



# **Pollution Incident Management Response Plan**

**(Bernard Star 2016)**

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## Forward

As a major land and resource manager in the Riverina, CICL has a responsibility for the protection of the environment within its area of operation.

Appropriate planning for these events is essential to ensure that any response is consistent with legislative responsibilities, that staff welfare and safety is considered, that adequate staff training is provided, that the response is coordinated, and that CICL's normal operations can still function.

CICL is committed to meeting its legislative and community responsibilities to plan for pollution emergencies that may occur in its licenced area. To achieve this CICL will have in place a PIRMP for all management areas.

This plan should be read in conjunction with all the following plans

- A. CICL EMERGENCY MANAGEMENT PLAN
- B. CICL EMERGENCY RESPONSE PROCEDURES MANUAL
- B. CICL FIRE CONTROL STRATEGY AND ASSETS
- C. CICL POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN
- E. CIA SURGE AREAS USEAGE RULES
- F. MURRUMBIDGEE SHIRE COUNCIL LOCAL DISASTER PLAN (Displan)
- G. MURRUMBIDGEE SHIRE COUNCIL LOCAL FLOOD PLAN
- H. JERILDERIE SHIRE COUNCIL LOCAL DISASTER PLAN (Displan)

## Purpose

The purpose of plans is to comply with and include the information detailed in the POEO Act (section 153C) and be in the form required by the POEO(G) Regulation (clause 98B).

The purpose 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. A written copy will be supplied to an authorised EPA officer and to any person who is responsible for implementing the plan.

## Location

The location covered by this plan is the Coleambally Irrigation Area (CIA) covering an area of 95,802 Ha and the two CICL business premises being the Brolga PI Office complex and the CICL works depot. The GPS location is as follows-

<b>Location</b>	<b>Latitude</b>	<b>Longitude</b>
<b>CIA</b>	Please see Area of Operation map.	
<b>CICL Office</b>	<b>-34.806174</b>	<b>145.879685</b>
<b>CICL Works Depot</b>	<b>-34.802839</b>	<b>145.890554</b>

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## Summary

This Plan has been developed over the last 10 years as CICAL's chemical contingency plan, so as to satisfy EPA legislation the name and some information has been varied.

The Protection of the Environment Legislation Amendment Act (POELA) 2011 requires Environmental Protection Licence holder to prepare and implement a Pollution Incident Response Management Plan.

Implementation of this plan addresses both systematic and incident procedures to be followed in order to prevent or minimize pollution incidents from occurring, limit their impact and respond appropriately when such incidents occur.

### **EPA Licence Number: 4652**

The plan document is comprised of several components:

- 1. Procedures if Notification and Action levels are exceeded.**  
This explains the response's that will be taken by CICAL when an exceedance occurs.
- 2. Pollutant Spill Plan.**  
This describes the procedures that CICAL will follow in an emergency. This plan complements the CICAL Emergency Management Plan 2013
- 3. Pollutant Control Plan.**  
This describes the procedures CICAL will use when pollutant applications are undertaken.

The Pollution Incident Response Management Plan will be reviewed and, if necessary, updated each year. It should also be noted that the Plan deals with the concentration of a pollutant in the waterbody rather than the load of pollutant.

## 1. Procedures If Notification or Action Levels Are Exceeded.

The Environment Protection Licence (EPL) provides a list of pollutants that CICL must monitor during the year. This list is referred to as Schedule One and is provided in Table 1.1. The Schedule provides the three different guideline levels for each pollutant that must be adhered to. The Australian and New Zealand Environment and Conservation Council (ANZECC) have endorsed the Environmental Guideline for all of the pollutants listed, or in the absence of such an endorsement for specific pollutants the NSW Centre of Eco-toxicology has derived an interim Environmental Guideline for the Environment Protection Authority (EPA).

**Table 1.1: Pollutants to be Monitored and their Environmental Guideline, Notification and Action Levels**

Pollutant	Notification Level (µg/L)	Action Level (µg/L)
Atrazine	13	45
Chlorpyrifos	0.01	0.11
Diazinon	0.01	0.2
Diuron	0.2	1.0
Metolachlor	0.02	0.1
Molinate	3.4	14
Simazine	3.2	11
Thiobencarb	2.8	4.6

**Note:**

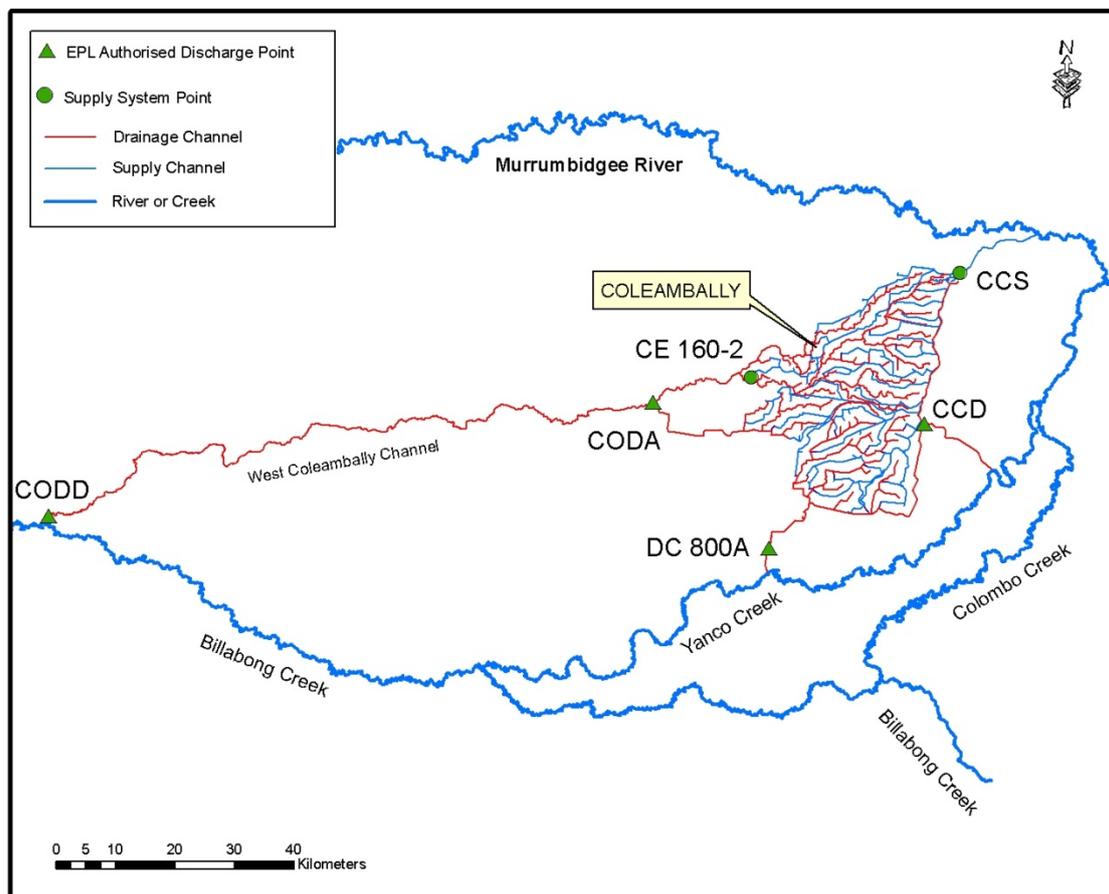
- 1. Notification Level** - This is equivalent to the 95% “trigger value” in table 3.4.1 of the Australian & New Zealand Guidelines for Fresh and Marine Water Quality (2000). This value can be interpreted as the concentration at which 95% of all species will be protected – with 50% confidence. The 95% protection levels relate to laboratory NOEC (no-observed effect concentration) data and hence do not mean that 95% level or protection results in loss of 5% of species.
- 2. Action Level** - This is equivalent to the 90% “trigger value” in table 3.4.1 of the Australian & New Zealand Guidelines for Fresh and Marine Water Quality (2000). This value can be interpreted as the concentration at which 90% of all species will be protected – with 50% confidence. The 90% protection levels relate to laboratory NOEC (no-observed effect concentration) data and hence do not mean that 90% level or protection results in loss of 10% of species.

