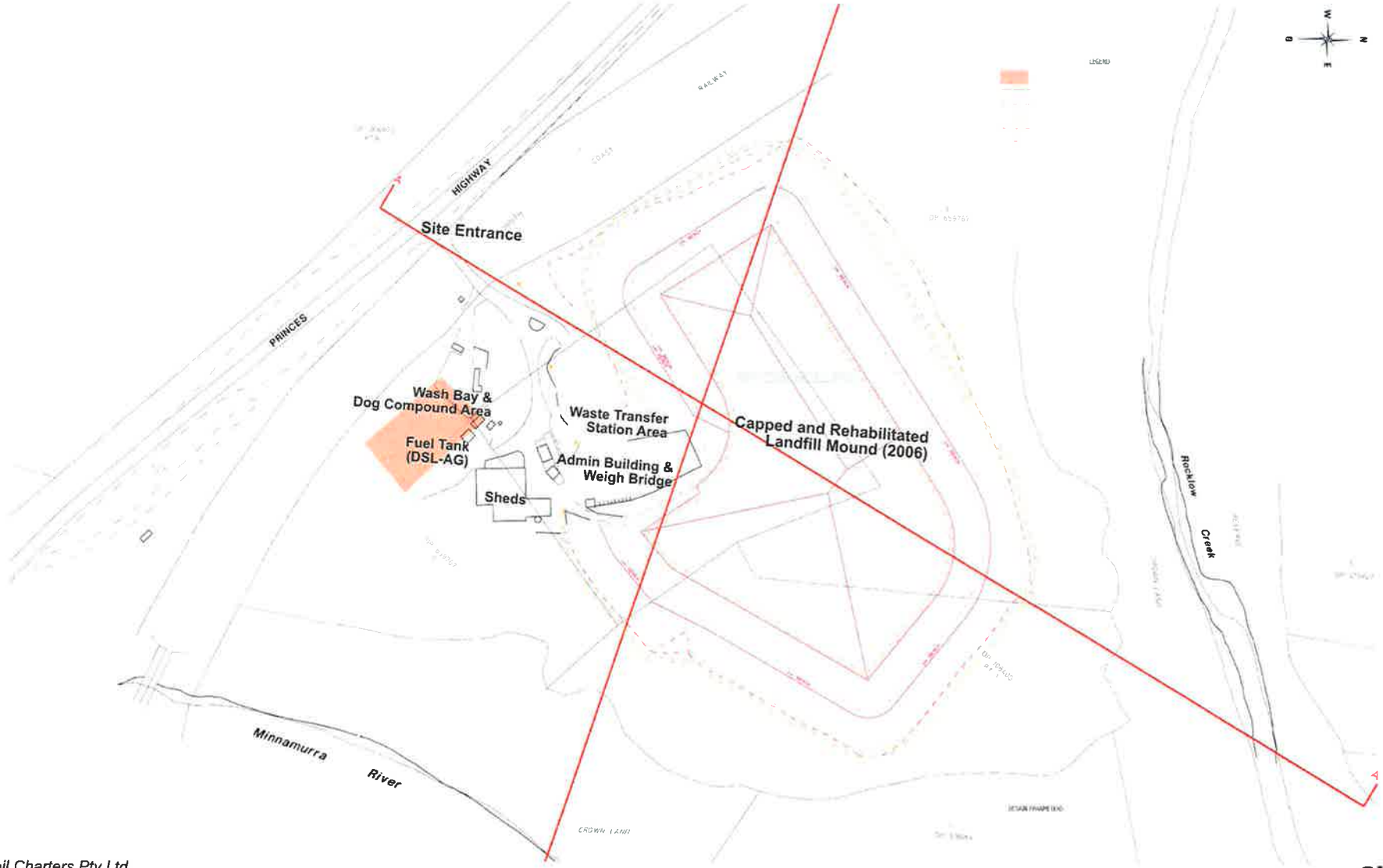
DATE 2010.05

KIAMA MUNICIPAL COUNCIL
MINNAMURRA WASTE DEPOT
LOCALITY PLAN

FIGURE 1

SCALE 1 : 6000

earth2water Pty Ltd
Environmental & Groundwater Consulting



Source: *Neil Charters Pty Ltd*

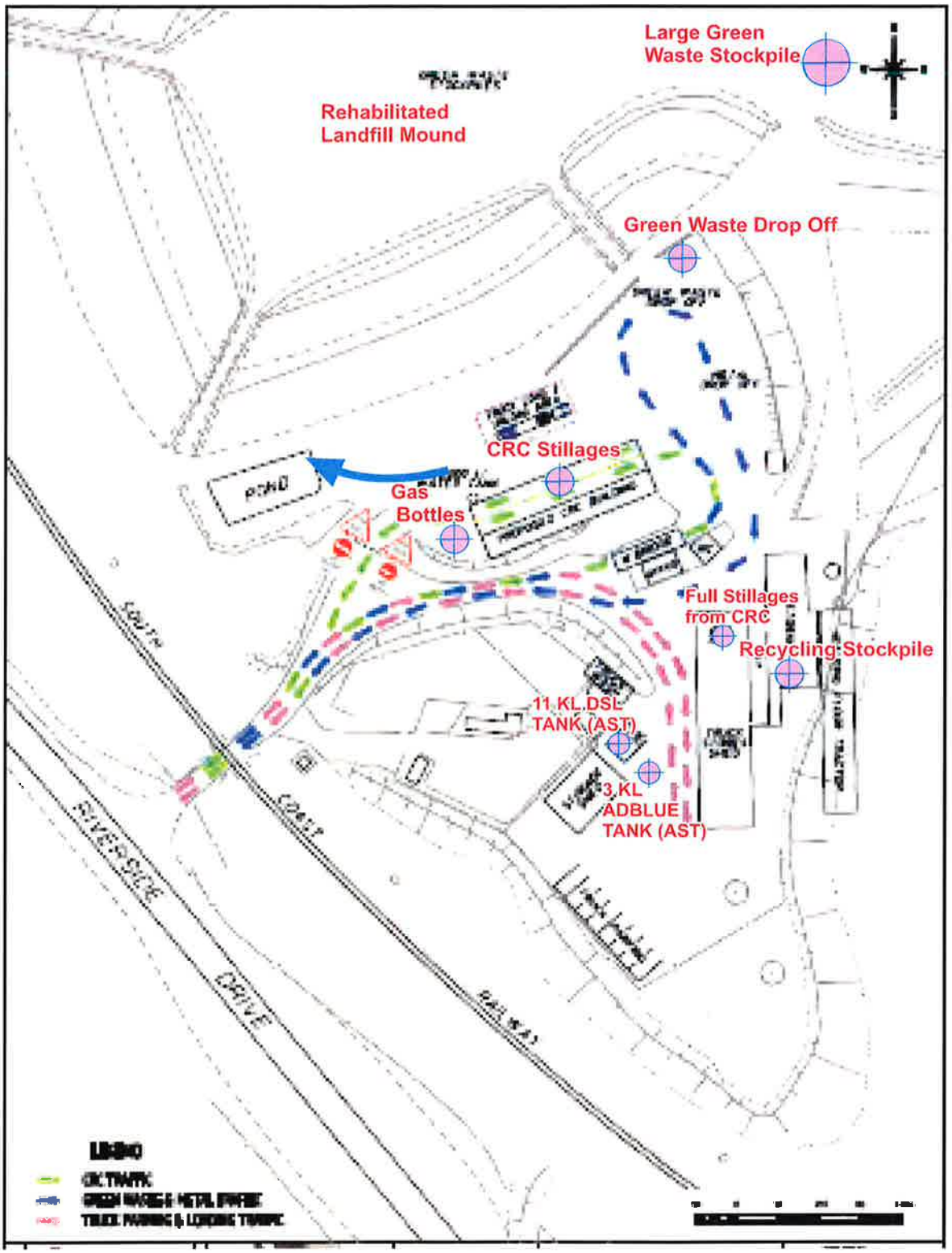
Site Layout

Date: *28 August 2012*

Reference: *E2W_181_01.cdr*

KIAMA MUNICIPAL COUNCIL - MINNAMURRA LANDFILL

Figure 2



Legend:
Location of Pollution Sources are highlighted

Stormwater run off (into dam)

Source: Neil Charters Pty Ltd (2014)

Minnamurra Landfill- PIRMP (2018)
Date: *May 2018*
Reference: *E2W_0181.cdr*

Site Layout & CRC Building (2018)

