



# **POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN (PIRMP)**

for

**Environment Protection Licence 12728**

**Singleton Regional Livestock Market**



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# 1. Context of the PIRMP

## 1.1 Purpose

This Pollution Incident Response Management Plan (PIRMP) has been prepared to describe the processes required to make preparations for, and respond to, a pollution incident at the Singleton Regional Livestock Market (SRLM).

## 1.2 Legislative Requirements

Singleton Council owns and operates the SRLM and holds an environment protection licence (EPL) 12728 issued by the Environment Protection Authority (EPA) for the scheduled activity of *Livestock intensive activities*. All holders of an EPL are required under the *Protection of the Environment Legislation Amendment Act 2011* (POELA Act) and the requirement under Part 5.7A of the *Protection of the Environment and Operations Act 1997* (POEO Act) to prepare, keep, test and implement a PIRMP.

This PIRMP has been prepared in response to these requirements.

## 1.3 Objectives

The objectives of a PIRMP are set out in the EPA Guidelines: Preparation of pollution incident response management plans, March 2012. The objectives of the PIRMP 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 POEO Act (such as local councils, Ministry of Health, SafeWork NSW, 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; and
- 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.

## 1.4 Definition of a Pollution Incident

NSW EPA defines a pollution incident as:

*“an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.”*

## 1.5 Duty to Notify

A pollution incident is required to be notified if there is a risk of ‘material harm to the environment’, which is defined in section 147 of the POEO Act as:

- “(a) harm to the environment is material if:*
- (i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or*
  - (ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and*
- (b) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.”*

The requirement to notify a pollution incident equally applies where the harm is caused only within the premises where the pollution incident occurs, and also where the harm is caused external to the premises.

It is also a requirement to report incidents **immediately** (ie. promptly without delay) to EPA, Ministry of Health, Fire and Rescue NSW, SafeWork NSW and local councils.

## 1.6 Scope of PIRMP

The scope of the SRLM PIRMP is as follows:

- description and likelihood of hazards;
- pre-emptive actions to be taken;
- inventory of pollutants;
- safety equipment;
- contact details;
- communicating with neighbours and the local community;
- minimising harm to persons on the premises;
- maps showing the location of scheme components;
- actions to be taken during or immediately after a pollution incident; and
- staff training.

In summary, the PIRMP is required to include the following:

- the procedures to be followed regarding notification in the event of a pollution incident;
- a detailed description of the action that will be taken immediately after a pollution incident to minimise and control any pollution;
- the procedures that will be followed regarding coordinating with any notified authorities or persons; and
- any other matter required by the regulations.

## 1.7 Singleton Council’s Commitment

Singleton Council is committed to protecting the health and safety of the community, Singleton Council employees and the environment. This commitment is formalised in Singleton Council’s Operational Plan 2017/2018.



## 2. The Premises

### 2.1 Site Location

The SRLM is located at 56 Gresford Road, Singleton, approximately 2.5 km east of the Singleton CBD (Figure 1). The Hunter River is approximately 200 m west of the site boundary.

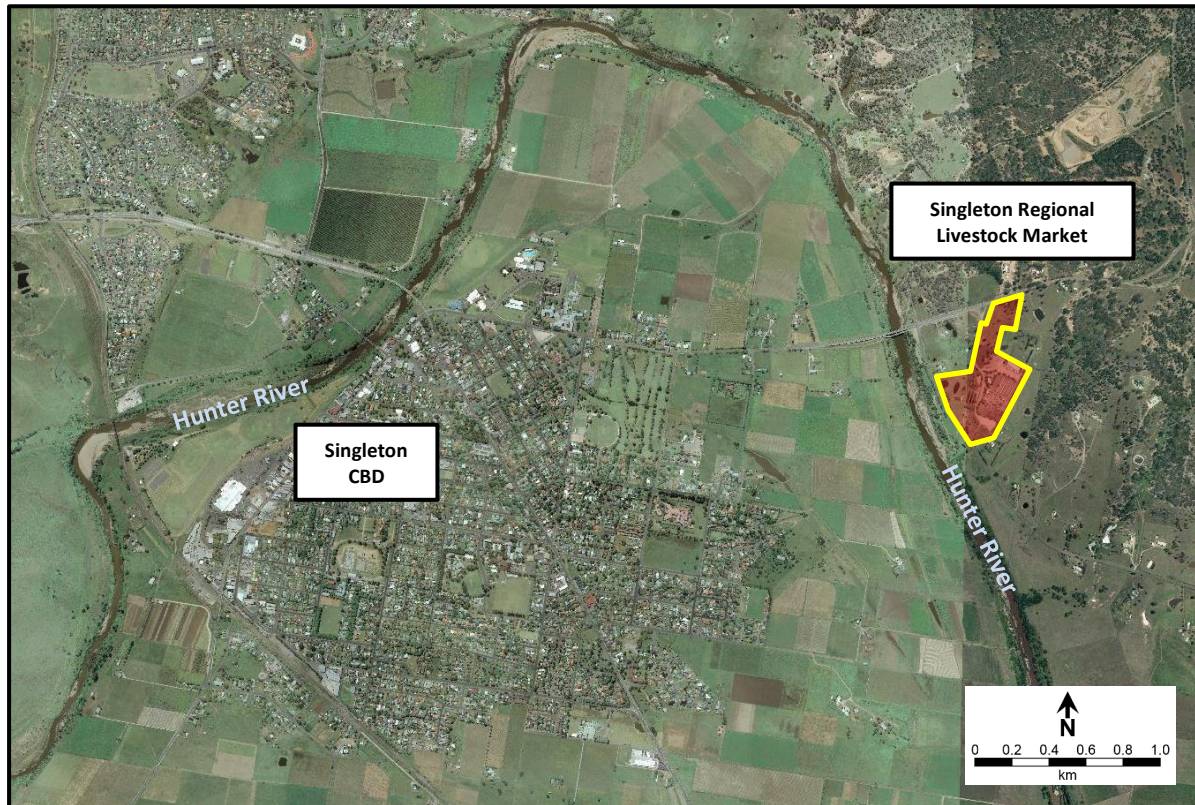


Figure 1: Site location (source: SixMaps)

### 2.2 Site Characteristics

The SRLM is cited near sensitive receptors which require implementation of considered environmental management (Figure 2). The sensitive receptors are:

- adjacent neighbouring residences; and
- near proximity to the Hunter River.

The 12 ha site is accessed by Gresford Road to the north, and borders Glendon Road to the west. The land surface slopes from the north east in the direction of the Hunter River at a nominal gradient of 6 degrees.

The surface water overflow location is adjacent to Glendon Road. The flow path to the Hunter River is approximately 200 m in length and passes through Clydesdale Reserve.