Each of these pollutants must be monitored for during specific times of the year and at specified locations. Figure 1.1 shows the location of all sites that are monitored in accordance with the EPL. These sites are the Authorised Discharge Points. Other sites are shown in Figure 1.2, which are also sampled to better enable CICL to monitor and manage pollutants within the drainage system.

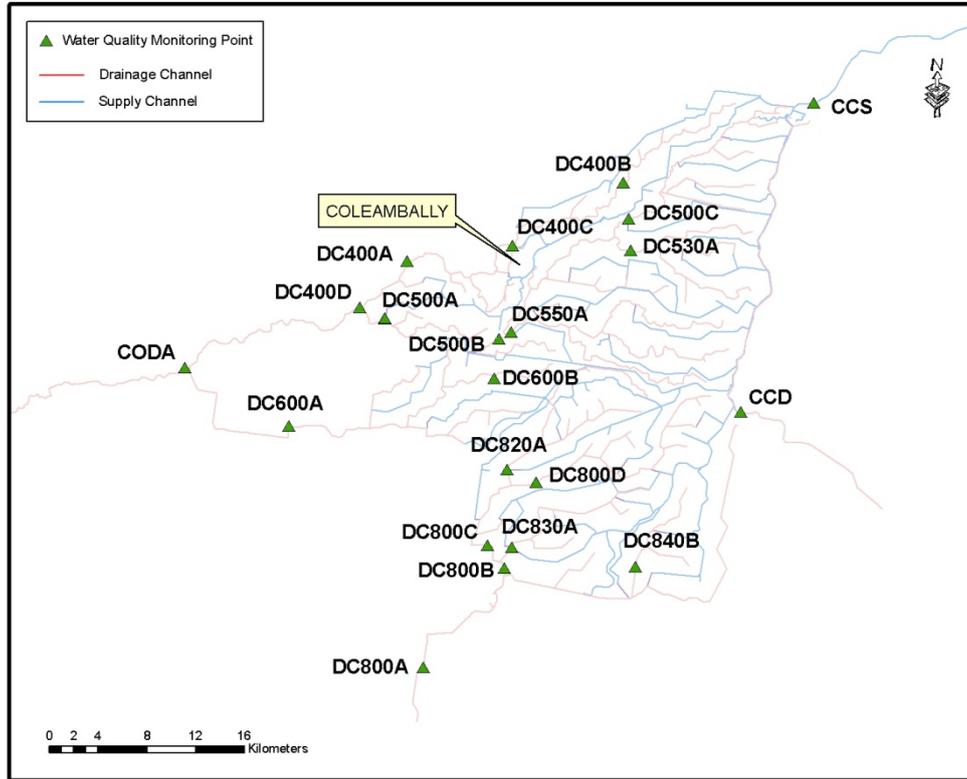
The monitoring condition M.2 of the EPL prescribes the requirement to monitor concentration of pollutants discharged and the condition M3 of the EPL outlines the sampling method and frequency. The sampling frequencies listed in M.3 of the EPL can be simplified into the pollutants that need to be sampled each month of the year and the pollutants that are required to be sampled for only in specific months of the year. Table 1.2. shows the list of pollutants that are to be monitored every month and the pollutants to be monitored in specific months of the year.

The EPL also requires that weekly samples be taken from the Authorised Discharge Points during October, November and December. These samples are to be analysed for the rice herbicide, Molinate. The remaining water quality sites shown in Figure 1.2 are also sampled on a weekly basis for Molinate at this time of year. Although the EPL only requires that the Authorised Discharge Points be monitored, CICL maintains the remaining 19 sites to enable better management of rice pollutants in the regional drainage system. This monitoring program forms the Rice Pollutant Management Program.

Monitoring site CODA / CODW is substituted for the Authorised Discharge Point CODD in the Rice Pollutant Management Program for practical reasons. (These being distance, the fact that no drainage water is allowed to re-enter the Coleambally Outfall Drain below CODA, little rice is grown below CODA and historical lack of flow at CODD.) Sampling at CODA rather than CODD was sanctioned by the Department of Environment and Conservation (DEC) in Licence variation notice No 1042504, issued 3 December 2004.