Figure 3

Plates

3,000 LITRE AD BLUE TANK WITH INTERNAL SPILL CAPTURE TANK

APPROVED SPILL PALLET USED FOR CAR BATTERIES

EVACUATION PROCEDURE

24 TONNE EXCAVATOR ON SITE WITH ATTACHMENTS


Chubb
ONE OF 18 FIRE EXTINGISHERS LOCATED AROUND DEPOT

2.5 TONNE FORKLIFT ON SITE FOR QUICK REMOVAL OF CONTAINERS

APPROVED BUNDING FOR ON SITE 11,200 DIESEL FUEL TANK

HOT & COLD MOBILE GERNIE USED FOR CLEAN UPS

UNIVERSAL SPILL KITS LOCATED IN THREE LOCATION AROUND DEPOT

SPILL CONTROL STATION LOCATED IN CRC BUILDING

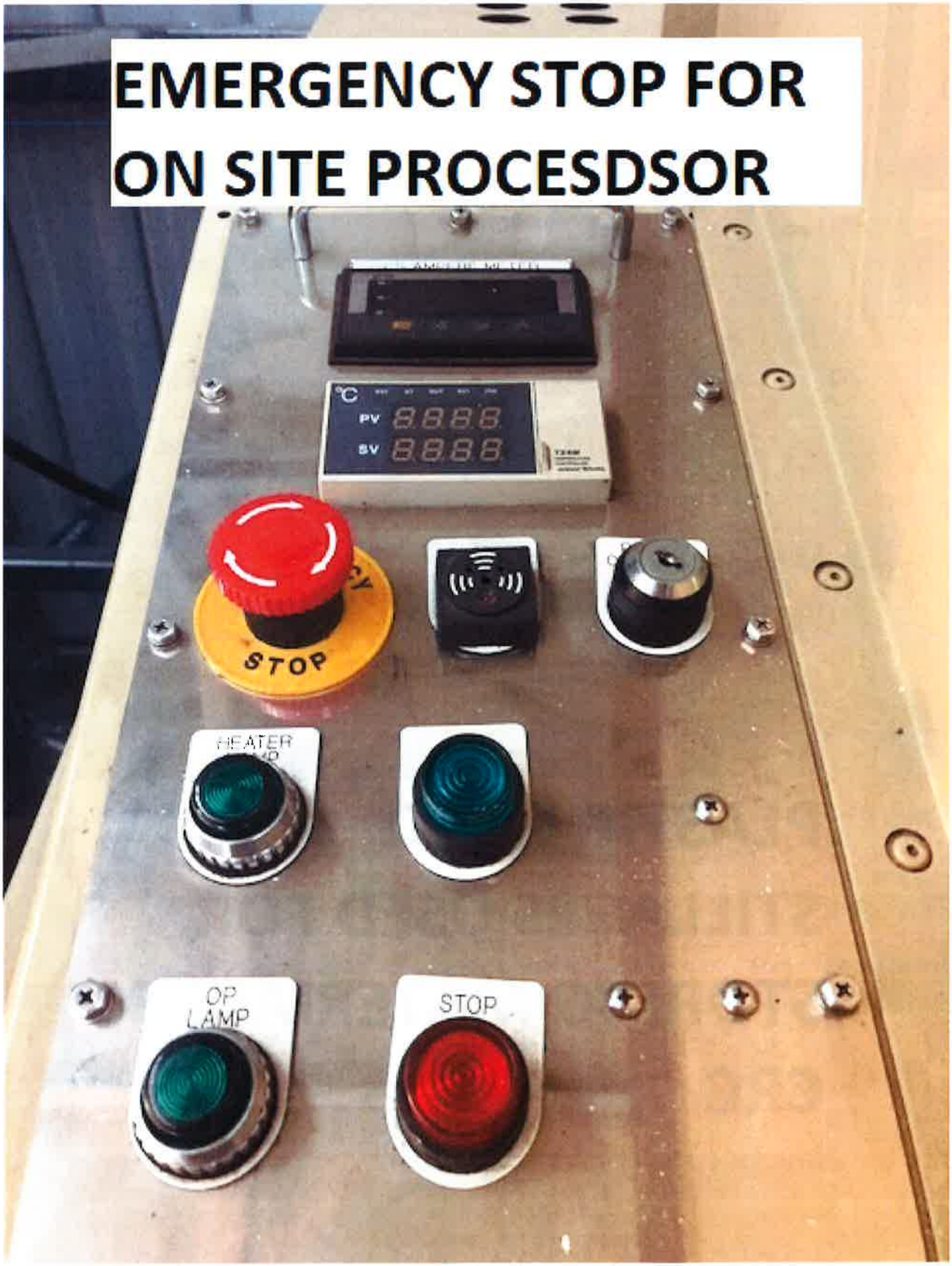

SAFETY SHOWER
& EVEWASH
SAFETY FIRST
SAFETY SHOWER
AND
EYEWASH
DANGER
NO
SMOKING
SAFETY
SHOWER
AND
EYE WASH
WATCH OUT
PUSH