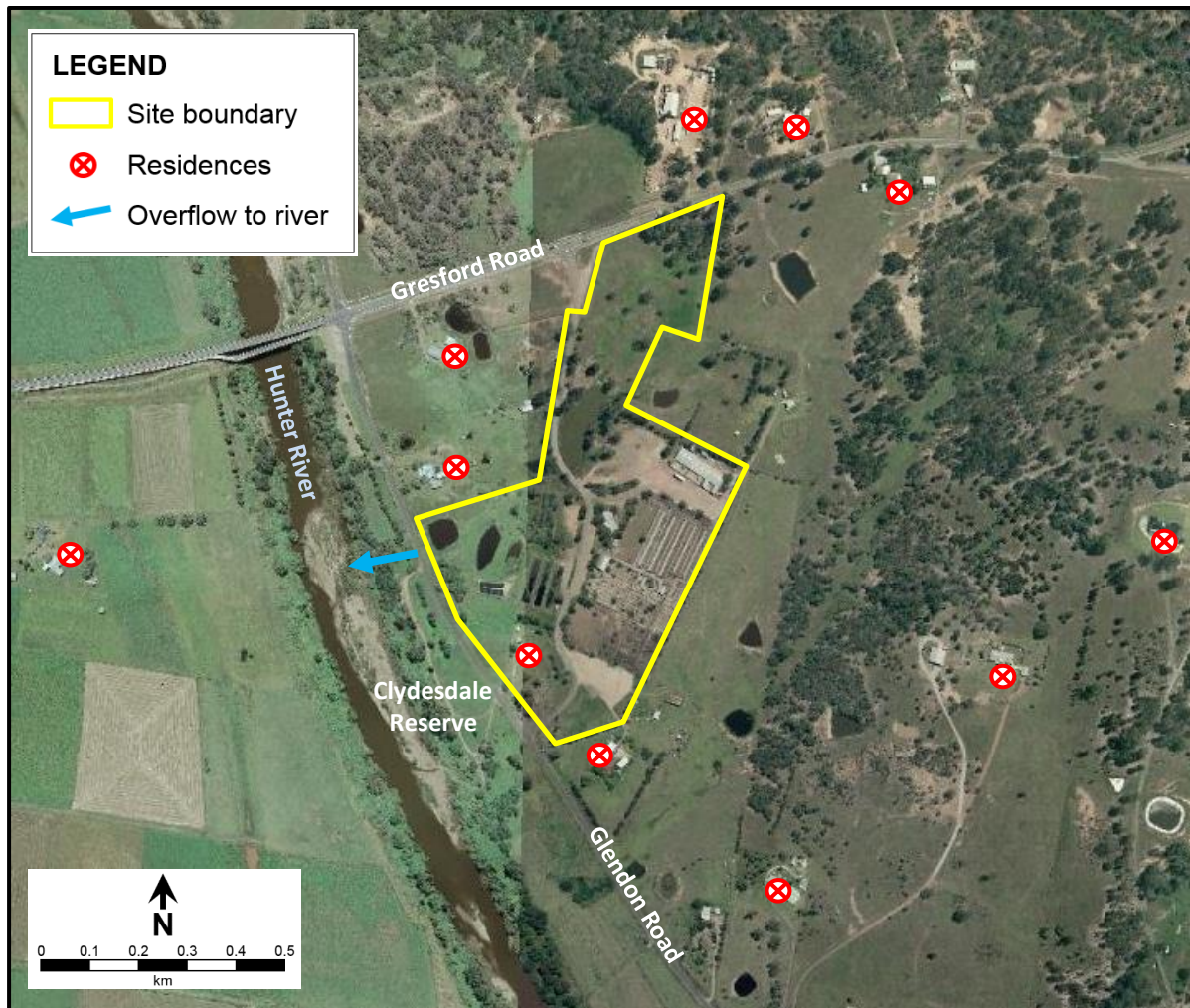


Figure 2: Local environmental setting (source: SixMaps)

## 2.3 Site Supervision

The SRLM Supervisor performs the day to day management responsibilities at the facility.

The site is open 24 hours every day. Singleton Council staff are present 6:30am to 3:00pm on weekdays. Sales occur each Wednesday, and cattle unloading commences at midday on Tuesday through to the 9:00pm curfew. Cattle are typically re-loaded and transported offsite by Thursday afternoon.

Vehicles movements are controlled by signage.

## 2.4 Site Development

In March 2014, Singleton Council received \$6M funding from Infrastructure NSW under the Resources for Regions Program to upgrade the SRLM facility. Construction works were completed in early-2018. The current site layout shown in Figure 3.

### 2.4.1 Current site description

The existing facility (see Figure 3) consists of:

- northern selling yards;
- northern selling yards roof (area 5,116 m<sup>2</sup>);
- refurbished northern selling yard fences and walkways;
- refurbished water troughs;
- southern stock holding yards and weigh scales;
- harvested water tank 'A' (500 kL);
- fire services (hydrants and main);
- workshop (with disused calves shed);
- truckwash area with high pressure hoses;
- electrical services (lighting etc);
- hydraulic services;
- access road (eastern side for fire-fighting access);
- Gresford Road intersection upgrade;
- wastewater treatment, effluent storage and effluent reuse system, including:
  - three in-series concrete primary settling sumps
  - solids drying area
  - five pond wastewater treatment system
    - Ponds 1-3 mechanically aerated
    - Pond 4 anaerobic
    - Pond 5 wetland and sedimentation
  - wet weather storage – Pond 6
  - Irrigation Area no. 2 (1.04 ha) and tailwater storage (Storage Dam 1)
  - disused Irrigation Area no. 1
- kiosk/office, permit office, NLIS contractor office;
- fuel storage shed;
- domestic wastewater septic and absorption trench system; and
- signage.

### 2.4.2 Site OEMP

Prior to the issuing of an occupation certificate for the re-developed SRLM, an Operational Environmental Management Plan (OEMP) was developed and submitted to Singleton Council. This PIRMP forms part of the OEMP.



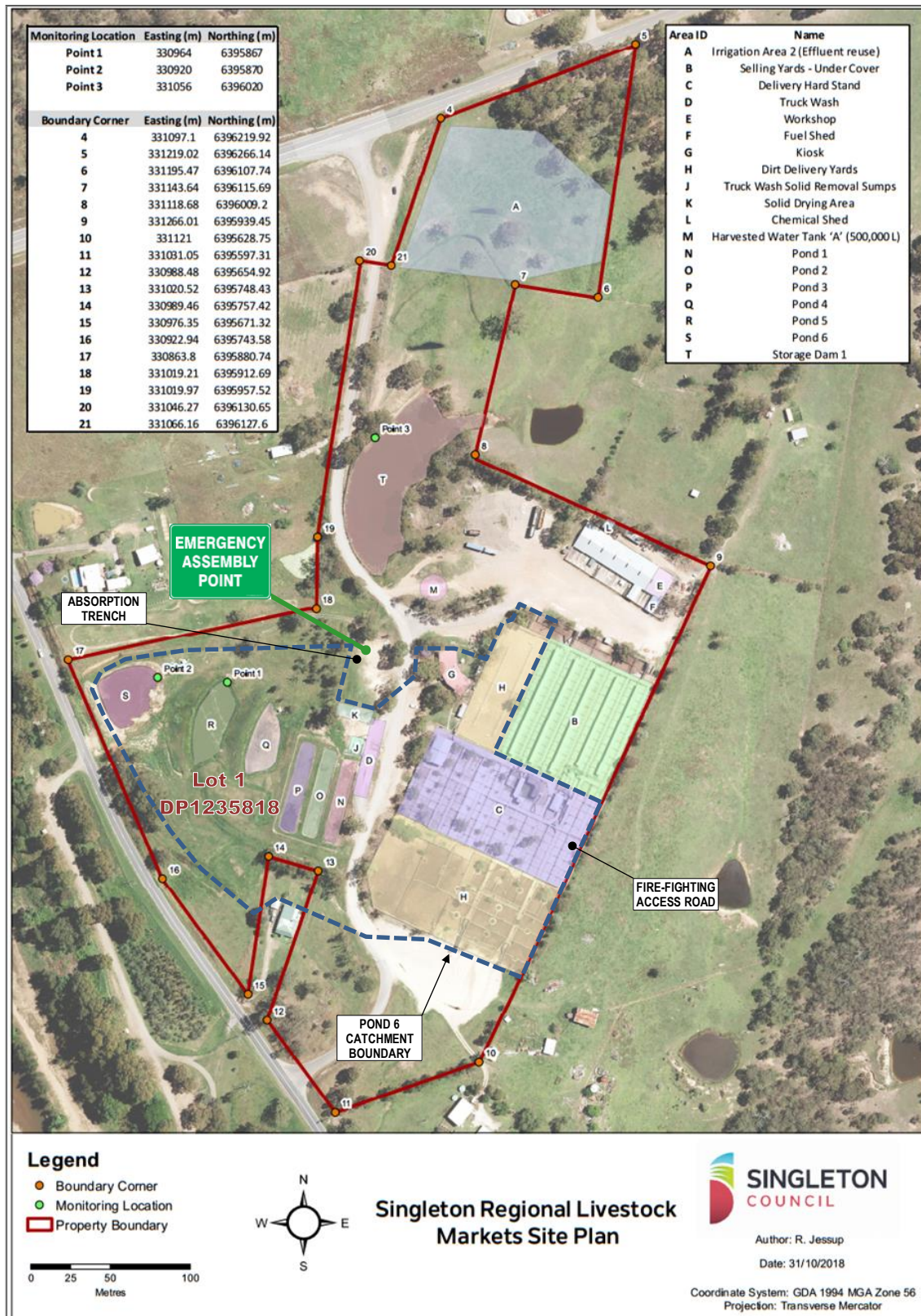


Figure 3: SRLM site layout and Pond 6 catchment boundary

### 3. Operational Risk Management

To inform the site risk assessment presented in Section 4, the following sections describe current operational procedures and design aspects which impact the management of risk at the facility.