**Figure 1.1: Location of Authorised Discharge Points and Supply System Points**



**Figure 1.2: Location of Water Quality Monitoring Points**

**Table 1.2: Schedule Two – Pollutants to be monitored**

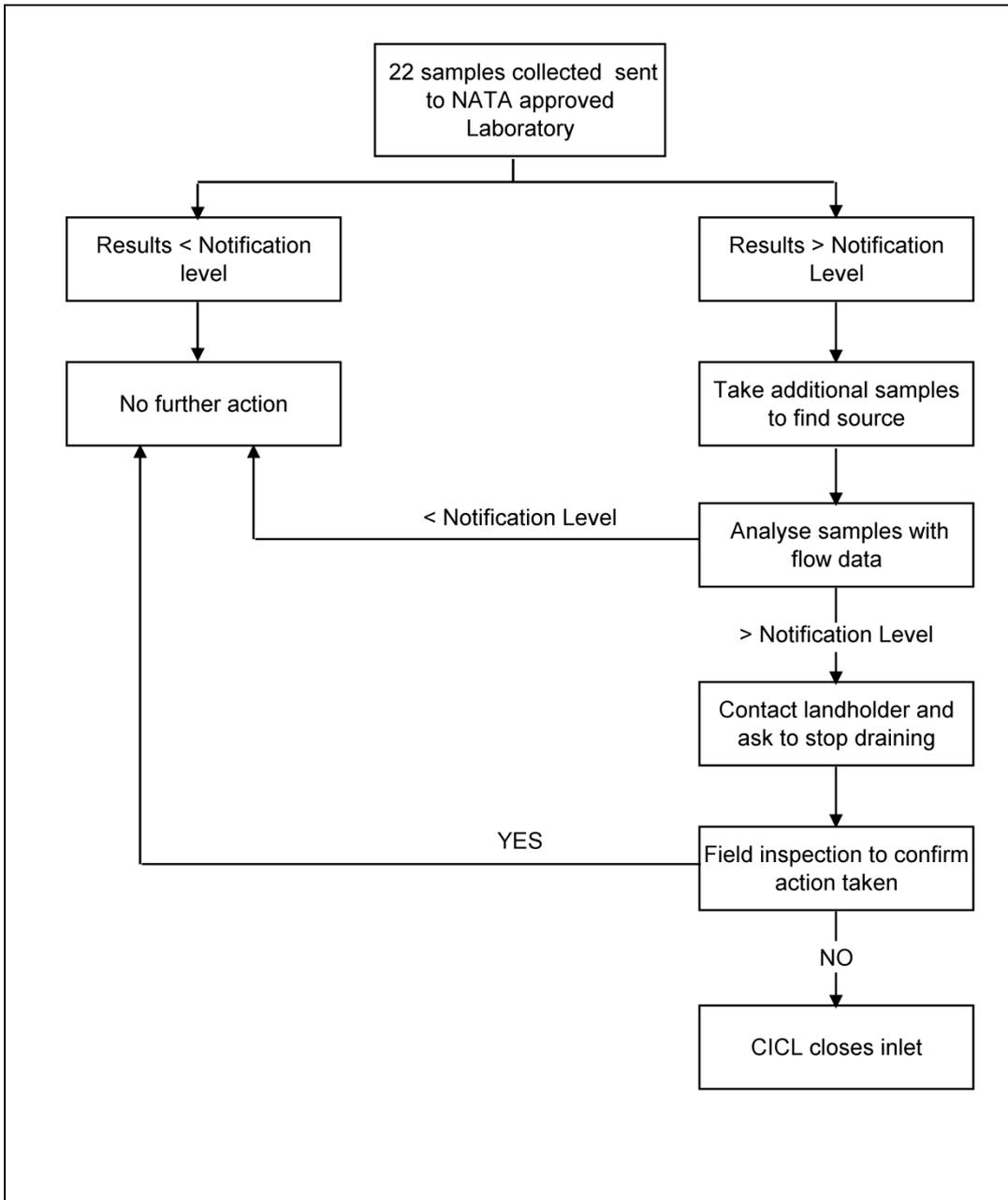
Pollutant	EPA SF	Months						
		Jan	Apr	May	Sep	Oct	Nov	Dec
2,4 D	1	√	√	√	√	√	√	√
Atrazine	1	√	√	√	√	√	√	√
Chlorpyrifos	1	√	√	√	√	√	√	√
Conductivity	1	√	√	√	√	√	√	√
Diazinon	1	√	√	√	√	√	√	√
Diuron	1	√	√	√	√	√	√	√
Malathion	2					√	√	√
Metolachlor	3	√				√	√	√
Molinate	2					√	√	√
Nitrogen (total)	1	√	√	√	√	√	√	√
Phosphorus (total)	1	√	√	√	√	√	√	√
Simazine	1	√	√	√	√	√	√	√
Thiobencarb	2					√	√	√
Trifluralin	1	√	√	√	√	√	√	√
Turbidity	1	√	√	√	√	√	√	√

During a scheduled sample test, if the concentration of a pollutant listed in Schedule One exceeds either the Notification or Action Level, the following shall be carried out:

### **1.1 Notification Level Exceedance**

- (a) The NSW Environmental Protection Agency (EPA) will be notified of the exceedance within twenty-four hours of CICL being informed. Notification will include specific information on the date and time of the exceedance, location of the exceedance, testing officer's name and the name of the testing laboratory. All monitoring documentation will be available for inspection.
- (b) Monitoring for the pollutant in question will be increased at the suspect location. If the pollutant in question is located in a drain, monitoring downstream to log the event will occur.
- (c) Inspection of the waterbody to ascertain the point source of the pollutant will take place. The following steps are taken:
  - Immediate ground truthing of suspect drainage channel (within 24 hours of receiving the results)
  - Additional samples are taken – one at the site and any other discharge points upstream (generally these points are farm drainage inlets)
  - At the time of sample collection at the farm inlet, salinity of the discharge and estimated flow is also recorded.
  - Water samples are sent to accredited laboratory for analysis.

Figure 1.3 illustrates the follow up sampling procedure and actions taken by CICL in response to an exceedance of the Notification Level.



**Figure 1.3: Follow up sampling and actions taken by CICL**

- (d) If a point source is located then the Customer who is draining pesticide-contaminated water will be informed and advised to stop draining pollutant into CICL’s drainage system.
- (e) If landholder does not stop draining the pollutant, CICL temporarily closes the drainage inlet (using a plastic bucket).
- (f) If the landholder deliberately re-opens the drainage inlet, CICL takes another sample for analysis by accredited lab. If pollutant level is still higher than the Notification Level, CICL closes the drainage inlet with earth works. A fee is charged to the landholder for all additional monitoring and earth works.

- (g) If the landholder breaks the earthworks put in place by CICL, CICL reviews the breach of water supply contract.
- (h) If a point source can not be located all Customers who are draining into the waterbody will be informed and advised that remedial actions need to be commenced.
- (i) Monitoring will continue until the event decreases below the Notification threshold.
- (j) When the Notification threshold is reached the EPA will be notified. Monitoring will then be decreased to normal operational standards of monthly sampling.