FRONT END LOADER ON SITE TO ASSIST WITH CONTAINING SPILLS OR ASSISTING IN FIRE FIGHTING

APPROVED SIGNAGE FOR EMERGENCY SERVICES AND PUBLIC NOTIFICATION

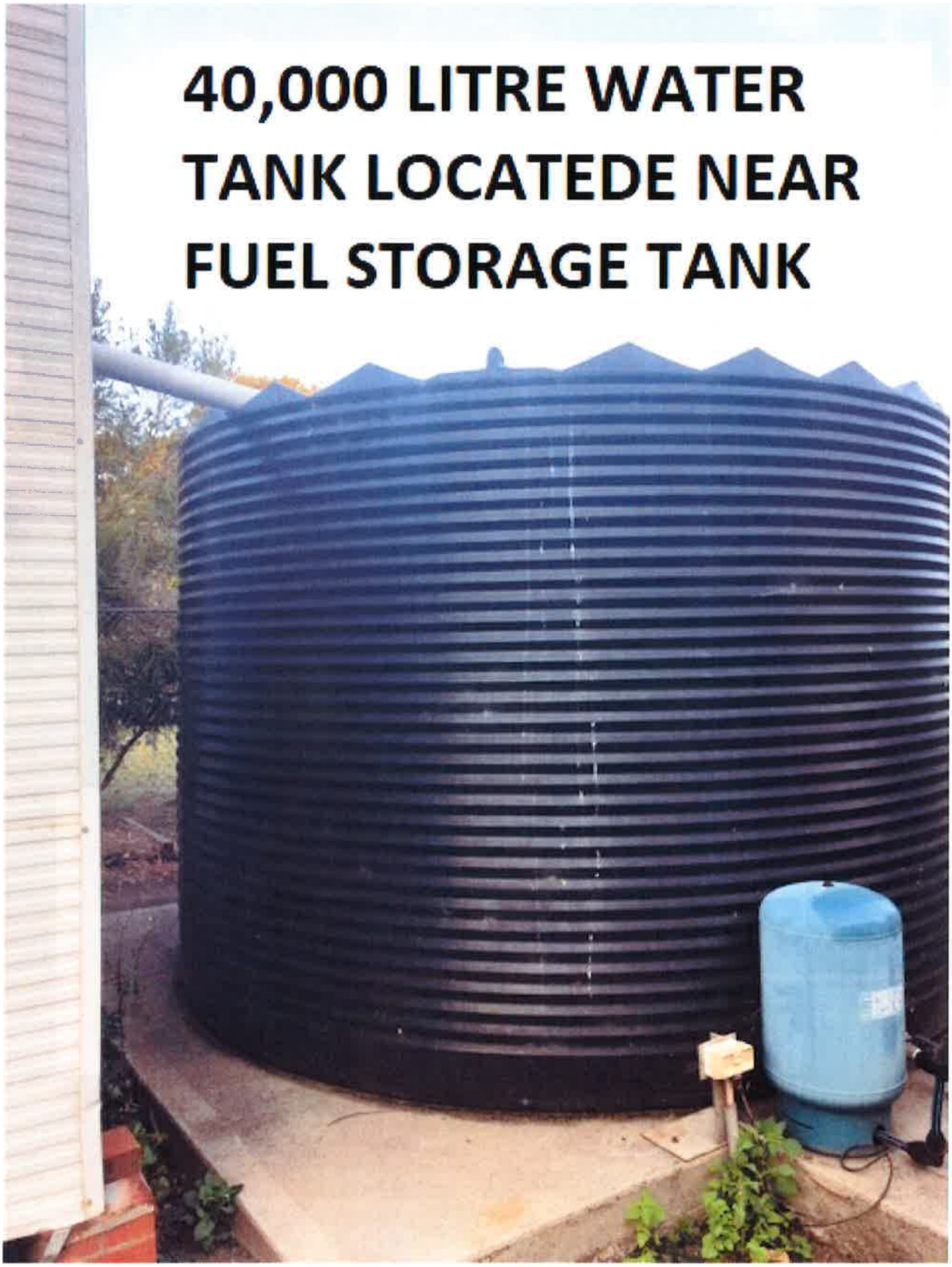
PLASTIC LINED STILLAGES USED FOR STORING MATERIALS IN CRC

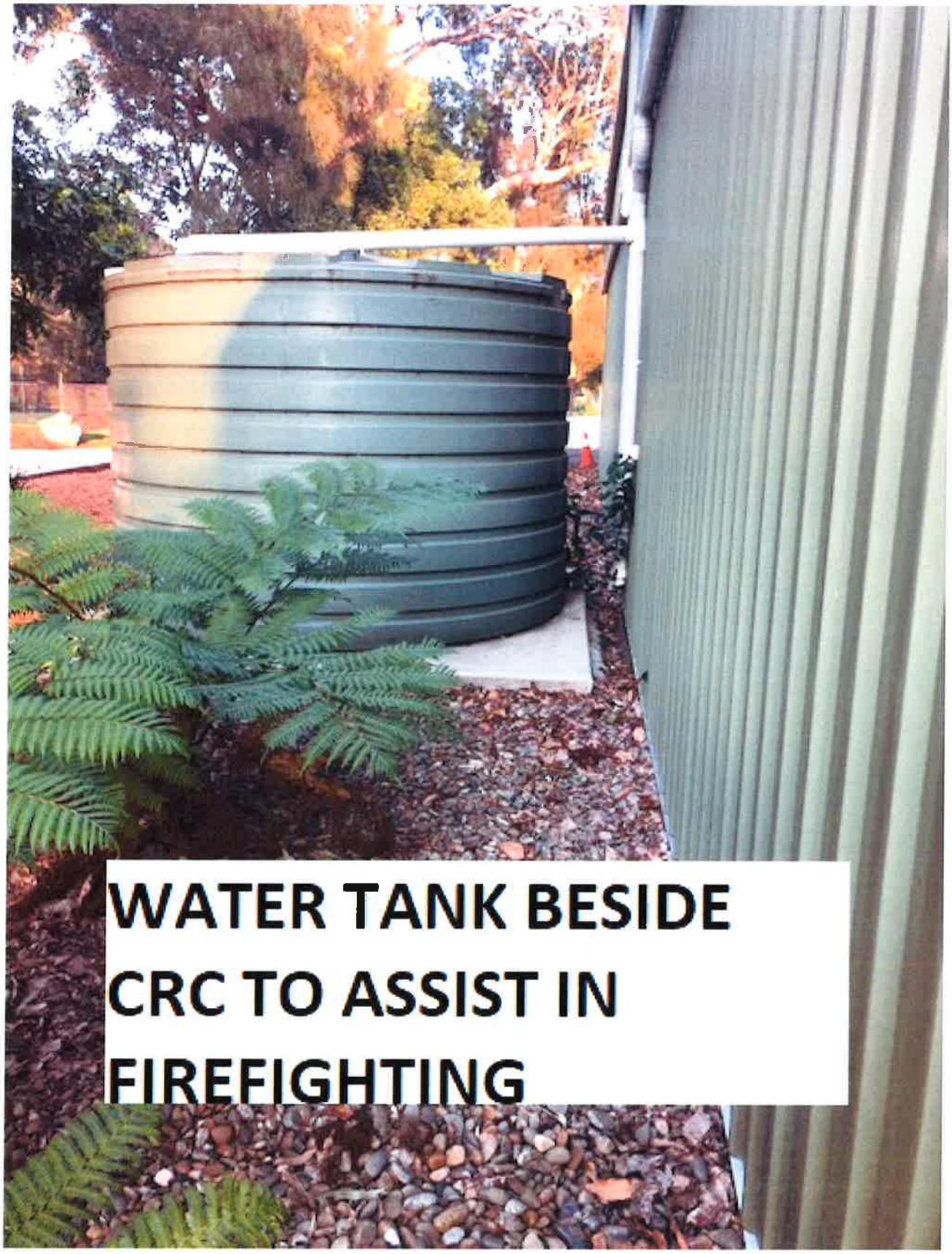
EMERGENCY STOP FOR ON SITE PROCESDSOR



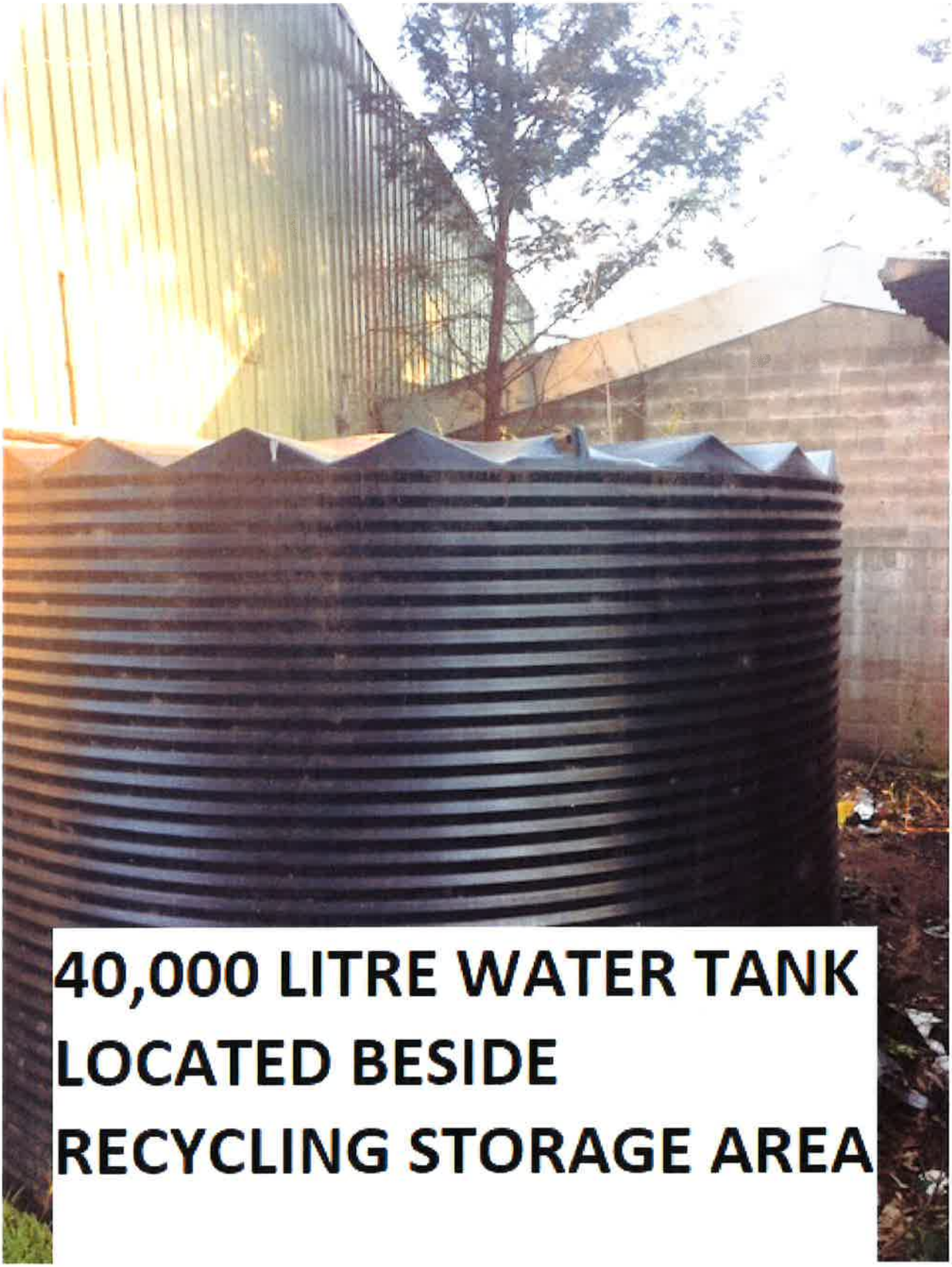

ONE OF 5 STREET
SWEEPERS AVAILABLE
FOR HEAVY CLEAN UPS

40,000 LITRE WATER TANK LOCATEDE NEAR FUEL STORAGE TANK





WATER TANK BESIDE CRC TO ASSIST IN FIREFIGHTING



40,000 LITRE WATER TANK LOCATED BESIDE RECYCLING STORAGE AREA

14,000 LITRE WATER TANKER ON SITE TO ASSIST IN DUST CONTROL AND FIREFIGHTING

Appendix A-1:

Procedures and Contact Details for Notifying Pollution Incidences Testing of PIRMP

Appendix A-1: CONTACT DETAILS FOR REPORTING POLLUTION INCIDENTS

Notification requirements- reporting of pollution incidence "immediately" (section 148 POEO Act, from 6 Feb 2012)

Decision Step 1. Call "000" if the incident presents an immediate threat to human health or property (Fire and Rescue NSW, NSW Police and the NSW Ambulance Service are the first responders, responsible for controlling and containing incidence).