#### 3.1 Wastewater Management

The sources of surface water runoff emanating from the 'dirty' surface areas at the SRLM include:

- washdown water used to clean voided cattle waste from all concrete floors at the northern and southern yards following sale days;
- washdown water used to clean voided cattle waste from trucks; and
- rainfall incident on the catchment area of Pond 6 (see Figure 3).

The long-term mean wastewater pond system inflow rate is estimated to be 2.02 ML/yr and the 90<sup>th</sup> percentile inflow is estimated to be 6.01 ML/yr (AK Environmental 2018).

Treated wastewater effluent sourced from Pond 5 is recycled for yard washdown purposes. This reuse strategy decreases demand requirements for higher quality water.

Effluent sourced from Pond 6 is used at the 1.04 ha Irrigation Area No. 2 for irrigation of permanent pasture. A network of fixed sprinklers applies irrigation to land, and Storage Dam 1 acts as a downstream tailwater dam.

The volume of applied effluent is recorded on a daily basis.

##### 3.1.1 Wet weather storage requirement

The dedicated wet weather storage (Pond 6) has been sized to comply with (i) an EPL licence condition (1 June 2012) for a pollution study and reduction program requirement to "accept contaminated surface run off from the saleyards area and effluent inflows for up to a 1:25 year ARI 24 hour storm event" and (ii) an EPL licence condition (30 April 2013) to provide "capacity of 4.5 ML for the purpose of dedicated wet weather storage". Calculation of the 1:25 year ARI 24 hour storm event requirement forms part of the Singleton Saleyard Wastewater Management Plan (Mitchell Hanlon Consulting 2013). The actual storage volume requirement is 4.36 ML for the expected rainfall depth of 144 mm. Increasing the requirement to 4.5 ML was adopted by Mitchell Hanlon Consulting (2013) as a conservative measure.

The new roof (Building 'B'), constructed as part of re-development works, spans the northern pens and captures and diverts all rainfall to Harvested Water Tank 'A'. This has reduced the catchment area to the wastewater ponds by 5,116 m<sup>2</sup>. Based on the method of Mitchell Hanlon Consulting (2013), the wet weather storage requirement (based on the 1:25 year ARI 24 hour storm event) will subsequently reduce to 3.62 ML. Pond 6 has a capacity of 4.28 ML, which 18% larger than the new requirement.

Pond 5 is currently used as an extra treatment pond. As an additional factor-of-safety, Pond 5 can be drawn down (as irrigation supply to Irrigation Area 2) in response to a pending large storm event (ie. east coast low) to make a further 0.32 ML available for wet weather storage. Together, Pond 5 and 6 offer wet weather storage capacity 27% above the requirement.

#### 3.2 Solid Waste Management

Solids wastes are collected from the three in-series concrete primary settling sumps and transferred to a bunded drying pad. Solids generation varies from 3 to 7 m<sup>3</sup>/day. Dried solids are collected by residents for use on gardens.

When pond de-sludging is undertaken to re-establish wastewater system capacity, the removed sludge is firstly dried onsite. When dry, the resultant solid waste is removed from site. No liquid or wet waste is permitted to be removed from site.

The estimated volume of solid waste removed from site is recorded on a daily basis.

### **3.3 Environmental Monitoring**

In accordance with conditions in EPL12728, wastewater samples are to be taken from 'Point 1' (Pond 5) and 'Point 2' (Pond 6) on a quarterly basis (3 monthly) during pumped discharge. When Storage Dam 1 is nearing capacity, water quality sampling is undertaken to determine suitability of water for discharge to the Hunter River.

### **3.4 Dead or Diseased Stock Management**

The following actions are undertaken in the event of dead stock:

- Investigate cause of death, if death is not clear contact either Local Land Services Vet or a Vet from Singleton Veterinary Hospital.
- Remove NLIS tag for recorded keeping then destroy when finished. NLIS tag number will also need to be registered as dead on the NLIS database.
- If the carcass cannot be removed immediately move to the dead stock area and cover (behind the Workshop).
- Find the owner to organise disposal.
- If owner is wanting Singleton Council to dispose of the carcass, call Singleton Waste Management Facility to prepare burial hole. Carcass transport of the will be supplied by the Singleton Council Works Department.
- All deaths are recorded in the Dead Stock Register contained within the OEMP, which is kept at the SRLM administration office with the following details:
  - Date & Time
  - Description of stock
  - If a vet was engaged
  - Cause of death
  - NLIS Tag number
  - Owner/ Persons responsible
  - Disposal method
- Record mortalities in the monthly Saleyard Report.

In the event of mass stock death or notifiable disease, the SLRM Supervisor will refer to the Biosecurity Management Plan contained within the OEMP to determine the appropriate management strategy.

### **3.5 Fire Management**

Management actions which control the potential for fires are:

- maintain machinery in good working order to reduce potential for ignition;
- manure stockpiles are turned regularly until removal from site;
- regular testing of fire hydrants and fire extinguishers; and
- regular site patrols.

### 3.6 Vandalism or Targeted Attack

A stock fence is erected at the site boundary, but the entrance road access is not gated.

Singleton Council staff are present 6:30am to 3:00pm each weekday, and through to the 9:00pm cattle unloading curfew every Tuesday.

Intensive livestock facilities are potential targets for animal activists, and staff are required to remain vigilant to any suspicious behaviour.

It is a requirement for staff as soon as they become aware of instances of malicious damage, animal activism or anti-social behaviour, that Police are notified.

### 3.7 Pollutants and Chemicals

The following human and animal waste-based pollutants are generated by the SRLM and are potentially hazardous to public health and the environment:

- cattle waste solids (separated at sumps);
- pond sludge;
- treated effluent (discharged from wastewater system); and
- raw sewage (from kiosk/office).

The chemicals and fuels listed in Table 1 are stored at the site. Chemicals and fuels are maintained in small quantities and are kept in secured and bunded locations. For those chemicals/fuels which have safety data sheets (SDS), these are kept on site and updated as required. Safe use of chemicals and spill-handling procedures are in accordance with SDS documentation.

Table 1: Treatment chemicals and fuels

Chemical	Typical Analysis	Use(s)	Safety Data Sheet Kept At Site?
Diesel	400 L	Fuel Shed	Yes
Unleaded Petrol	50 L	Fuel Shed	Yes
Kerosene	20 L	Dairy Ring	Yes
Cattle marking paint	40 L	Dairy Ring	-
Roundup 450	40 L	Chemical Shed	Yes
Hammer	500 mL	Chemical Shed	Yes
Lynx WG Herbicide	500 g	Chemical Shed	Yes
Galmet Paint	5 L	Workshop	Yes
Galmet Aerosol	6 x 350 g	Workshop	Yes
WD40	6 x 350 g	Workshop	Yes
Engine Oil 15w40	20 L	Fuel Shed	Yes
Hydraulic Oil	20 L	Fuel Shed	Yes
Copper Sulphate	20 L	Chemical Shed	Yes
Compressor Oil	500 mL	Workshop	Yes
Bathroom Disinfectant	20 L	Kiosk Store	-
WhiteKing Bleach	5 L	Kiosk	Yes
Urinal blockettes	15 kg	Kiosk Store	-
Mortein Surface Spray	6 x 350 g	Kiosk	Yes
Peabeu Insect Spray	6 x 350 g	Kiosk	Yes



### 3.8 Safety Equipment and PPE

Safety equipment and personal protective equipment (PPE) are provided to workers to minimise the risk to human health and the environment. The purpose of this safety equipment and PPE is to contain, control or prevent contact with potential pollutants.

The following safety equipment is maintained at the premises:

- Fire hydrants and high-pressure hoses;
- Fire extinguishers and fire blankets; and
- PPE for undertaking of works concerning untreated effluent. Shovels and hand equipment are also available to limit contact with waste material.