## **1.2 Action Level Exceedance**

- (a) The EPA will be notified of the exceedance within twenty-four hours of CICL being informed. Notification will include specific information on the date and time of the exceedance, location of the exceedance, testing officer's name and the name of the testing laboratory. All monitoring documentation will be available for inspection.
- (b) The same procedures that are followed in points 1.1 (b) and (c) in Notification Level Exceedance will also be followed for Action Level Exceedance.
- (c) Once the Action Level has been exceeded for a specific pollutant, all downstream users of the waterbody will be notified. Once the Action Level has been exceeded harm may be caused to the aquatic ecosystem. As such CICL will inform all downstream Customers so they can make informed decisions on precautions to protect livestock and crops. This awareness notice will continue until the pollutant has fallen below the action threshold. A list of effected Customers and a copy of the awareness notification will be given to the EPA.
- (d) When the point source is located CICL will interview the associated Customer. CICL will instruct the customer to immediately implement works and measures that will cease the flow of drainage water from the farm to the waterbody.
- (e) If the high levels continue and the pollutant is known to emanate from a CICL farm that has not been able or willing to cease its drainage flow, the drainage privileges to that farm will be withheld. The Customer will be verbally given forty-eight hours to remedy the problem after which time CICL will take action to discontinue drainage from the farm.

- (f) If CICL are aware of continuing poor farm management which causes the Action Level to be continually exceeded, then supply of water to that farm will be suspended until:
  - (i) On-farm management practices are reviewed to comply with provisions in the EPL and the Coleambally Land and Water Management Plan (LWMP).
  - (ii) Conditionality and assurance may be required before supply is resumed.
- (g) Monitoring will continue until the event decreases below the Action and Notification thresholds.
- (h) When the Action, and consequently the Notification thresholds are reached, the EPA will be notified. Monitoring will then be decreased to normal operational standards of monthly sampling.

### **1.3 Transferring costs to the customer for an incident causing a breach of the Environment Protection License.**

If pollutants in the drainage system exceed the notification or action level specified in the Environment Protection License, it results in the following additional costs:

- (i) Additional monitoring as specified in the Pollution Incident Response Management Plan with a focus to identify the source of pollution.
- (ii) Ensuring that the flow of contaminated water from the identified source has been stopped. This may require 'works'.

Other potential costs may include:

- (iii) Works to reduce pollutant concentrations at CICL's discharge points. These works could be 'dilution flows' on an event basis or the storage of polluted water.
- (iv) Fines imposed by the Department of Environment and Conservation.

The process below outlines how CICL will pass costs on to the customer pursuant with section 18.3 of the Customer Contract.

#### **(a) Cost of additional monitoring due to elevated levels of pollutant in the drain, with a focus to identify the source of pollution**

Clause 1.1 (f) of this Plan allows CICL to charge a fee to the responsible customer for additional monitoring and other works related to an incident of discharge of polluted water into CICL's drainage system.

CICL becomes aware of the incident of pollutant contamination of drainage water in two ways:

- (i) Either the customer informs CICL that due to some reason (generally a bank blow-out following a rainfall event) polluted water has escaped his property and has entered in to the CICL drainage system; or
- (ii) CICL is made aware of an incident via the established monitoring system(s)

If the incident is reported by the customer then CICL is not required to find the source of the pollution. However, if the elevated levels of pollutant are detected through CICL's monitoring program(s) it requires much effort and additional cost to locate the source of pollutant.

Based on the cost incurred in recent incidents, it is recommended that any cost incurred and associated with positive identification of a pollution source should be apportioned in through one of the following two ways:

- (i) If a customer informs CICL within 24 hours of the pollutant incident, a fee of \$100 be charged per inlet draining polluted water into CICL's drainage system
- (ii) If CICL identifies the source of pollution to a particular drainage inlet through its own resources (sampling or otherwise), a fee of \$600 be charged per inlet draining polluted water into CICL's drainage system

**(b) Cost of works to prevent pollutant entering CICL's drainage system**

This component generally involves the cost of temporarily blocking the drainage inlet into CICL's drainage system and is borne by the customer.

Once the source of contamination is identified, CICL requests the customer to prevent further contamination of CICL's drainage system by blocking the drainage inlet. In most cases, the customer complies. However, in instances where the customer does not comply, CICL acts to prevent further contamination of the drainage system by undertaking necessary works.

**It is recommended that in such instances where CICL incurs costs to prevent further discharge of pollutants into the CICL drainage system, all costs shall be transferred in full to the customer.**

Note that this recommendation reinforces CICL's Pollution Incident Response Management Plan (Clause 1.1 (d, e, f)).

**(c) Works to reduce pollutant concentrations at CICL’s discharge points after the pollutant has entered the drainage system.**

During the LWMP Review (2005) this issue was discussed in detail. The Review did not consider “dilution flow” as a viable option as it does not solve the problem. The construction of a storage or the installation of checks in CICL’s drainage system to catch spills were discussed in several meetings and rejected for a variety of reasons.

**This policy concurs with the LWMP Review outcomes and recommends that any costs associated with the construction of a storage and the installation of drainage system checks should be borne by the community.**

**(d) Fines imposed by the Department of Environment, Climate Change and Water (DECCW).**

If CICL is fined for a breach of the EPL, the fine should be transferred to the customers (assuming the contamination of CICL’s drainage system occurred due to customers’ actions) based on following factors:

- Concentration of pollutant
- Estimated (by CICL) volume of polluted discharge
- Customer’s cooperation with CICL
- Implementation of the LWMP On farm options
- History of previous incidents of discharging polluted water

Table 1.2 details a points system that can be used to transfer the fine imposed on CICL to the customers.

Note that the concentration of the pollutant is the critical factor. Penalty points as described below will only be activated if the concentration of the pollutant exceeds the notification level as specified in the EPL. Pollutant levels below the notification level will not attract any penalty points and no further action will be taken.