All Appropriate Regulatory Authority (ARA) = KMC Council, NSW EPA, Ministry of Health, Workcover/Safe Work Australia, Fire and Rescue NSW.

AGENCIES	Address	Phone	Mobile	Fax	Email	Comments
1. Kiama Municipal Council						
Gino Belsito / Director Engineering &						Note 1
Works / Acting General Manager	Manning Street kiama	42320425	0419241 047	42320555	GinoB@kiama.nsw.gov.au	reponsible for notification, and
Tony Hardy / Manager Waste Services	Manning Street kiama	42377621	417227011	42378509	tonyh@kiama.nsw.gov.au	activation of the PIRMP
Greg Hardy / Business Unit Co-ordinator	Manning Street kiama	42377621	409468591	42378509	gregh@kiama.nsw.gov.au	(including documentation and testing
						of the plan)
EPA						
Wollongong Office		42244100		42244110		as above
Contact		131555			info@environment.nsw.gov.au	
NSW Public Health						
(poison information centre)		131 126				NSW Poisons Information Centre
Workcover Authority/Safe Work Australia						
Contact		131050				as above
Fire Rescue NSW						
Shellharbour Station	Lot 301 Wattle Road Shellharbour	42951940		42974826		
Fire Calls		000				
Hazmat	Lot 301 Wattle Road Shellharbour	42974485				
Hazmat incidents calls		000				
Zone Office		42242000		42242088		
Rural Fire Service						
Dunmore Station	Dunmore Road Dunmore	42376519		42376519		as above
Dunmore Captain			411667907			
Fire Calls		000				
NSW Police						
Illawarra LAC	6 Pioneer Drive Oak Flats	42325599	42325511			as above
NSW Ambulance Service						
Kiama	Terralong street Kiama	131233				as above
Endeaviour Engergy						
Emergencies		131003		98536000		as above
Persons Outside of Premises/Community Potentially Impacted by Pollution						Identification and notification of persons outside of premises that may be impacted by pollution incidence (eg. Fishermen, bushwalkers, neighbours, construction workers etc), Refer Table A-1
Notification requirements	Neighbouring Residences					Site Address and PH (& names)
Test of PIRMP Procedures (Annual - Date/Time)	5/09/2013 17/9/2014 23/9/2015 15/9/2016 22/9/2017					KMC Test/Audits completed By: Tony Hardy
Pollution Events- Incidents Notifified						KMC to update (date/time- incident) Tony Hardy. Refer to Table A-1

Notes

1- Documented details of the notification (date,time, person, description) is required for verifying procedure.

Table A-1

Notification of Premises in the Vicinity of Minnamurra Waste depot in case of a Pollution Incident									
Date	Time	Incident Controler	Contact No.	Name of Council employee advising premises	List of Advised Premises	Premises Phone Numbers	Time Notified	Emergency Services on site	Type of Incident

Note: Table to be completed- as required for the/each pollution incidence

			Manager			constructed using Council's front end loader. The bunded area was lined with black
						plastic and the Council forklift relocated the stillage to the bunded area. The waste
						oil was cleaned up using approved absorbent.
						The full stillage was emptied container by container into the new stillage. During the
						emptying process a 20 litre waste oil container was found with a split down its side
						causing oil to leak from the container. The container was completely emptied and
						the plastic liner was inspected and found to have a hole allowing the oil to escape.
						The plastic liner , split container and the black plastic used for the bunded area were
						all baged into a heavy duty bag.
						Toxfree were notified and advised us that they would collect the material on their
						next collection.
						As this incident did not effect the depot operation the deploy was not closed and
						it was not necessary to advise any other agencies. Due to the nature of the event and
						short timeframe to complete the clean up the premises in the vicinity were not
15/09/2016	2.45pm	Incident completed		fine	EPA	notified.
					Council	
22/09/2017	9.30am	Fire in green waste stockpile	Tony Hardy			
			417227011			At 9.30 am we were notified by a user of our facility the there was a fire in the
			Manager	overcast	EPA	green waste stockpile located in a secured area of our depot. Council's on site water
					Council	tanker was used to start extinguishing the fire until the Rural Fire Service arrived
					Rural Fire Service	Council's front end loader was also used to separate the unburnt material from the
					Premises in the Vicinity	stockpile to reduce the hazard. The Rural Fire Service arrived and assisted Council to
						completely extinguish the fire.
						As the smoke from the fire was not obstructing other operations of the depot, the
						depot stayed open and a Council employee redirected the users of the facility to a
						temporary drop off area well away from the incident.
						an investigation failed to find the cause of the fire. The incident was completed and
22/09/2017	11am	Incident completed				operations returned to normal at 11am
					EPA	
					Council	
					Premises in the Vicinity	

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your council, your community

Hazard Reporting Procedure WHS P 18

1. Purpose

The purpose of this procedure is to describe the mechanism for staff to identify hazards and make recommendations on possible solutions in the workplace.

2. Scope

This procedure applies to **all departments and employees** for the reporting of all identified workplace hazards.

3. References

Work Health and Safety Act 2011
Work Health and Safety Regulations 2017
Kiama Council's Work Health Safety Policy (WHS- 001)

4. Definitions

Hazard – is a situation or thing that has the potential to harm a person. Hazards may include: noisy machinery, a moving forklift, chemicals, electricity, working at heights or a repetitive task.

Hazard Report Form - This document has been designed in-house to record hazards identified by employees. These forms are available at worksite offices, from your supervisor, manager or the risk management section and are provided to meeting organisers.

5. Hazard Reporting Procedure

When an employee identifies a hazard, it should be reported in the first instance to their supervisor or manager. The employee should then complete the hazard form including recommendations to eliminate or reduce the hazard and provide the form to their manager for view. to council by notification to management and recorded on council's hazard record system.

Incidents must be reported, but may be delayed for a short period eg, until the employee has returned to the depot or the office. However in all cases notification to the supervisor must be given, depending on the category of incident, the written Incident Report Form must be completed in a timely fashion.

Under normal circumstances the Incident Report Form must be completed for reporting an incident before the end of shift or the employee leaving the workplace on the day the incident occurs.

The process of filling in the Incident Report Form is straight forward and in sections so as to assist in its understanding
Under normal circumstances the incident report form is completed and signed by the employee. The employee must take the form to his/her supervisor or manager to notify and discuss any issue associated with the report.

For serious or dangerous occurrences the supervisor or manager should have been informed immediately after the event so he/she would have knowledge of the circumstances of that incident. It is likely that a more formal investigation will be undertaken directly after the incident.

Consideration by the supervisor/ manager must be given, depending on the seriousness of the incident to notifying senior management and the risk section to ensure correct external notification in accordance with the legislative requirements.

The supervisor / manager section on the Incident Report Form is designed for comments following his / her discussion with the employee or investigation. It is also required that the supervisor / manager sign and date the form.

The completed Incident Report Form should then be sent or taken in a timely fashion to the Risk Management section for processing into the WHS database.

12. Duties / Functions

Supervisors / Managers

It is the responsibility of the supervisor/manager of the injured employee or of the activity or work location to investigate the reported incident.

Supervisor / managers are required to notify senior management and risk management of serious incidents ASAP.

If the incident is such that the appropriate director or the risk officer considers an investigation team should be established, they will instruct accordingly.

The supervisor/manager is responsible to ensure that employees do complete the required Incident Report Form in a suitable time frame.

When the Incident Report Form is presented by the employee the supervisor/manager following a discussion or basic investigation should make written comment, sign, date and forward the form within 2 days of the incident.

Supervisors/managers are responsible for the health and safety of employees under their direction and to ensure that they work safely.

Supervisors/managers must ensure the activities and tasks employees preform are in accordance with approved Safe Work Method Statements.

Supervisors/managers should also ensure that where appropriate that Risk Assessments are undertaken in accordance with that procedure.

If an incident causes an employee to require medical attention or loose time, the supervisor/manager should inform the employee that councils Workers Compensation and Rehabilitation Policy together with the Return to work Procedure should be followed. Council's "Return to Work Co-ordinator" will assist with this requirement.