The types of PPE kept at site are shown in Table 2, and the locations of firefighting and PPE components are shown in Figure 4.

**Table 2: Personal protective equipment and storage locations**

Equipment	Purpose	Location
Protective overalls	Prevent bodily contact with contaminants	Kiosk/Office
PVC gloves (45 cm)	Prevent bodily contact with contaminants	Kiosk/Office
Safety glasses	Prevent contaminants entering eyes	Kiosk/Office
Dust mask	Prevent inhalation/ingestion of contaminants	Kiosk/Office
Safety boots	Prevent foot injuries	Kiosk/Office

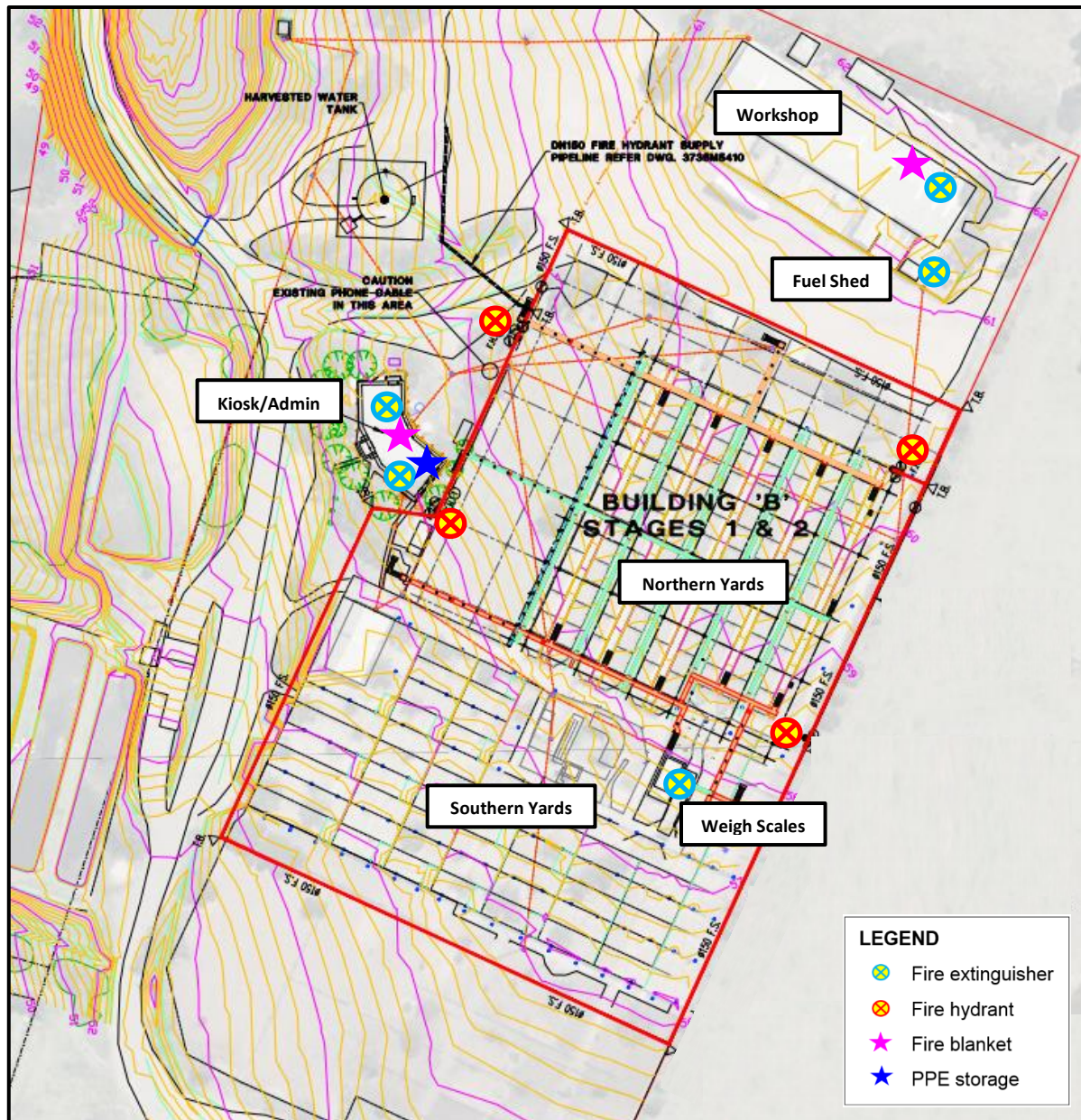


Figure 4: Locations of firefighting components and PPE storage

### 3.9 Site Inductions

All Singleton Council staff and contractors conducting work at the SRLM are to be inducted to the site by the SRLM Supervisor. Contractors must be inducted onto the site in accordance with Council's Managing Contractor Safety procedure. Council staff who do not routinely work at the SRLM are required to undertake an induction if they are required to undertake work at the SRLM site. This induction must cover the purpose, requirements and responsibilities detailed in this PIRMP.

All work carried out will be managed under Council's Integrated Risk Management system and prior to completing any task a risk assessment, standard operating procedure and/or safe work method statement will be completed and adhered to.

### 3.10 Evacuation Procedure

In the event of an emergency, Council staff will notify all workers and visitors onsite through either personal-address, air horn or by verbal communication. All Council staff and visitors are to go the emergency assembly point, which is located at the overflow carpark as shown in Figure 3.

### 3.11 Specialist Advice

Council maintains a preferred suppliers list of environmental and engineering specialists. The preferred contractors for works at the SRLM are listed in Table 3.

**Table 3: Preferred suppliers for specialist works at the SRLM**

Company	Area of Expertise	Phone
ForEarth	Wastewater systems	(02) 6581 4353 0417 694 844
MooreCivil	Earthworks	0428 721948

In the event of an incident, these consultants would be available on short notice to assist in providing specialist advice on managing impacts to the environment.

### 3.12 Training

Training is provided to all Council staff conducting work at the SRLM. The nature of the training is determined by the level of risk and likelihood of incidents and is further the position the employee holds. Training is provided with the principle objective of statutory compliance and knowledge and application of procedures and plans. Additional training is provided to supplement knowledge and skills as well as providing breadth knowledge. Training is provided in the form of:

- formal training courses/certificates;
- toolbox talks; and
- internal training on PIRMP and incident response.

All staff should receive sufficient training to enable them to carry out their assigned duties in a competent and safe manner. All staff must be:

- capable of using the fire-fighting equipment;
- capable of identifying potential pollution incidents; and
- familiar with the requirements and procedures contained within this PIRMP.

The staff training register for each position is shown in Appendix A.

## 4. Risk Assessment

A risk assessment has been undertaken to determine the following with regards to the SRLM:

- identification of hazard events;
- identification of potential exacerbating circumstances;
- documentation of preventative measures and monitoring; and
- assessment of the residual risk (likelihood and consequence).

### 4.1 Structure of Assessment

The criteria used to undertake the risk assessment is set out in Singleton Council's 2017 Integrated Risk Management structure (see Appendix B), including the definition of likelihood, consequence and the resultant risk matrix.

### 4.2 SRLM Risk Assessment

The risk register is shown in Table 4. The risk assigned to each potential pollution incident event is the *residual risk* when all preventative actions/measures are considered.