**Table 1.3: Points system to calculate landholder fine for breach of EPL**

<b>Criteria</b>	<b>Magnitude</b>	<b>Penalty Points</b>
<i>Concentration of pollutant</i>	Less than notification level	No penalty points
	>notification level and < action level at the farm drainage point	5
	>action level and less than 5 x action level	10
	> 5 x action level	20
<i>Estimated volume of polluted discharge from property drainage point</i>	Less than ¼ ML/day	5
	¼ ML/day – ½ ML/day	10
	½ ML/day – 1 ML/day	15
	> 1 ML/day	20
<i>Cooperation with CICL</i>	Spill is reported within 24 hours	5
	Spill reported between 24-72 hours	10
	Spill not reported	20
<i>Implementation of the LWMP On farm options</i>	A LWMP compliant recycle system is in place	0
	Installation of a compliant recycle system has commenced	5
	No action has been taken to install a compliant recycle system	20
<i>Contribution to pollution of Licenced Discharge Point</i>	No breach of Licence levels at downstream Licenced Discharge Point	0
	Contributing to Notification Level at the downstream Licenced Discharge Point	10
	Contributing to Action Level at the downstream Licenced Discharge Point	20
<b>Sub-Total</b>		Max 100 per incident
<i>History of previous incidents</i>	Multiply sub-total points for this incident by the number of offences incurred within last 3 calendar years.	
<b>Total Points for the incident</b>		

Points should be calculated for all farms involved in an incident when the concentration of the pollutant exceeded the notification level at the nearest sampling point, as specified in the Environment Protection

License. In the case of a number of incidents having occurred costs can then be split based on the penalty points incurred by the offending parties.

Each fine incurred by CACL would be distributed to customers as follows:

- Summation of the total penalty points accumulated by CIA customers
- Calculation of the fine per penalty point (\$fine divided by points)
- Apportion fine to customers based on penalty points accrued by each farm

**Additional note and Limitations of the policy**

The process does not deal with Notification or Action levels that are not traced back to a specific source. It is not considered fair to pass the full fine amount on to only the landholders who are identified. Therefore in such a situation, the fine would be apportioned between the incidents whose source was identified and those not. The portion assigned to the incidents not traced to a source would be covered by the Company (i.e. socialised), the remainder would be split between the identified offenders, as a function of the number of points accrued by each farm over the season.

*For example, if we were fined \$200,000 in December for exceedance at a discharge point and internally had 9 Action and 41 Notification levels over past two months, of which 6 Action level sources and 19 Notification level sources were identified, the following calculations would be undertaken:*

<i>Total Exceedances: 9 Actions + 41 Notifications</i>	<i>=50</i>
<i>Exceedances Identified: 6 Actions + 19 Notifications</i>	<i>=25</i>
<i>Exceedances not Identified</i>	<i>=25</i>
<i>Proportion of the fine assigned to the Company=(25/50)x100</i>	<i>=50%</i>
<i>Proportion of the fine assigned to the landholders responsible</i>	
<i>= (25/50)x 100</i>	<i>=50%</i>
<i>Total Fine:</i>	<i>=\$200,000</i>
<i>Fine to be paid by the Company = 50% of \$200,000</i>	<i>=\$100,000</i>
<i>Fine to be split between the identified landholders</i>	<i>=\$100,000</i>

- 1.4** CACL will publish in the local newspaper, educational advertisements to raise the community awareness of on-farm pollutant management and monitoring results. These advertisements will be run in September and October for rice pollutant and in October and November for other crops.
- 1.5** CACL will take remedial action to restrict polluted drainage from a farm by use of all or part of the following sequence:
  - (a) Request the Customer to cease irrigation drainage immediately.

- (b) Should the Customer fail to cease irrigation discharge, CICL will block the drainage inlet structures to prevent inflow to the waterbody within 48 hours of the discharge being detected.
  - (c) Review of water supply conditions to the farm.
  - (d) Review of contractual arrangements with the Customer.
- 1.6** This Pollution Incident Response Management Plan will be reviewed annually and updated as required and a copy of the updated version will be sent to the EPA for approval upon completion.
- 1.7** CICL will maintain a record of complaints in accordance with the EPL and the Quality and Environmental system (Q & E) of the Co-operative. Each complaint will be entered into the Actions Register database. All Records of Complaint are to be kept for a minimum of four years and the information about the complaint, except the details of the complainant, will be made readily available to the EPA in accordance with items M4.3 to M4.3 of the EPL.
- 1.8** A written report of any event that may cause potential harm to the environment will be prepared in accordance with the EPL. A report is not required if the harm caused, or likely to be caused, to the environment is expressly permitted by the EPL. These events shall be recorded on the form 'Notification of Actual or Potential Harm'. A copy of this form has been included in Appendix 1. A copy of this report will be given to the EPA within 7 days of the event in accordance with items R2.1 to R2.2 of the EPL.

## **2. Pollutant Spill Plan**

### **2.1 Introduction**

The objective of this document is to set out the procedures that CICL will implement in the event of a pollutant spill, leak or similar pollutant incident. A pollutant spill or leak is an event that has the potential to cause harm to the environment. In the event that there is the likelihood of potential harm to humans or to property, the NSW Police and Fire Brigade will be the lead agency to coordinate the minimisation of the impact. In the event where there is a likelihood of potential to cause harm to the environment, the DECCW will be the lead agency and CICL will coordinate with the lead agencies.

As the distributor of irrigation water in the CIA, CICL will endeavour to ensure that Customers are not put at risk of damage to property or health by use of water supplied to them. CICL will also endeavour to protect the water resources and environs (including stream, wetlands and groundwater) from degradation. Therefore, when a pollutant spill occurs within the areas, CICL will:

- Monitor and assess the risk (or damage) to the environment.
- Notify Customers/ neighbours that they may be affected by the spill.
- Promote actions leading to containment, followed by neutralisation or removal if possible.
- Promote or implement actions that will reduce the adverse impacts of the spill.
- Ensure that due consideration is given to the protection of the environment in the clean up process.
- Assist with site monitoring if necessary

It should be noted that the Murrumbidgee Shire Council (MSC) has a plan to coordinate all actions that are to be carried out in the event of an emergency. This plan is called the DISPLAN. In any emergency the DISPLAN can be activated and all actions should be carried out in accordance with the DISPLAN. At any point the Pollutant Incident Coordinator can order CICL and its representatives to perform actions contrary to the plan. The Pollutant Incident Coordinator will be the senior Fire Brigade Officer at the scene, or in the absence of this person, the senior Police Officer. Table 2.1 is a directory of all the people that may need to be contacted in the case of a pollutant spill.