Employees

Each employee has a responsibility to comply with council's requirements in work health and safety matters under the WHS Act 2011 and the WHS Regulations 2011

It is the employee's responsibility to report all incidents in accordance with this written procedure and to follow the reporting process by complying with the completion, signing and dating of the Incident Report Form.

Employees must inform their supervisor/manager at least verbally prior to leaving their workplace either during the day or finishing the shift. If the supervisor/ manager is unavailable then an Incident Report Form must be completed by the employee and left for his/ her supervisor's attention.

Employees who lose time or require medical treatment in relation to a work related injury may have to complete a Workers Compensation Claim in accordance with council's policy and procedure.

Note – Workers Compensation requires employees to inform Injury management officer prior to any medical treatment being sought. This allows the insurer to be informed and agree to payment. If urgent treatment is necessary notification must be provided ASAP after treatment.

Risk management officer – Safety

The risk management officer - safety is responsible for ensuring that incident reports are processed in accordance with SafeWork requirements.

Consulting and providing assistance to management and employees with any aspect of incident notification.

Recommending with the appropriate Director an investigative team is formed if the circumstances warrant such investigation.

Notifying SafeWork and or Council's Workers Compensation Insurer of any notifiable incidents in accordance with the NSW legislation.

Raising concerns about any aspect of WHS generally with the reporting and managing of this procedure.

Document Control

Document Content Co-ordinator -	Risk Manager Officer – Safety
Procedure No :	WHS - P 017
Effective Date :	September 2011
Revision No :	2
Attachment A :	Incident Report Form
Reviewed	June 2017
Dated :	23 June 2017 (latest version)

KIAMA MUNICIPAL COUNCIL
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HAZARD IDENTIFICATION FORM

This form is for you to highlight and address any issues you see in your work environment that may cause injury or harm to you, your work colleague or the public.

NOTIFICATION OF HAZARD

EMPLOYEE DETAILS

Name:	Date:

HAZARD DETAILS

Description of Identified Hazard (including location):

YOUR RECOMMENDATIONS

What will fix the issue identified:

MANAGER RECOMMENDATION

Issue is (please circle) :	**RESOLVED**	**ESCALATED TO RISK TEAM**
Comments		
NAME & SIGNATURE:		DATE

Return all completed forms to risk team following manager review

Section 5: Fire Safety Measures

1. All essential fire safety measures (including critical fire safety measures) must be listed for an annual fire safety statement
2. Only critical fire safety measures must be listed for a supplementary fire safety statement

Fire Safety Measure	Building Code of Australia Reference/s	CFSP*	Minimum Standard of Performance	Date Measure Tested	Date Measure Assessed
Portable fire extinguishers	BCA E1.6	NR	AS 2444 - 2001		

* Insert initials of CFSP

Section 6: Details of competent fire safety practitioners (CFSPs)

The table must include details of:

1. Each CFSP who endorsed a fire safety measure referred to in Section 5 of this form
2. Each CFSP who inspected the building in accordance with clause 175(b) of the Regulation (in a shaded row)

Initials	Given Name/s	Family Name	Phone	Email	Signature
NR	NOEL	RHODES	0242605600	Noel.rhodes@chubb.com.au	
NR	NOEL	RHODES	0242605600	Noel.rhodes@chubb.com.au	

Fire Safety Statement

Approved under the Environmental Planning and Assessment Regulation 2000.

Version 2.0

Effective from 1 December

How to complete this form

1. Please print in CAPITAL LETTERS
2. Please complete all relevant sections in full

Note

1. A reference to 'the Regulation' in this statement is a reference to the Environmental Planning and Assessment Regulation 2000
2. A reference to a CFSP in this statement is a reference to a 'competent fire safety practitioner' as defined by clause 167A of the Regulation

Section 1: Type of statement

This is (mark applicable box) ☒ an annual fire safety statement (complete the declaration at Section 7 of this form)

☐ a supplementary fire safety statement (complete the declaration at Section 8 of this form)

Section 2: Building the subject of this statement

Street No.	Street Name	Suburb	Postcode
446	RIVERSIDE DRIVE	MINNAMURRA	2533

Lot No (if known)	DP/SP (if known)	Building Name (if applicable)
1	439772	MINNAMURRA WASTE DEPOT WEIGH BRIDGE OFFICE

This statement applies to (mark applicable box) ☒ the whole building

☐ part of the building

Section 3: Description of the building or part of the building the subject of this statement

Storeys above ground in the building (No.)	Storeys below ground in the building (No.)
1	0

If statement relates to a part – describe that part and its location in the building

Uses of building or part subject to this statement (e.g. retail, offices, residential, assembly, carparking)

OFFICES

Section 4: Name and address of owner of the building or part

Title	Given Name/s	Family Name
	KIAMA MUNICIPAL COUNCIL	

Street No.	Street Name	Suburb	Postcode
11	MANNING STREET	KIAMA	2533

NSW GOVERNMENT

Appendix A-2:
Hazard and Risk Analyses (Minnamurra Landfill)

	RISK MATRIX						
	Consequences		Likelihood or probability				
	People	Environment	A	B	C	D	E
			Almost certain *(expected)*	**Likely** *(will probably occur)*	**Moderate** *(might occur - has happened)*	**Unlikely** *(could occur - known to happen)*	**Rare** *(practically impossible)*
1	No incident or first aid injury	Negligible discharge	**High 15**	**Medium 19**	**Low 22**	Low 24	**Low 25**
2	Medical treatment	Uncontrolled discharges in minor quantities	**High 10**	**High 14**	**Medium 18**	**Low 21**	**Low 23**
3	Alternative work or lost time injury	Moderate breach of environmental statutes	**Extreme 6**	**High 9**	**High 13**	**Medium 17**	**Medium 20**
4	Serious or permanent injury	Major breach of environmental statutes	**Extreme 3**	**Extreme 5**	**Extreme 8**	**High 12**	**High 16**
5	Fatality	Shutdown of project due to environmental breach	**Extreme 1**	**Extreme 2**	**Extreme 4**	**Extreme 7**	**High 11**

Risk rating	Risk score	Risk description	Residual Risks if control measures implemented
Low	21 - 25	Tolerable. Monitor, manage and carry out activity in accordance with identified controls.	
Medium	17 - 20	Implement strict control measures to reduce hazard. Management must determine appropriate level of supervision required.	
High	9 - 16	Implement strict control measures to reduce hazard. Activity must not commence without management approval and without appropriate supervision present. Review process.	
Extreme	1 - 8	Intolerable. Activity must not commence. Eliminate hazard or introduce further controls to reduce hazard.	

Appendix A-3:
Preliminary Risk Assessment (Minnamurra Landfill)

ITEM	SITE ACTIVITY	HAZARD hazards associated with work activities - possibilities that could lead to an accident.	HAZARD RANKING & RISK SCORE Assess the risk using the risk matrix.	PROPOSED ACTION/CONTROL MEASURE Action/procedures taken to eliminate or minimise the hazards, the risk of injury/damage and/or potential severity factors. Proposed controls will be maintained.	CONTROL RANKING & RISK SCORE Risk (when control measure implemented) using the risk matrix.	WHO IS RESPONSIBLE Person responsible for supervision (S), to implement (I) and people responsible to implement controls measures (A).
1.	Access and activities at site (KMC staff, contractors, general public)	Traffic (Public Vehicle traffic & Site Traffic - work trucks, earthwork machinery)	Low (21)	– Review site plans & obey all road rules and traffic signs – Liaise with site contact for access and mobilisation issues (park in dedicated areas) Emergency contact information (signage) available onsite at all times	Low (21)	KMC
2A	Site Work Activities (CRC building, general and outdoor exposure)	Biological (Human Health)	Low to medium (18)	– Snakes, spiders, insect, vermin bites, may require first aid treatment (facilities onsite, use of insect repellent, or dial 000) – Foreshore area is restricted to general public. – Wearing of appropriate clothing for tasks (long pants, shirt and boots) – All Works within designated areas	Low to moderate (21)	As above
2B		Physical (Human Health) Exposure to weather and Physical Activities	Medium to High (15)	– Sun hat & water supply (& rest -as required) – Sun cream – Use appropriate lifting techniques and mechanical devices (trolley, barrows, winch etc.) – Stop work (heavy rain, muddy and slippery conditions etc) to avoid slip trip falls.	Low (21)	As above
3.	Site Activities (subsurface excavations, & soil disturbance)	Chemical (Human Health) Exposure to contaminated soil,water or air.	Low to medium (18)	– Site Specific JSA/SWMS for intrusive works. – Wear appropriate PPE (e.g. nitrile gloves, tyvek, safety glasses, long pants & shirt, hard hats). Masks/respirators as dictated by conditions. Ear plugs as necessary – Minimise dermal contact with soil/water – Use water as required to dampen soil and reduce fugitive dusts, wash hands etc – Stop work - asbestos (SWMS upgrade)	Low (21)	As above