Table 4: Risk matrix

Risk	Causes	Contributing Factor(s)	Likelihood	Consequence	Risk Rating	Controls
Failure of wastewater pond system	Ponds 1-6 structural embankment failure	Downstream toe scour by overtopping	Rare	Major	Medium	Regular embankment integrity inspections Routine maintenance to maintain vegetation cover
		Internal wave-induced erosion	Unlikely	Major	Medium	Regular embankment integrity inspections Routine maintenance
		Seepage/piping embankment weakening	Unlikely	Major	Medium	Regular embankment integrity inspections
	Effluent overflow from Pond 6	Single large rainfall event	Rare	Moderate	Medium	Wet weather storage available to contain up to 1 in 25 year 24 hour design storm
		Prolonged wet period	Possible	Moderate	High	Wet weather storage available to contain up to 1 in 25 year 24 hour design storm
		Power failure to pump	Possible	Minor	Medium	Engage emergency electrical contractor Generator hire for outages exceeding 24 hours
	Pond to pond pipe/culvert outlet blockage	Build-up of solids in Pond 1 and 2 discharge outlet pipes Build-up of grass growth in Pond 4 discharge outlet culvert	Likely	Minor	Medium	Regular pipe and culvert integrity inspections Routine maintenance to maintain vegetation cover

Risk	Causes	Contributing Factor(s)	Likelihood	Consequence	Risk Rating	Controls
Failure of facultative wastewater pond treatment	Offensive odour generation	Treatment volume capacity reduced by build-up of solids in Ponds 1-3 and 4 - insufficient residence time to achieve treatment quality	Unlikely	Moderate	Medium	Regular pond sediment build-up inspections Regular dosing with probiotic bacteria Engage contractor to remove excessive solids build-up
		Chemical/fuel spill compromising bacteria population	Unlikely	Moderate	Medium	Follow correct chemical and fuel handling procedures Increased dosing with probiotic bacteria
		Power failure	Unlikely	Minor	Low	Engage emergency electrical contractor Generator hire for outages exceeding 24 hours
	Generation of high strength effluent	Treatment volume capacity reduced by build-up of solids in Ponds 1-3 and 4 - insufficient residence time to achieve treatment quality	Possible	Minor	Medium	Regular pond sediment build-up inspections Regular dosing with probiotic bacteria Engage contractor to remove excessive solids build-up
		Chemical/fuel spill compromising bacteria population	Unlikely	Minor	Low	Follow correct chemical and fuel handling procedures Increased dosing with probiotic bacteria
Toxic algal bloom in Storage Dam 1	High nutrient load in captured surface water	Treated effluent irrigation rates at Irrigation Area 2 exceeding infiltration capacity of soil causing runoff of treated effluent Captured sludge in Storage Dam 1 releasing nutrients	Possible	Minor	Medium	Irrigation by moisture deficit approach Regular inspection of irrigation equipment Regular dam sludge removal Exclusion of cattle from Irrigation Area 2



Risk	Causes	Contributing Factor(s)	Likelihood	Consequence	Risk Rating	Controls
Truckwash not operational	Unwashed trucks leave site	Pump failure Power failure	Possible	Minor	Medium	Engage emergency electrical contractor Generator hire for outages exceeding 24 hours Regular pump maintenance Allow truck effluent tank release
Failure of effluent irrigation system	Effluent overflow from Pond 6	Pond 6 drawdown restricted by irrigation area hydraulic loading caused by prolonged wet weather	Possible	Moderate	High	Regular soil moisture inspections at Irrigation Area no. 2 Drawdown by irrigation ahead of predicted wet periods (Bureau of Meteorology website)
	Algal outbreak at Storage Dam 1	Hydraulic overloading of Irrigation Area no. 2 causing direct runoff of applied effluent	Possible	Moderate	High	Regular soil moisture inspections at Irrigation Area no. 2 Drawdown by irrigation ahead of predicted wet periods (Bureau of Meteorology website) Water quality monitoring
Failure of manure stockpile management	Offensive odour generation	Incomplete solid waste stockpile handling Large quantity of build-up	Possible	Minor	Medium	Routine stockpile inspection Engage contractor to remove excessive solids

Risk	Causes	Contributing Factor(s)	Likelihood	Consequence	Risk Rating	Controls
Fire	Self-combustion of solid waste stockpiles	Incomplete solid waste stockpile handling Excessive period of stockpiling	Unlikely	Minor	Low	Routine stockpile inspection Engage contractor to remove excessive solids
	Ignition	Accidental ignition by human intervention Deliberate ignition - vandalism	Possible	Moderate	High	Staff not permitted to smoke onsite Regular inspections Routine maintenance Staff presence and vigilance at site
Chemical/fuel spill	Hazardous material exposure	Inappropriate handling or human error	Possible	Minor	Medium	Limited quantities kept on site Follow correct chemical and fuel handling procedures
		Vandalism	Possible	Minor	Medium	Limited quantities kept on site Maintain lockable storage
Failure of domestic wastewater system	Raw sewage runoff	Incomplete septic management	Unlikely	Minor	Low	Regular inspections Routine maintenance
Vandalism or targeted attack	Hazardous material exposure	Active human intervention	Possible	Minor	Medium	Staff presence and vigilance at site

## 5. Actions in Response to Pollution Incident

A Pollution Incident Decision Flow Chart is shown in Appendix C. The flow chart is to be used in the event of a pollution incident to ensure all notifications and actions are correctly identified and subsequently enacted.

### 5.1 Timing of Notification Response

The notification of the relevant authority when material harm to the environment or human health is caused or threatened must be **immediate**, meaning **promptly without delay**. Notwithstanding the requirement for immediacy of the response, priority may still need to be given beforehand to actions which prevent, limit, or make good harm to the environment.

### 5.2 Responsibilities and Contact Details

When a pollution incident causes or threatens material harm to the environment or human health, it is the direct responsibility of the **SRLM Supervisor** to contact the regulatory authorities listed in Table 5.

For 'notifiable incidents' under the Work Health & Safety Act (2011) NSW, the **SRLM Supervisor** should immediately contact the Integrated Risk Management Team who will manage the notification to SafeWork NSW.

Table 5: External Emergency Contact Details

Organisation	Details	Contact Info	Phone
Emergency Services	Police, Fire & Rescue, Ambulance, HAZMAT	Emergency Only	000
NSW EPA	NSW EPA Pollution Line	24 hours	131 555
NSW Health	Public Health Unit - Newcastle Office (note: After Hours diverts to John Hunter Hospital - ask for Public Health Officer on call)	Public Health Officer	(02) 4924 6477
Fire & Rescue NSW	Pollution Incident Notification	24 hours	1300 729 579
	Singleton Fire Station	24 hours	(02) 6572 1495
	Fire & Rescue NSW Zone Office Regional West 2 – Upper Hunter and Central West	Business hours 8:30am - 4:30pm	(02) 6331 6372
SafeWork NSW		24 hours	13 10 50

Emergency contact details of all responsible Singleton Council staff are provided in Table 6. In accordance with EPL 12728, EPA must be notified in writing of the appointment of any subsequent contact persons, or changes to the person's contact details as soon as practicable and in any event within fourteen days of the appointment or change.

Table 6: Singleton Council Emergency Contact Details

Position	Name	Phone
SRLM Supervisor	Richard Watling	0438 284 833 (02) 6572 1525
Coordinator of Asset Planning	Neda Khojasteh	0411 323695 (02) 6578 7264
Manager - Infrastructure Strategy Planning and Programming	Peter McMurray	0428 684 583 (02) 6578 7270
Council after hours contact		(02) 6572 1400

### 5.3 Relevant Information to be Notified

Section 150 of the POEO Act defines the information which needs to be reported in the event of a pollution incident. The relevant information is:

*“(1) The relevant information about a pollution incident required under section 148 consists of the following:*

- (a) the time, date, nature, duration and location of the incident,*
- (b) the location of the place where pollution is occurring or is likely to occur,*
- (c) the nature, the estimated quantity or volume and the concentration of any pollutants involved, if known,*
- (d) the circumstances in which the incident occurred (including the cause of the incident, if known),*
- (e) the action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known,*
- (f) other information prescribed by the regulations.”*

The SRLM Supervisor is responsible for supply of this information immediately after the pollution incident is known. If some information is not known to the SRLM Supervisor at the time the pollution incident is notified, is the responsibility of the SRLM Supervisor to provide the remainder of information immediately after it becomes known.

A Pollution Incident Reporting Form is provided in Appendix D.

### 5.4 On-site Harm Minimisation Actions

#### 5.4.1 Pollution containment actions

All site personnel with relevant training must make every effort to contain the pollution incident on-site, without putting themselves or others at risk of harm.

In the case of a fire and where safe, trained personnel must attempt to extinguish or contain the fire immediately.

In the event of a chemical spill that is not contained by bunding, the chemical spill kits must be used by trained personnel to restrict the spread of the chemical.

Where a breach of the wastewater system has occurred, on-site earthworks machinery should be used to contain surface water discharge as far as practicable.