**Table 2.1: People to contact in case of emergency.**

Name	Position/Location	Phone Number
John Culleton	Chief Executive Officer Coleambally Irrigation Co-operative Ltd.	6950 2820 6954 4567 (ah) 0448 216876
Kevin Kelly	Operations Manager Coleambally Irrigation Co-operative Ltd.	6950 2818 6954 4273 (ah) 0428 544273
Bernard Star	Licencing & Environmental Compliance, Coleambally Irrigation Co-operative Ltd.	6950 2839 0400 344 319
Eric Hutchinson	SCADA Officer Coleambally Irrigation Co-operative Ltd.	6950 2828 0427 544269 (ah)
Tracie Scarfone	NSW Office of Water- Yanco	02 6951 2574
Vince Kelly	Senior Operations, Engineer Murrumbidgee Region	(03) 5898 3946 0419 676 905 Mob
Darren Walleit	Head, Griffith Unit - Environment Protection and Regulation,	02 6969 0700 0427255214(Mobile)
Craig Bretherton	Regional Manager, Griffith Unit – Environment Protection and Regulation	6041 4963 13 1555 (ah)
Kevin Adams	Fire Control Officer Murrumbidgee Shire	02 6968 4166
Chris Barron	Fire Control Officer Jerilderie Shire	03 5886 1200 03 5886 1788 (ah) 0428 179 139 (mob)
Police	Coleambally Darlington Point	6954 4104 6968 4144 000
Hospital	Griffith Base Wagga Wagga Base	6969 5555 6938 6666
Ambulance	Coleambally	000 13 1233
Fire Brigade	Coleambally Griffith	000 6954 4062 6964 4152
Poisons Information	The New Children's Hospital, Westmead	13 1126

## **2.2 Types of Incidents**

Once CICL has been notified or has become aware that a pollutant spill has occurred, a nominated officer will visit the site to assess the significance of the spill. The nominated officer will generally be the Licence Compliance Officer, however in the absence of this person the Manager Licencing & Environmental Compliance may attend. Assessing the significance of the spill will include judging the size of the incident and determining whether or not any further action is required. Once it has been decided that further action is required that the following judgement must be made about the type of spill that has occurred.

The numbers of pollutant spill scenarios are too large to individually list however the three main variables involved are:

- Location
- Size of the incident
- Type of pollutant involved

The following classification will be used by CICL to classify different types of spill in order to assist response effectiveness:

- **Spills that have not contaminated waterways.**  
(That is those that are not likely to contaminate any water user, aquatic or wetland organism.)
- **Spills that have contaminated a non-CICL waterway.**  
(These are all spills other than those that occur within the supply and drainage system of the CIA and surrounding districts.)
- **Spills within the CIA and surrounding districts that have contaminated the supply or drainage system.**

The following outlines CICL's response to the three spill classifications listed.

## **2.3 Spills that have not contaminated waterways.**

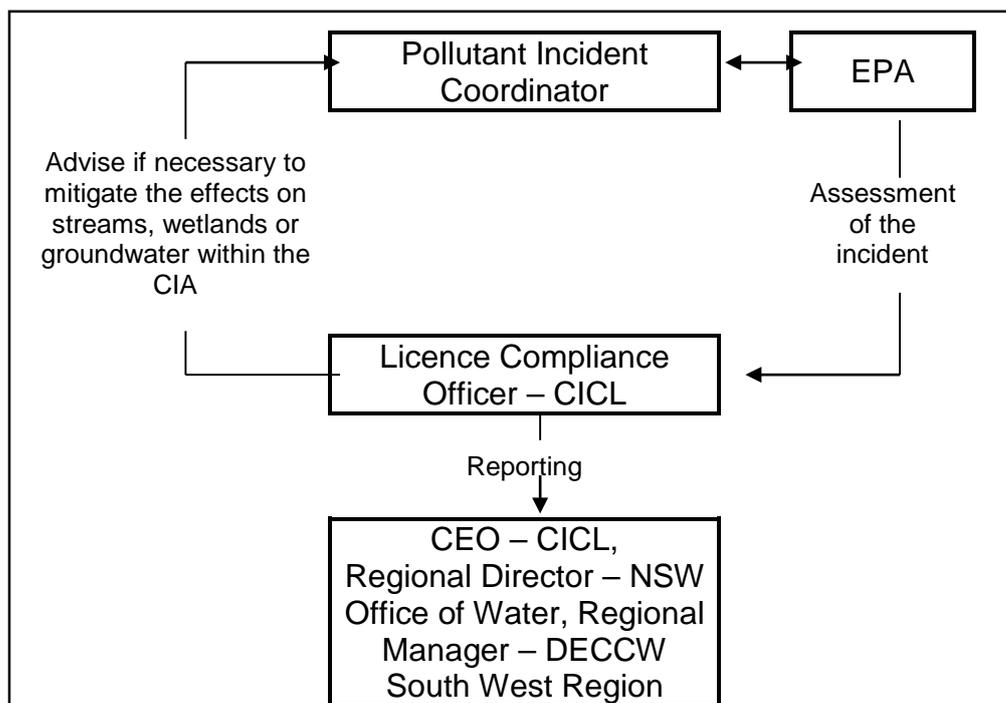
Example: The most common type of incident is when a vehicle used in the transport of a pollutant is involved in an accident and the pollutant is discharged out of the transport container.

The Police and the Fire Brigade should be the first agencies contacted. The role of each of the emergency services is set out in the “NSW State Disaster Plan” (DISPLAN 2000). CICL may not have a major role in such incidents, depending on the threat to the environment. It is necessary for CICL to consider the environmental aspects (especially the water resource) of such incidents.

### **CICL’s response:**

- A site inspection by a CICL Licence Compliance Officer will be necessary.
- The Licence Compliance Officer attending may require the service of an Analytical Chemist. Together they will liaise with the NSW EPA and the Pollutant Incident Coordinator in order to assess the risk to the environment.
- CICL will inform all affected persons/ neighbours and customers via one of the following methods- phone, text, email or radio.
- CICL will obtain information on the clean-up process.
- CICL will assist with site monitoring.
- The Licence Compliance Officer will report on the incident to the CICL Chief Executive Officer (CEO), as well as the Regional Director of the EPA.

Figure 2.1 illustrates the interaction between CICL and other authorities in the event of a pollutant spill that does not contaminate a waterway.



**Figure 2.1: Spills that have not contaminated waterways.**

## **2.4 Spills that have contaminated a non-CICL waterway.**

Example: A roadside spill involving a vehicle transporting a pollutant, where the pollutant may enter a natural or artificial watercourse, eg a natural drainage depression, roadside table drain, gravel pit or wetland.

The Police and the Fire Brigade are the primary emergency services in such an incident; however, CICL has a significant role to play in mitigating the effects of this kind of incident.

### **CICL's response:**

The Licence Compliance Officer will liaise with the NSW EPA and the Pollutant Incident Coordinator to assess the magnitude of the incident and its potential to affect CIA and the related environment.