Note: Relevant Training/Qualifications:

			• Polluted runoff accumulation in pits or water quality/groundwater holding dams. Proposed measures to manage or mitigate impacts: • Polluted seepage to be collected within onsite water quality dams, and pumped to storage tanks or disposed offsite via tanker truck (as required). • Proactive control measures- site inspection to identify water/pollutants harmful to groundwater. Inspection of site proposed after heavy or prolonged rainfall.	landfill rehabilitation works and water quality dams. Risks to groundwater users is low given the site location. The landfill site is not located in public drinking water supply and depth to groundwater is expected to be greater than 2 m depth.
Surface water	Ensure that existing or proposed activities do not discharge pollution to surface water	Natural surface water system is located away from landfill (> 50m). The landfill and KMC activities are primarily within hardstand and bunded areas and drained into pond/dam or infiltrated into subsurface to minimise potential discharges to surface water. Thick grass cover and vegetation exists around the landfill site.	Activities that have potential to discharge to surface water • Contaminated or unstable spoil which is carelessly placed on ground surface (drainage to creeks etc). • Stockpiling of Green waste and/or food waste. • CRC building. • Illegal discharge of polluted runoff/seepage into roadway/storm water or eventually creek/river system. Proposed measures to manage or mitigate impacts: • Spoil placed only within designated landfill or transfer station area. Use of soil bunds, and silt fencing, diversion drains, and hay bails (as required) to manage offsite discharges. • Remove contaminated spoil from roads, paths, drainage tracts which can lead to discharges into storm water. • Inspection and control of discharge points and use of sediment fences/traps etc and establishment of diversion drains for flood water. • Address any polluted/turbid runoff from the site. • Disturbing, excavation of acid sulfate soils (outside of landfill footprint) has potential to impact aquatic ecosystems (acid leachate). • Address possible vermin /pests etc associated with stockpiling of green /food wastes.	**Low to moderate (risk can be managed and reduced by implementing appropriate control measures at site and inspections during wet weather).** Site inspection around landfill, transfer station and drainage lines after rainfall events (causing runoff) to identify and manage risks to surface water pollution and flood water. Possible vermin/pest/insect controls – inspection, treatment as required. Environmental control measures to be implemented as site specific conditions dictate (install; hay bails-silt fencing-diversion drains, gross pollutant traps). Works to minimise erosion/ or muddy materials tracked or drained offsite. Precautions during intense rainfall required to ensure landfill is stable and seepage contained.

Table A-3: Preliminary Risk Assessment (Minnamurra Landfill)

Kiama Municipal Council

Factor	KMC (Objective)	Site Issues	Requirements & Control Measures	Risk Evaluation & Comments
Land (soil)	Ensure existing or proposed activities do not discharge pollutants to land	Landfilled waste onsite. Potential leaching, fugitive dusts, erosion issues, dams, and possible landfill gas emissions. Any incidental contamination (e.g. midnight dumping of asbestos, heavy metals) which are not suitable for handling at waste transfer station or top of landfill mound) is to be separated, tested and disposed at an appropriate licensed landfill site. Contractor negligence and illegal dumping outside of landfill area.	Activities that have potential to discharge to land. • Processing or Stockpiling of impacted/contaminated soils (including green/food waste, asbestos and chemicals/liquids) • Material Transport (onsite/offsite) • CRC building Proposed measures to manage or mitigate impacts: • Site inspection/monitoring (pollution, asbestos etc) • Plant decontamination (wheel or truck wash, as required) leaving the site. • Stable site access roads (all weather, gravel cover as required) • Proactive control measures- truck tarpaulins, water sprays, street/road sweeping, appropriate placement /disposal methods, control and secured work areas. Any polluted soil outside the site to be removed ASAP by Contractor to appropriate area. • Any spoil, spillage of polluted materials onto access/offsite areas is to be cleaned ASAP (e.g. bobcat, street sweep). • Any wind swept debris (bags, paper etc) to be collected and appropriately disposed to minimize nuisance visual impact.	**Low** **(risk can be adequately managed by staff and implementing control measures).** KMC resources and machinery (trucks, excavator, water cart and sweepers) available to manage discharges to land. The risk of impact to offsite receptors (land and people) is low as the landfill is now rehabilitated and transfer station is managed by KMC staff. Site is controlled/locked when not attended by KMC to prevent illegal dumping. Any non compliance of material handling (dumping outside of land farm area) is to be reported to KMC representatives and or EPA.
Groundwater	Ensure that existing or proposed activities do not discharge pollution to groundwater	Contaminated groundwater (shallow & deep) exists under the landfill mound and in groundwater holding dams (polluted groundwater).	Activities that have potential to discharge to groundwater • Bulk earthworks and disturbance (mobilization) of contamination to groundwater system. • Disturbing, excavation of acid sulfate soils (outside of landfill footprint) has potential to impact aquatic ecosystems (acid leachate).	**Low** **(risk can be adequately managed by staff and implementing control measures).** Groundwater seepage/infiltration is expected to be low/negligible due to

Appendix A-4:
Soil, Water Air, Pollution Mitigation Plans

Air (odour, vapour, dust, fire)	Ensure that potential air pollutants are contained and that activities do not impact on the natural environment or cause human health problem.	Landfill gases, fires/explosions, and contaminated materials may create air quality & health issues. Bulk earthworks/machine access at the site may create fugitive dusts during dry and hot weather. Asbestos fibre with dumped materials.	KMC staff will identify sources of air pollution (odours/vapours, including dust) during site works and activities. Soil disturbance in unsealed areas have potential to create air quality issues (especially dust, odour) and community complaints. Proposed measures to manage or mitigate impacts: • Dust generation will be monitored and mitigated by contractors and or KMC (use of water misting). • Proactive management of fugitive dusts is required to mitigate adverse impacts and complaints. Inspection of the offsite areas (e.g. dust accumulation on parked vehicles, roads) is required to ensure that the surrounding environment is not adversely impacted. • Monitoring of wind and climatic conditions is required to ensure that any sensitive receptors are not subjected to nuisance dust or odours. • Pragmatic measures are required during soil distrurbance/mulch stockpiles which may require works to progress slowly or intermittently due to excessive odour or dust and requirement for control measures (use of plastic covers or water spray). • Site observations and inspection required to address fire hazards (smoke from mulch heaps, amount of dry materials and adverse climate – 40deg C). Liaison with NSWFB to mitigate fire hazards. • Asbestos contractor and consultant required for removal of asbestos impacted waste (Workcover/Safe Work Aust/EPA may require air monitoring).	**Low to Moderate (adverse weather conditions and risk can be managed and/or reduced by undertaking inspections and implementing appropriate control measures at site).** E2W consider that dust/odour is likely to arise in dry windy weather at the waste transfer station- and possibly during mulching and maintenance works.

Notes & Summary:

The potential risk to the environment arising from site activities is considered to be low, which can be further mitigated by implementing appropriate control measures. A proactive approach (site inspections, implementing control measures such as road cleaning, debris removal from access roads, wetting of dry soil stockpiles) is required to address and mitigate risk (known and unknown) to the environment to eliminate or at least minimize adverse risk to human health and the environment. Onsite stockpiling of green waste/food waste to consider vermin and pest control measures (as required).