#### **5.4.2 Staff and visitor notification**

In the event of a pollution incident, all SRLM staff are to be contacted as soon as is practical via mobile phone (numbers listed in Table 6).

If visitors are at site for sale days or stock loading and unloading, the public-address system is to be used to notify of a pollution incident.

All staff and visitors are to be mustered by Singleton Council staff to the Emergency Assembly Point shown in Figure 3, from which they can be safely evacuated from site as required.

#### **5.4.3 Neighbouring properties notification**

In the event of notification of a pollution incident, EPA will determine whether neighbouring properties should be notified. EPA has the formal powers to direct Singleton Council to make notifications to the neighbouring properties. The eleven (11) neighbouring properties shown in Figure 2 must be notified by 'door knocking' when direction is received from EPA.

## **6. Continuous Improvement through Evaluation, Audit and Review**

### **6.1 Evaluation**

This PIRMP is required to be reviewed, tested and updated at least once every 12 months. Following the occurrence of a pollution incident, this PIRMP is to be updated within one month.

The review will consist of the following:

- assessment of the risk assessments for the SRLM against current operations and control measures;
- identification of any additional or emerging issues or trends; and
- determination of priorities in procedural improvements and asset upgrades.

### **6.2 PIRMP Update**

The result of the evaluation will be documented and the PIRMP updated. To ensure clarity regarding the most recent version of the PIRMP, a Document Control is provided at the commencement of this document, and the current version and date of issue are recorded on each page at the bottom left hand corner. The next review date is shown in the Document Control. Each reviewed copy will be kept in Council's record keeping system (CM9).

### **6.3 Publication of this PIRMP**

A copy of this plan will be issued to relevant Council personnel. At a minimum, copies will be held at the following locations:

- CM9 (Council's document management system); and
- SRLM office.

As per the requirements of EPL 12728, this PIRMP is also publicly available on the Singleton Council website ([www.singleton.nsw.gov.au](http://www.singleton.nsw.gov.au)) in the 'Environment' tab. Copies of the PIRMP will be provided to any person who makes a written request.



## Appendix A – Staff Training Register

Date	Staff Member	Description of Training

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## Appendix B – Singleton Council 2017 Integrated Risk Management

**Consequence**

	Insignificant	Minor	Moderate	Major	Catastrophic
<b>People</b>	Minor injury, no first aid required	Minor injury; first aid required	Injury or illness requiring medical attention	Significant injury or long term illness; hospitalisation	Fatality; permanent disability, illness or disease
<b>Environmental</b>	Minimal environmental impact; isolated and immediately reversible	Minor environmental impact; isolated and reversible or localised and immediately reversible	Moderate environmental impact; localised and reversible or isolated and irreversible	Significant environmental impact; regional and reversible or localised and irreversible	Catastrophic environmental impact; national and reversible or regional and irreversible
<b>Legal</b>	Isolated non compliance or breach; minimal failure of internal controls	Contained non compliance or action with short term significance; some impact on normal operations	Significant claim or breach involving statutory authority or investigation; prosecution possible	Major breach with litigation/ fines and long term significance; critical failure of internal controls	Extensive litigation/fines with possible class action; indictable offences
<b>Financial</b>	Negligible financial loss; less than \$10,000; up to 10% of program/project value	Minor financial loss; \$10,000 - \$50,000; 10% - 15% of program/project value	Significant financial loss; \$50,000 - \$500,000; 15% - 25% of program/project value	Major financial loss; \$500,000 - \$1m; 25% - 50% of program/project value	Extensive financial loss; in excess of \$1m; >50% of program/project value
<b>Reputation</b>	Isolated, internal or minimal attention or complaint	Heightened local community concerns and criticism	Significant public criticism with our without media attention; short to mid term loss of support from community	Serious public outcry, state media attention and long term loss of support from community	Extensive public outcry; national media attention; loss of State government support with appointment of administrator
<b>Service Delivery</b>	Isolated; internal or minimal impact on service delivery	Contained impact on service delivery of short term significance	Significant impact on service delivery involving investigation	Major impact on critical service delivery with long term significance	Extensive impact/disruption to service delivery; threat to viability of critical program or whole of organisation
<b>Technology &amp; Systems</b>	No measurable operational impact	Minor downtime or outage in single area of the organisation; addressed with local management and resources	Significant downtime or outage in multiple areas of the organisation; substantial management required	Loss of critical functions across multiple areas of the organisation; long term outage; extensive management with external resources required	Extensive and total loss of critical and/or entire organisation; disaster management required

**Likelihood**

Likelihood	WHS	Event Frequency	Historical	Project
<b>Almost Certain</b>	Expected to occur in most circumstances involving normal operations	More than once per year	Expected to occur, occurs regularly in the industry	Likely to occur in more than 1 in 2 projects of this kind
<b>Likely</b>	Could happen at any time	Once per year	Will probably occur, has occurred many times in the industry	Likely to occur in between 1 in 2 and 1 in 4 projects of this kind
<b>Possible</b>	Could happen sometimes	Once every 10 years	Might occur, has occurred several times in the industry	Likely to occur in between 1 in 4 and 1 in 10 projects of this kind
<b>Unlikely</b>	Could happen, but very rarely	Once every 50 years	Not likely to occur, has occurred once or twice in the industry	Likely to occur in less than 1 in 10 projects of this kind
<b>Rare</b>	Could happen but probably never will	Less than once every 50 years	May only occur in exceptional circumstances, unheard of in the industry	Will not happen

RISK MATRIX		C1	C2	C3	C4	C5
		Insignificant	Minor	Moderate	Major	Catastrophic
<b>L5</b>	Almost Certain	MEDIUM	HIGH	HIGH	EXTREME	EXTREME
<b>L4</b>	Likely	MEDIUM	MEDIUM	HIGH	HIGH	EXTREME
<b>L3</b>	Possible	LOW	MEDIUM	HIGH	HIGH	HIGH
<b>L2</b>	Unlikely	LOW	LOW	MEDIUM	MEDIUM	HIGH
<b>L1</b>	Rare	LOW	LOW	MEDIUM	MEDIUM	HIGH

**Corrective Actions**

RISK RATING	ACTION	RESPONSIBILITY FOR ACTION
<b>EXTREME</b>	<ul style="list-style-type: none"> <li>Bring to the attention of the Director for immediate management action</li> <li>All possible treatments must be put in place to reduce the risk to an acceptable level</li> <li>Report quarterly to the Executive Leadership Team</li> </ul>	Director
<b>HIGH</b>	<ul style="list-style-type: none"> <li>Bring to the attention of the Manager for immediate management action</li> <li>Allocate actions and budget to minimise risk</li> <li>Report quarterly through the Group Risk Management Committee</li> </ul>	Manager
<b>MEDIUM</b>	<ul style="list-style-type: none"> <li>Identify management responsibility, monitor and review response action as necessary</li> <li>Allocate resources where existing controls are deemed inadequate</li> <li>Report to Group Risk Management Committee annually</li> </ul>	Coordinator/Supervisor
<b>LOW</b>	<ul style="list-style-type: none"> <li>Accept and monitor</li> <li>Manage through existing processes and procedures</li> <li>Report via routine internal reporting mechanisms</li> </ul>	Coordinator/Supervisor

# 2017 Integrated Risk Management



# Approach

Singleton Council's organisational vision is our ESP – engaged, safe, performing. To that end, it's imperative that we develop and implement a risk management system that creates value and fosters a positive, risk aware culture.

Council acknowledges that risk is inherent in our business activities and the pursuit of our objectives. Sound risk management is essential to ensure the achievement of our strategic objectives as detailed in the Community Strategic Plan.

We will integrate a structured approach to the management of risk throughout the organisation in order to promote and demonstrate good corporate governance, to minimise loss and to maximise opportunities to improve service delivery and customer value.

An organisation without a robust system for managing risks is vulnerable to uncertainties and lost opportunities and is unlikely to be resilient in the face of change or adversity.