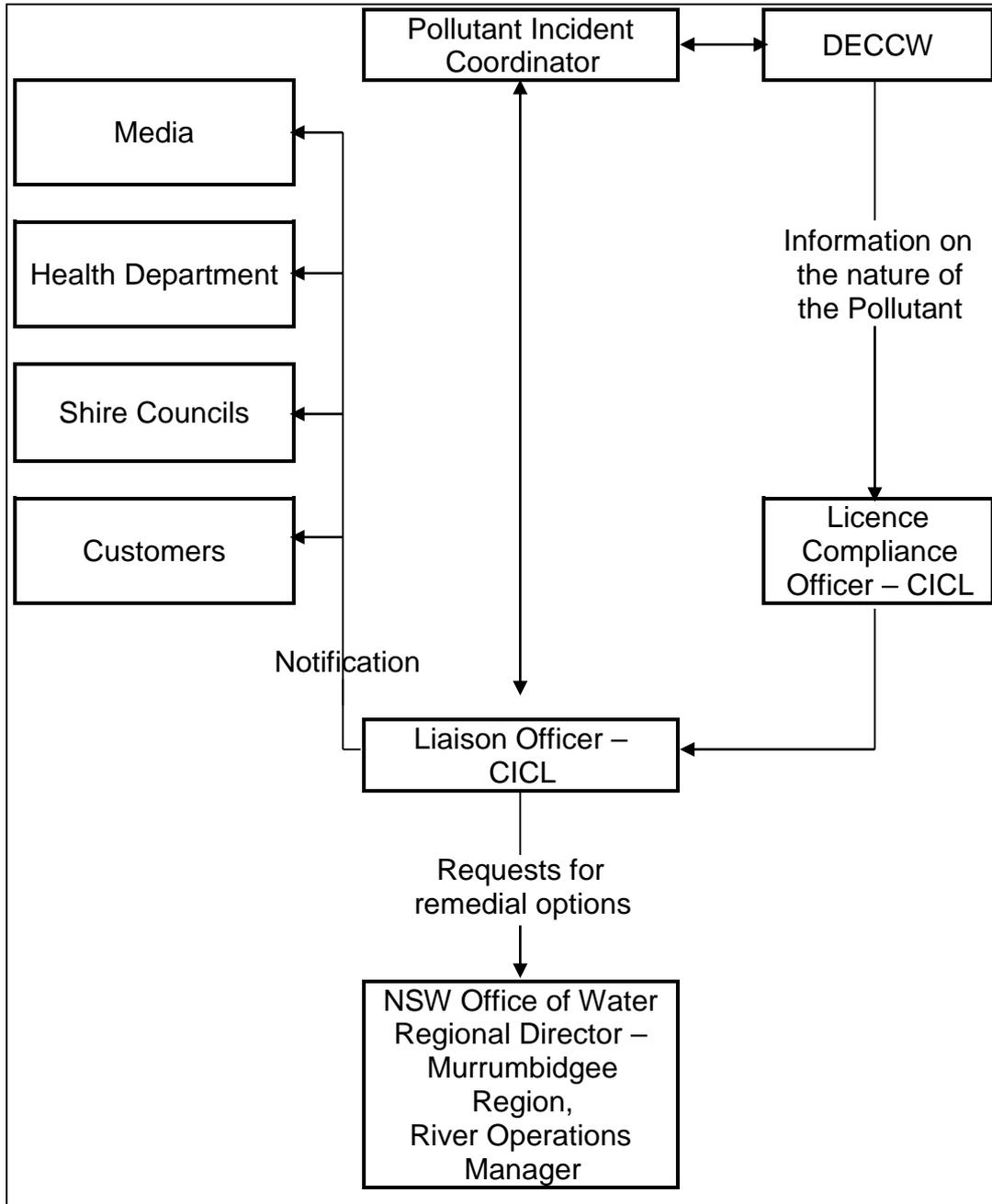
In the case of a major spill the CEO of CICL will appoint a Liaison Officer as per the Pollutant Incidents Procedures Handbook. This person will most likely be the Operations Manager or the Manager Licencing & Environmental Compliance. This person will liaise with the Pollutant Incident Coordinator and direct CICL's actions.

Depending on the location of the spill and the nature of the pollutant, decisions will need to be made by the Liaison Officer in order to minimise any adverse effects of the contaminated water. This could involve bunds and blockages to contain or redirect contaminated flows or releasing supply flows to dilute the pollutant.

The Liaison Officer will communicate with the Pollutant Incident Coordinator to ensure that all water users are kept informed about such things as refraining from using the water, precautions that need to be taken or the withholding of supply water.

CICL will inform all affected persons/ neighbours and customers via one of the following methods- phone, text, email or radio.

Figure 2.2 illustrates the interaction between CICL and other authorities in the event of a pollutant spill that has contaminated a non-CICL waterway.



**Figure 2.2 Spills that have contaminated a non-CICL waterway**

## **2.5 Spills within the CIA and surrounding districts that have contaminated the supply or drainage system**

Example: A drum of pollutant falls into a supply or drainage channel.

The Police and Fire Brigade are the primary emergency services in such an incident. CICL will play a major role in mitigating the effects of this kind of incident.

### **CICL's response:**

The CEO will appoint a Liaison Officer. The Liaison Officer will communicate with the EPA and the Pollutant Incident Coordinator to assess the incident in terms of potential effects on water users and the environment.