TESTING OF PIRMP FOR MINNAMURRA WASTE DEPOT LICENCE NO. 5958

DATE	TIME	INCIDENT	COUNCIL CONTACT	WEATHER CONDITIONS	NOTIFICATIONS	ACTION THAT WOULD HAVE BEEN TAKEN IN REAL INCIDENT
5/09/2013	5.30 am	Fuel Spill from Truck	Tony Hardy 0417227011	Fine	EPA	Considering the Depot was not opened to the General public and the fuel spill was
			Manager		Council	minor estimated 5 litres then it was deemed not necessary to advise other agencies
					Depot Staff	or other premises in the vicinity.
						Other Council vehicles due to leave the site were advised to stay put until notified
						Approved absorbent was used to clean up the spill, the absorbent was then
						sweeped up and containerised for transport to a licenced landfill.
						An accident near miss Council form was completed by the driver as per Council's
						procedure. Investigation into the incident was undertaken and found that a faulty
						fuel nozzle was the cause of the incident.
						The power to the fuel bowser was turned off and a danger tag was placed on the
						bowser.
						Council staff were advised to fill there trucks using Council's fuel card until the
5/09/2013	7.30am	**Incident Completed**		Fine	EPA	nozzle was replaced.
					Council	
					Depot Staff	
17/09/2014	1.20 pm	Leaking large gas bottle from CRC	Tony Hardy 0417227011			
		Storage cabinet	Manager	overcast	EPA	Users of the facility were escorted from the site by Council employees.
					Council	Council employees left their stations and proceeded to the staging areas.
					Hazmat	Council employee was stationed at the main gate to advise customers of the
					Rural Fire Service	incident and closure.
					Premises in the	Council employee was appointed to advise other premises in the vicinity.
					Vicinity	Rural fire Service were the first on the screen and used a fog spray covering the
					Users of facility	leaking bottle and surrounding area.
					Employees	Hazmat arrived and assisted the RFS. As it was not possible to turn the bottle off
						Hazmat and the RFS continued with the spraying until the bottle was emptied.
						Once the area was safe the bottle was inspected and found it had a faulty tap
						Other gas bottles were also checked and all found safe.
						Gas bottles are inspected when dropped off and this bottle had been on site for
						at least two days

						Once the area was deemed safe by Hazmat the following occurred.
						All agencies were notified
						Premises in the vicinity were notified.
						employees returned to work.
17/09/2014	2.45pm	**Incident completed**		Fine	EPA	Depot reopened
					Council	
					Employees	
					Premises in the	
					Vicinity	
23/09/2015	8am	Small Fire in Recycling Shed	Tony Hardy	Fine	EPA	During the loading of recyclables into Council's transport trailer smoke was noticed
			417227011		Council	in the recycling stockpile.
					Rural Fire Service	Due to the nature of material the Rural Fire service were notified for backup of
					Premises in the Vicinity	Council's equipment (14,000 litre Water tanker)
					Employees	Council's front end loader was used to separate the smoking material from the
						stockpile. Employees then used its water tanker to water down the material until
						the Rural Fire Service attended. With the assistance of the Fire Service the smoking
						material was extinguished.
						As the transport trailer was in the process of being loaded a decision was made to
						unload the trailer and inspect the load in case there was any of the smoking
						material that may have been loaded.
						The material in the trailer was spread out and inspected.
						The material was given the all clear and left spread out for further inspection.
						It is believed that a mobile phone battery was responsible.
						To assist in any future incidents Council advised residents not to place mobile
						phones or phone batteries into their recycling bins.
						The Depot was not closed due to this incident and the incident was completed
						at 10am
23/09/2015	10am	Incident Completed		Fine	EPA	
					Council	
					Premises in the Vicinity	
					All employees	
15/09/2016	2pm	oil spill	Tony Hardy	Fine	EPA	Oil was noticed coming from one of the full waste oil stillage located in the storage
			417227011		Council	building. A small bunded area large enough to hold the leaking stillage was

Appendix A-5:

NSWEPA, May 2018 (Ref: DOC 18/264054) & Responses by KMC/E2W

Appendix A-4 Soil, Water and Air: Pollution Mitigation Plan

earth2water Pty Ltd
Environmental & Groundwater Consulting
ABN 64 106 859 238

Goal: Prevent air, soil and water contamination at the Site.

ASPECT	ACTIONS	KPIs	TARGETS	MONITORING & REPORTING
Air, Soil, Water (Surface Water & groundwater) contamination	1. Ensure Notification to stakeholders for pollution events (Appendix A). 2. Control any surface spillages or fuel or oils. Remediate if necessary. 3. Maintain the integrity of the surface covering. 4. Inspect site daily to ensure appropriate human health and environmental conditions are not degraded over time. 5. Minimise stormwater contamination and manage stormwater releases to prevent environmental harm. 6. Undertake a visual inspection of site boundary, CRC building, creek/river and entrance areas to ensure that pollution is not discharging offsite.	No visual impact or exceedance of concentrations (air, soil, water) above published guidelines. No adverse health or environmental impact from pollution (degraded air, water, soil conditions). No community complaints (including from KMC staff or contractors).	Pollutants (nutrients, metals, hydrocarbons, asbestos etc) in air, water and soil should not exceed published EPA guidelines for commercial/ industrial site criteria. No nuisance odour or vermin/pests etc associated with stockpiling (green waste/food waste etc).	Environment reporting. Routine inspections by KMC members in accordance with checklist and or audit. Ensure appropriate training of staff (include notification procedures, emergency and spill prevention and control).

Our reference: DOC18/264054
Contact: Sally Marsden

May 08 2018

Paul Czulowski
Manager Environment and Health
Kiama Municipal Council
PO BOX 75
KIAMA NSW 2533

Dear Mr Czulowski,

Desktop Audit of requirements to prepare a Pollution Incident Response Management Plan

Environment Protection Licence Number 5958 – Minnamurra Waste Disposal Depot

The Environment Protection Authority (EPA) has completed a desk top audit of Minnamurra Waste Disposal Depot's compliance with the requirements of Protection of the Environment Operations Act 1997 (POEO Act) and Protection of the Environment Operations (General) Regulation 2009 (POEO Reg) that require holders of environment protection licences to prepare a Pollution Incident Response Management Plan (PIRMP).

The objective of the desktop audit is to assess the level of licensee's compliance with requirements of Part 5.7A of the POEO Act and Part 3A of the POEO Reg. The desktop audit was undertaken on 01 May 2018.

Tables 1 and 2 summarise the audit findings, that were identified in the desk top audit and actions required by the licensee to ensure that the non-compliances identified are addressed immediately.

The EPA now offers you the opportunity to review the draft audit findings and provide any comments. Please forward any comments on the audit findings to Sally Marsden by email sally.marsden@epa.nsw.gov.au within 14 days of the date of this letter so that they may be considered in finalising the report.

I further advise that any comments you make will be attached to the final summary of audit findings as an Appendix. If however, we have not received a response by the above date, we will assume that you are satisfied with the findings and the audit will then be finalised. A copy of the final summary of audit findings will then be forwarded to you, while a copy will be available on the EPA's Public Register http://app.epa.nsw.gov.au/prpoeoapp/ for public review.

If you require further information or clarification on any matters regarding this audit, please do not hesitate to contact Sally.

Sincerely

DR WINSTON WICKREMERATNE
Head Environmental Audit Unit
Environment Protection Authority

Enclosure: Draft Summary of Audit Findings

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NSW EPA

Draft Summary of Audit Findings

Scope of the Audit

The scope of the audit is limited to the examination of Minnamurra Waste Disposal Depot's Pollution Incident Response Management Plan as holder of environment protection licence 5958 for its depot in 446 Riverside Drive, Minnamurra, NSW 2533 and any parts of the PIRMP published on the licensee's website for this premises on the date of the desktop audit (01 May 2018).

Audit criteria and evidence

The audit criteria (the requirements against which the auditor assesses audit evidence) were: the legislative requirements for PIRMPs - Part 5.7A of the Protection of the Environment Operations Act 1997 (POEO) limited to Section 153A, 153C and 153D in relation to the information to be made publicly available and the related clauses of Chapter 7, Part 3A of the POEO (General) Regulation 2009.

Audit evidence used in making the assessments was the PIRMP submitted to the EPA on 17 March 2018: Kiama Municipal Council Pollution Incident Response Management Plan Minnamurra Waste Disposal Depot and the PIRMP published on the licensee's website (http://www.kiama.nsw.gov.au/environment/managing-the-local-environment) on the date of the desktop audit.

Compliance Assessment

Tables 1 and 2 outline the non-compliances identified through the desk top audit of the PIRMP received and the PIRMP available at Visy's website and actions required to be taken by the licensee immediately. A copy of the revised version of the PIRMP must be provided to the EPA within 14 days of the date of the letter outlining the final report.

Table 1: Assessment of Compliance with the Protection of the Environment Operations Act 1997 – Chapter 5, Part 5.7A (the Act)

Requirement	Details of non-compliance	Action Required
153C Information to be included in plan		
a) the procedures to be followed by the holder of the relevant Environment Protection Licence in notifying a pollution incident	Section 3.1 'Procedures for Notification Pollution Incidence' and '3.2.5 Incident Management and Emergency Response Systems' outline the steps for notifying those on site and relevant authorities but does not have any information on the procedure for notifying the owners or occupiers in the vicinity of the premises.	The licensee must include the procedures to be followed by the holder of the relevant Environment Protection Licence, or the occupier of the relevant premises, in notifying a pollution incident to; • the owners or occupiers of premises in the vicinity of the premises
b) a detailed description of actions to be taken immediately after pollution incident	Section 3.2.5 'Incident Management and Emergency Response Systems' provides information on the potential actions but does not satisfy the requirement of detailed description.	The licensee must provide a detailed description on the action to be taken immediately after a pollution incident by licence holder or occupier of premises to reduce or control any pollution.