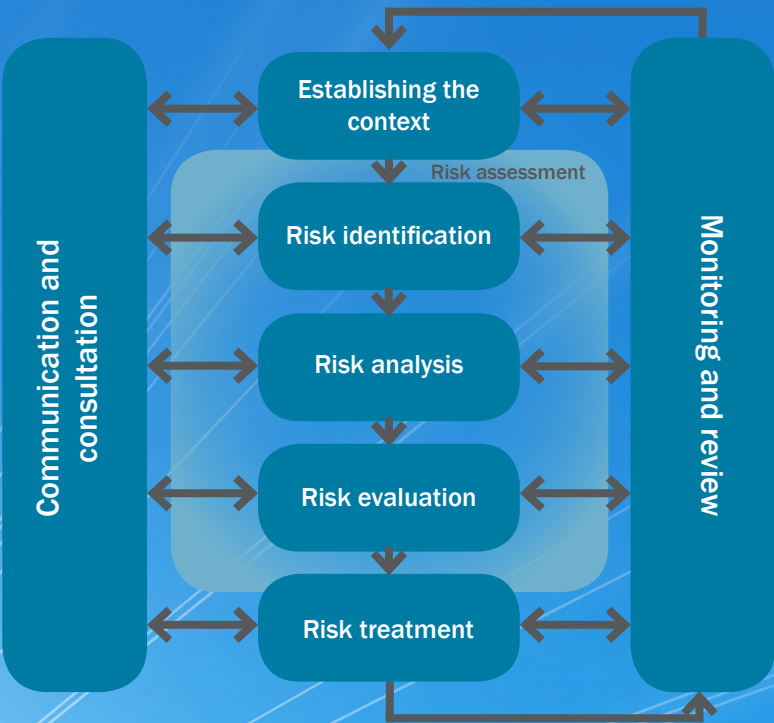
We have adopted a structured, consistent and holistic approach to the management of risk at all levels and for all business activities through the integration of business, Work Health & Safety and environmental risk management into a common framework.

Council's Delivery Program outcome requires that "Risk is better understood and managed across Council". This outcome is supported by 2016/2017 Operational Plan actions 4.5.4.2 "Design an Integrated Risk Management System" and 4.5.4.3 "Implement an approved Risk Management System" both of which are addressed by the Integrated Risk Management Policy (Minute no. 206/16 19 December 2016) and the Integrated Risk Management Framework.

# Definitions

The following terms, as defined by AS/NZS ISO 31000:2009 Risk management – Principles and guideline, will apply:

- **Risk** – the effect of uncertainty on objectives (Note: an effect is a deviation from the expected and can be positive and/or negative)
- **Risk management** – the coordinated activities to direct and control an organisation with regard to risk
- **Risk appetite** – amount and type of risk that an organisation is willing to pursue or retain
- **Risk assessment** – overall process of risk identification, risk analysis and risk evaluation
- **Control** – measure that is modifying risk
- **Risk register** – record of information about identified risks
- **Risk profile** – description of any set of risks
- **Risk owner** – person with the accountability and authority to manage a risk
- **Likelihood** - chance of something happening
- **Consequence** – outcome of an event affecting objectives



# Risk Management Process

The steps in the risk management process are:

- 1. Communication & Consultation**  
Communicate and consult at every step of the risk management process to ensure all participants understand, are involved in and contribute.
- 2. Establish the context**  
Examine the external, internal and risk management environments in which the risk identification, analysis and treatment options will be considered.
- 3. Identify risks**  
Think through the sources of risk, the potential hazards, the possible causes and the potential exposure.  
  
The key questions when identifying risks are:  
  
What can happen?  
When can it happen?  
How can it happen?  
Where can it happen?  
Why can it happen?  
What is the impact?  
Who is responsible?
- 4. Analyse risks**  
Analyse the risk in terms of the likelihood of the risk occurring and the potential consequences. Consequence and likelihood are combined to produce an estimate of the level of potential risk.
- 5. Evaluate risks**  
Compare the level of risk found during the analysis against Council's known priorities and requirements. Make decisions based on the risk rating about which risks are going to be treated and the priority of those treatments. Treatment strategies will vary depending on the level of risk.
- 6. Treat/Control risks**  
Determine the options for treating the risk. Accept and monitor medium and low risks. For high and extreme risks, develop and implement risk management plans to mitigate the risks to an acceptable level.
- 7. Monitor & review**  
Ongoing review is essential to ensure that risks identified and associated treatment options remain relevant and that changing circumstances don't alter risk priorities.

# Risk Ratings

**Inherent risk** is the overall raw, untreated risk or worst case scenario. It's determined by combining the likelihood and consequence ratings without reference to any existing controls.

**Residual risk** is the level of risk in light of existing controls. Ultimately, the level of residual risk will determine how a risk is treated.

**Proposed risk** is the level of risk that would remain if the additional or proposed controls were to be successfully implemented. For risks where the decision is taken to accept the risk, the proposed risk level will be the same as the residual risk level.

# Control Effectiveness

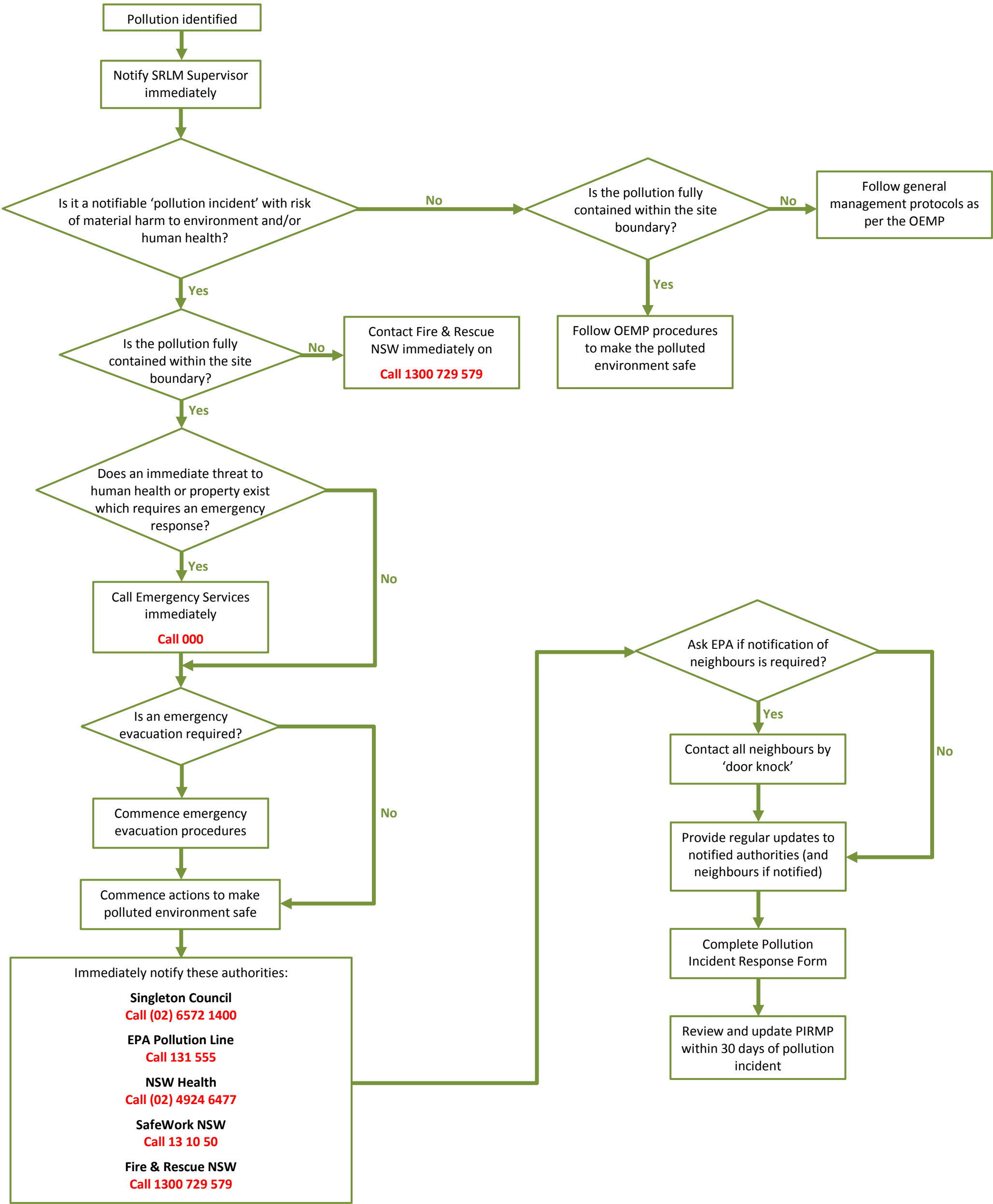
Effective	Control is effective in most circumstances; will have a significant effect in terms of reducing the likelihood and/or consequence; provides assurance that this risk will not occur
Somewhat effective	Control is partially effective most of the time; will have some effect in terms of reducing the likelihood and/or consequence; some weaknesses/ inefficiencies have been identified; improvements are required
Ineffective	Control is not effective; will not have any effect in terms of reducing the likelihood and/or consequence; little or no assurance that risk will not occur, many weaknesses/ inefficiencies exist