Table 2: Assessment of Compliance with the Protection of the Environment Operations (General) Regulation 2009- Chapter 7, Part 3A

Requirement	Details of non-compliance	Action Required
98C (1) Additional matters to be included in the plan		
b) likelihood of such hazards occurring	Appendix A-2 'Hazard and Risk Analysis' gives the hazard ranking and risk score, however does not include any information on conditions or events that could, or would, increase that likelihood	The licensee must provide details of any conditions or events that could, or would, increase that likelihood
i) mechanisms for providing early warnings to occupiers of nearby premises	Section '3.1 Procedures for Notification Pollution Incidence' and 'Appendix A-1: Contact Details for Reporting Pollution Incidents' give the list of staff onsite who will contact authorities and any other persons affected but does not outline any means for early warning or regular updates	The licensee must include details of the mechanisms for providing early warnings and regular updates to the owners and occupiers of premises in the vicinity
j) a detailed map showing the location of the premises, the surrounding area, the location of potential pollutants and the location of any storm water drains	There are maps included in the Figures section of the plan. Figure 1 shows the location of the site, however it is unclear where those in the surrounding area that are likely to be affected by a pollution incident are located. The location of potential pollutants on the premises and the location of any storm water drains on the premises is not included in Figure 2	The licensee must add (a) detailed map showing: • the surrounding area that is likely to be affected by a pollution incident • locations of all potential pollutants stored on site.
k) nature and objectives of any staff training program in relation to the plan	There is no discussion of a training program in the plan	The licensee must include information regarding the nature and objectives of any staff training program in relation to the plan
o) the manner in which the plan is to be tested and maintained	The plan is tested annually in September by Tony Hardy as shown in Section '1.1 General Requirements of the Plan' however there is no information around the manner in which the plan is tested	The licensee must include the manner in which the plan is to be tested and maintained

The action program identified in Table 1 and 2 must be undertaken by the licensee.
Some requirements of the PIRMP could not be assessed during the desk top audit, as the PIRMP did not include the information required, but referred to another document that is required to be prepared under or in accordance with another law that requires this information.

Table 3 lists those requirements that could not be determined by the desk top audit. The licensee must ensure that all referenced documents comply with these PIRMP requirements.

Table 3: Not-determined assessments

Requirement	Details of non-compliance	Action Required
98C (1) Additional matters to be included in the plan		
f) a description of any safety equipment or other devices used to minimise the risks to human health or the environment and to contain or control a pollution incident	Section '3.2.1 Hazardous Substances' indicates the use of spill kits, eye wash, extinguishers and bunding but does not mention any alarms, overflows or first flush systems Section '3.2.5 Incident Management and Emergency Response Systems' states: "*For example, this may includes actions such as containing the spill, pressing the emergency stop button to stop machinery/all pumps etc, or using the fire extinguishers on the Site to extinguish or prevent a fire, using the spill kit to clean up any fuel spills and prevent any spills from entering drains, etc. and contacting the relevant authorities and emergency service*" The plan should provide the actual equipment on site not just examples of possible safety equipment.	The licensee must include a description of all safety equipment or other devices used to minimise the risks to human health or the environment and to contain or control a pollution incident
n) the dates the plan has been tested and name of person who carried out the test	The plan is tested annually by Tony Hardy as shown in Section '1.1 General Requirements of the Plan' and 'Appendix A-1: Contact Details for Reporting Pollution Incidents' includes a line with years but there is no clear record for the testing of the plan.	The licensee should include a table with the date, test type and person who carried out the test to ensure clearer communication
98E Testing of Plan		
2 a) Testing must be carried out routinely at least once every 12 months	The plan is tested annually by Tony Hardy as shown in Section '1.1 General Requirements of the Plan' and 'Appendix A-1: Contact Details for Reporting Pollution Incidents' includes a line with years but there is no clear record for the testing of the plan.	The licensee should include a table with the date, test type and person who carried out the test to ensure clearer communication

NSWEPA, Table 1. Section 153C

a) In the event of a pollution incident the holder of the relevant licence (Kiama Municipal Council) Licence No.5958 or the owner or occupier will notify the premises in the vicinity by undertaking a door knock of each relevant property by a senior staff m-ember of Council advising them of the pollution incident. If available, they will be given a Council contact phone number so they can contact Council if required. If the resident is willing to provide their phone number, then this number will be recorded and used for future updates when available (Table A-1; the template).

In the Event that the premises are unattended then a letter outlining the pollution incident and Council's contact number will be left on site.

The relevant properties will be updated by phone or in person as the incident progresses or when completed. A registrar identifying the following will be kept on site.

- Date and time of Incident
- Name of Council officer in control
- Name of Council officer notifying premises in the vicinity.
- Type of Incident.
- List of premises notified.
- Phone number & address of premises.
- Time premises were updated on the incident. • Emergency services on site.
- Time premises were notified of completion of incident.

b) In the Event of as Pollution Incident the responsible Council officer MUST notify all authorities relating to the incident as follows.

- Environment Protection Authority for all Pollution Incidents.
- Council staff identified on the PIRMP on all Pollution Incidents.
- Premises in the Vicinity of all Pollution Incidents.
- Depending on the actual incident the following agencies will be notified.
- In Case of a Non Hazardous fire then the Rural Fire service will be notified (Dunmore Rural Fire Service) as the Depot is located in the Rural fire service area.
- In case of Hazardous fire, the Fire Rescue will be notified as well.
- In the event that somebody has or maybe injured due to the incident then the NSW Ambulance Service will be notified.
- In the event that the incident has or is likely to cause death or serious injury to staff or users of the facility then the Police and Safe Work Australia will be notified.
- Depending on the Incident it may be necessary to Close the Depot and if this is the case the media will be advised to advise users of the facility that the depot is closed until further notice due to the Pollution Incident. A Council staff member will be in attendance at the gate to advise users of its closure and to provide entry for emergency services.
- A number of other pollution Incidents may involve the notifying of other agencies including but not limited to the Endeavour Energy, Dept. of Public Health, Care flight, SES.
- In the event of any Pollution Incident Council has a wide range of equipment that can assist with these pollution incidents and a Full list has been supplier and is included in Council's PIRMP. In Section 3.2.1

NSWEPA, Table 2. Section 98C (1)

Actions required:

(b) The licensee must provide details of any conditions or events that could, or would, increase that likelihood.

Based on E2W discussions with KMC (Tony Hardy); the following conditions are outlined;

- Strong wind storms; damage to infrastructure, resulting in failure of containment systems (mobilisation of chemicals to environment).
- Purposeful disposal of unauthorised or hazardous chemicals which are camouflaged or hidden.
- Incidental damage to recyclable materials/containers from heavy machinery or vehicles.
- Inappropriate storage, disposal or mixing of hazardous waste by the community (e.g. battery, fuel, oils, fertiliser) at the site.

Council has onsite staff and sophisticated surveillance systems at the CRC to observe inappropriate behaviour and undertake the clean-up using established resources (Refer to Plates).

(i) The mechanism for providing early warnings and regular updates to the owners or occupiers of premises in vicinity (Table A-1 template) would be managed by Council (Tony Hardy or Greg Hardy). Refer to plates for general and specific information.

(J) Refer to Figure 3 and plates.

K) All Employees working at the Minnamurra Waste Depot have received training in relation to the duties they perform. The Manager Tony hardy Business Unit Coordinator Greg Hardy and acting coordinator all received training by Toxfree for the management of hazardous material that may be received at the CRC.

This training has been passed onto other Council employee engaged in any CRC operations. A recent survey and inspection by EPA representatives was undertaken. All operators of Council's plant and equipment are qualified and hold the appropriate tickets (refer to Plates).

Both the Manager and Coordinator (Tony & Greg Hardy) are members of the Rural fire service. The Manager is a Group captain (42 years service) whilst the Coordinator a Senior Deputy / Fire investigator (22 years service).

This expertise gained by many years of training relating to fires, oil spills, working with hazardous types of materials, in charge of large incidents involving other agencies including Police, NSW Ambulance, Safework Australia, EPA, State rail, RMS, Fire Rescue, SES and many others.

This experience has greatly assisted Council's management of its previous Waste disposal Depot and its current operations.

o) A detailed spreadsheet is provided in relation to the testing of the plan (attached in Appendix A-1).

NSWEPA, Table 3. Section 98C (1)

(f) Refer to Plates and Figure 3. A detailed spreadsheet is provided in relation to the testing of the plan (attached in Appendix A-1).

(n) The dates for PIRMP testing (annual) are presented in Appendix A-1.

LAST PAGE OF REPORT

Thank you for the opportunity to work with Kiama Council.

Feedback is Welcomed at Earth2Water
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