Appendix C – Pollution Incident Response Flow Chart



## Appendix D – Incident Reporting Form

**PART A**

## Report to Environmental Incident Hotline

### LOCATION OF INCIDENT



Recent changes to Part 5.7 of the *Protection of the Environment Operations Act 1997* (POEO Act) specify new requirements relating to the notification of pollution incidents. For more information see [www.environment.nsw.gov.au/pollution/notificationprotocol.htm](http://www.environment.nsw.gov.au/pollution/notificationprotocol.htm)

<input type="checkbox"/> Project	<input type="checkbox"/> Facility	<input type="checkbox"/> Activity	<input type="checkbox"/> Location/Name: <input type="text"/>
STREET NUMBER <input type="text"/>		STREET NAME <input type="text"/>	
SUBURB <input type="text"/>		NEAREST CROSS STREET <input type="text"/>	
WHERE DID THE INCIDENT OCCUR <input type="text"/>			
SECTION/UNIT RESPONSIBLE FOR THE SITE <input type="text"/>			

<input type="checkbox"/> <b>Sewage</b> <input type="checkbox"/> break in mains <input type="checkbox"/> pumping station (sewage or chemical) <input type="checkbox"/> sewage treatment plant <input type="checkbox"/> other (ponds etc) <input type="text"/>	<b>Cause</b> <input type="checkbox"/> blockage <input type="checkbox"/> mechanical failure <input type="checkbox"/> electrical failure or power outage <input type="checkbox"/> rainfall inundation <input type="checkbox"/> trade waste incident <input type="checkbox"/> break in main <input type="checkbox"/> other <input type="text"/>
<input type="checkbox"/> <b>Waste</b> <input type="checkbox"/> waste from Council project/facility/activity <input type="checkbox"/> dumped waste <input type="checkbox"/> asbestos only	
<input type="checkbox"/> <b>General</b> <input type="checkbox"/> spill/overflow (chemical, fuel, substance etc) - additional detail required below <input type="checkbox"/> vegetation - disturbance / damage <input type="checkbox"/> general - (heritage, water, wildlife etc) <input type="checkbox"/> other <input type="text"/>	
DESCRIPTION OF INCIDENT <input type="text"/>	
ACTION TAKEN TO CONTAIN / MANAGE THE INCIDENT <input type="text"/>	
Were photos taken: YES <input type="checkbox"/> NO <input type="checkbox"/>	Were samples taken: YES <input type="checkbox"/> NO <input type="checkbox"/>

### DETAILS OF PERSON REPORTING THE INCIDENT

NAME <input type="text"/>		DATE <input type="text"/>
PHONE <input type="text"/>	MOBILE <input type="text"/>	
DEPARTMENT SECTION <input type="text"/>		



## PART B Report to Environmental Incident Hotline INVESTIGATION

The appropriate Section Supervisor/Manager is responsible for completion of Part B of the incident report.



### IMMEDIATE ACTION BY SUPERVISOR/MANAGER

#### Will the incident:

1. Require assistance from other agencies to contain, isolate or cleanup?  
If "Yes" call 000 immediately.

YES ☐ NO ☐ NOT SURE ☐

2. Pose any actual or potential harm to human health that is not trivial?  
• Is it located within 100m of a school, childcare centre, aged care home?  
• Could it impact on users of public areas such as ovals, reserves, waterways?  
• Could the impact spread and potentially harm occupants of nearby properties?

YES ☐ NO ☐ NOT SURE ☐

3. Pose any actual or potential harm to ecosystems that is not trivial?  
• Could the incident flow / impact on a water body or drainage system?  
• Could the incident flow / impact on environmentally sensitive land?

YES ☐ NO ☐ NOT SURE ☐

4. Result in actual or potential loss or property damage of an amount over \$10,000?

YES ☐ NO ☐ NOT SURE ☐

If you answered 'YES' to any of the above then the incident should be considered as a notifiable "pollution event". There is a **duty to notify** the EPA, Ministry of Health, WorkCover and Fire and Rescue NSW immediately after becoming aware of a pollution incidents where material harm is caused or threatened. Failure to do so is an offence (*Protection of the Environment Operations Act 1997*)

### AGENCY NOTIFICATIONS

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.

#### NSW EPA (EPA Environment Line: 131 555)

Contacted: ☐ YES ☐ NO

Reason not contacted:

NAME OF EPA REPRESENTATIVE

TIME AND DATE

EPA REFERENCE NUMBER

ACTIONS REQUIRED BY EPA

#### NSW Health – Local Public Health Unit (See [www.health.nsw.gov.au/publichealth/infectious/phus.asp](http://www.health.nsw.gov.au/publichealth/infectious/phus.asp))

Contacted: ☐ YES ☐ NO

Reason not contacted:

NAME OF PHU REPRESENTATIVE

TIME AND DATE

PHU REFERENCE NUMBER

ACTIONS REQUIRED BY LOCAL PHU

#### SafeWork NSW (Call: 13 10 50)

Contacted: ☐ YES ☐ NO

Reason not contacted:

NAME OF SAFEWORK NSW REPRESENTATIVE

TIME AND DATE

SAFEWORK NSW REFERENCE NUMBER

ACTIONS REQUIRED BY SAFEWORK NSW

#### Fire & Rescue NSW (Emergency Hotline: 000)

Contacted: ☐ YES ☐ NO

Reason not contacted:

NAME OF FIRE & RESCUE REPRESENTATIVE

TIME AND DATE

FIRE & RESCUE REFERENCE NUMBER

ACTIONS REQUIRED BY FIRE & RESCUE

#### OTHER NOTIFICATIONS TO CONSIDER INCLUDE:

- ☐ Internal contacts eg Environmental Health Officer
- ☐ Media
- ☐ NSW Food Authority
- ☐ Shellfish programs
- ☐ River users eg boat hiring companies
- ☐ Marine education centres
- ☐ Other



#### PRELIMINARY INVESTIGATION

Notes from discussions with relevant operational staff


Any further observations or comments by Supervisor / Manager


#### CATEGORISATION BY AUTHORISED OFFICER

- ☐ **Minor**  
*No notification required*
  - Incident affects small area only (eg single property) AND
  - Incident is easy to clean up without additional assistance, AND
  - There is no risk of material harm to humans or the environment.
- ☐ **Moderate**  
*Notify EPA and Local PHU only*
  - Incident affects more than one property OR
  - There is a risk of pollution or material harm to the environment BUT
  - Cleanup can be completed without assistance AND
  - There is no danger to humans.
- ☐ **Major**  
*Notification required - Notify EPA, Local PHU, Workcover and Fire & Rescue*
  - Potential or actual harm to humans and the environment AND/OR
  - Assistance is required with cleanup from other agencies.
- ☐ **Council Responsible** Incident occurred as a direct result of Council activity or function.
- ☐ **Response by Council** Incident occurred on Council land, or land under Council care and control BUT Council did not cause the incident.
- ☐ **Technical Licence Breach** Relating to technical compliance such as exceedence of permissible discharge volume or environmental monitoring limits.

#### DETAILS OF APPROPRIATE SECTION SUPERVISOR/MANAGER REPORTING THE INCIDENT

NAME		DATE	
<input type="text"/>		<input type="text"/>	
PHONE	MOBILE		
<input type="text"/>	<input type="text"/>		
DEPARTMENT SECTION			
<input type="text"/>			