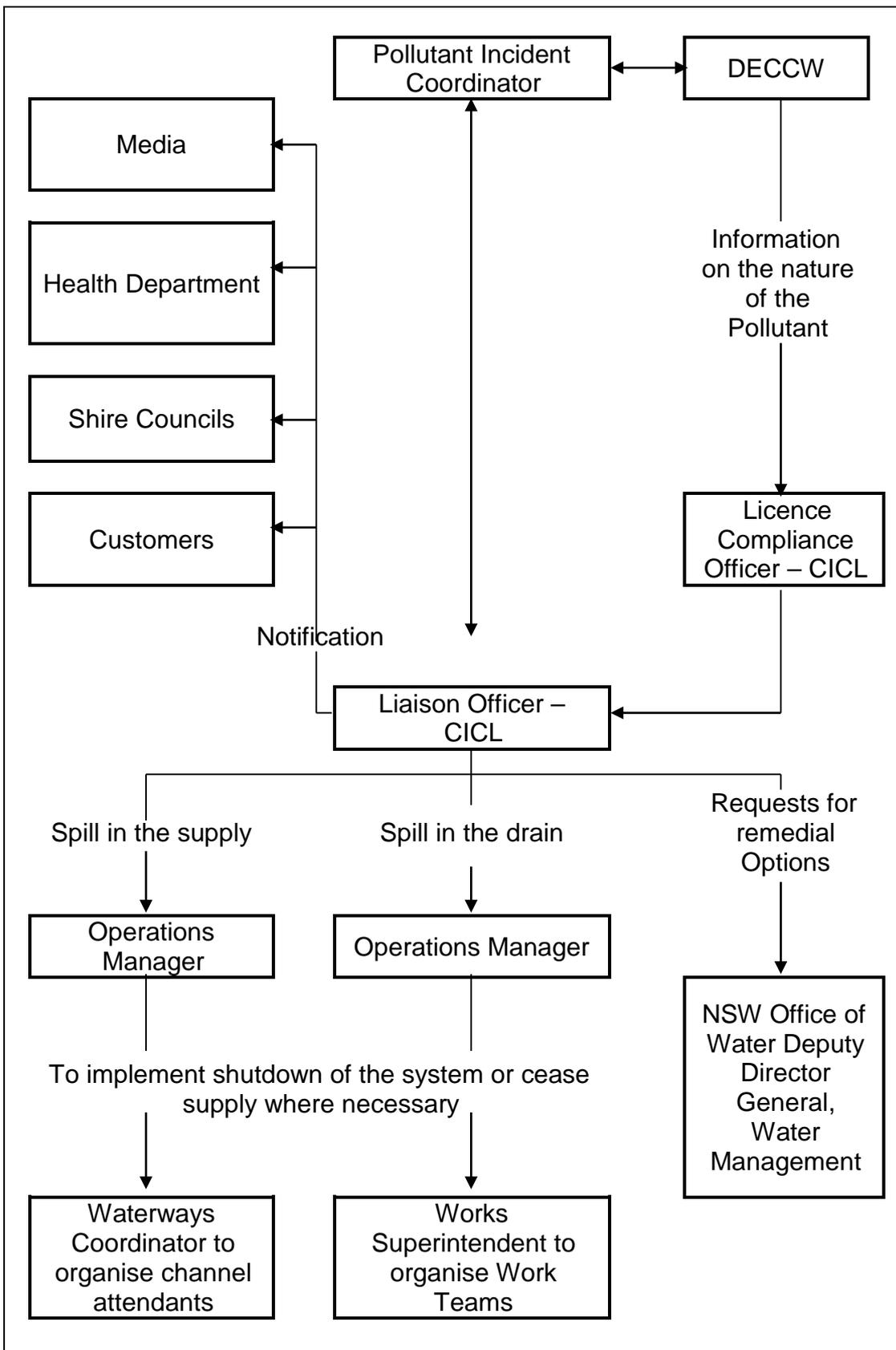
The Liaison Officer will maintain contact with the Pollutant Incident Coordinator and decide what actions are needed to reduce the potential for harm to the environment. It may be necessary to:

- a) notify Customers to cease irrigation; and/or
- b) close part of the water distribution system.

The CEO will ensure that all information and resources are made available in case an emergency shutdown needs to be implemented. This will include up-to-date maps of both the supply and drainage system. CICL staff will be made available to effect control over the system as required by the Liaison Officer or the Pollutant Incident Coordinator.

The Liaison Officer will ensure that all those parties likely to be adversely affected by the spill are notified. The media, Health Department, shire councils and individual Customers may all need to be notified.

Figure 2.3 illustrates the interaction between CICL and other authorities in the event of a pollutant spill that has contaminated the supply or drainage system.



**Figure 2.3: Spills that have contaminated a CICL supply or drainage channel.**

### 3. Coleambally Irrigation Co-operative Limited Pollutant Control Plan

The Pollutant Control Plan provides an outline of pollutant use by CICL. It also covers points O6.1(a) through to (c) of the EPL

#### 3.1 Chemical Weed Control Program

The Chemical Weed Control Program applies only to CICL premises, its employees and contractual arrangements as agreed to from time to time.

CICL will provide the EPA with a list of chemicals and an estimate of approximate volumes to be applied during the irrigation season, prior to the commencement of each season. This information will be annually available during the second week of August. The program will document all expected chemical applications to be carried out within the boundaries of the CIA. The program will not give exact details of application timetables for the coming year, as there are many variables that prevent this. These variables include weather, equipment and staffing requirements. The list provided in table 3.1 does however show how the volumes of chemicals used by CICL from 2006 to 2012 at a three year interval. A database is also regularly updated on current chemical applications. A copy of a print-out of this database is attached in Appendix 2. The form “Chemical Use Log” enables field staff to record accurately all details of chemical application. An example of this form is provided in Appendix 1.

**Table 3.1: Typical Chemical usage by CICL from 2006 to 2015**

Chemical	Usage
Access - Litres	0
Amine (Amicide) - Litres	0
Amitrol T - Litres	180
Bluestone - Kg	100
Dicam - Litres	170
Eject / Oust / Excalibur - Kg	10
Glyphosate - Litres	640
Goal - Litres	145
Hammer - Litres	0
L/guard - Grams	400
Magna - Litres	0
MCPA -Kg	0
Metsulfuron - Grams	0
Propon	1492
Q/Ph - Kg	0
Roundup CT - Litres	1040
Roundup PowerMax - Litres	100
Roundup BiActive - Litres	1940
Simazine - Kg	0
Surpass 300 - Litres	180
Tordon - Litres	35
Wetter - Litres	1370

All CICL staff undertaking any duties involving the application of chemicals have completed the Farm Chemical User Training Program run by the Rural Training Council of NSW, Ltd. Spray contractors and their employees must also have completed a minimum of the Farm Chemical Users Training Program.

The EPL requires that there be a mechanism in place to ensure that all users of treated land and waters are duly notified of any chemical applications. As the chemical spraying program may be altered on a day to day basis dependent on certain conditions the following will take place to ensure that all affected users are notified:

1. An advertisement will be placed in the local newspaper at the beginning of each irrigation season informing irrigators that chemical spraying will be taking place throughout the season.
2. If any chemicals other than Round-up Biactive or Weedmaster are to be used the affected users will be notified directly in advance of the chemical application.

CICL chemical drums will be triple rinsed and stored for recycling and re-use.

Washing and servicing of spray vehicles and equipment is to be carried out on the concrete apron designed for the purpose of washing CICL's vehicles and equipment. Water from this area is directed into a settling pit. Overflow from the settling pit is directed into Drainage Channel 590.

Storage of chemicals on the premises is in a locked corrugated iron shed with a raised floor. Below the slatted floor is a concrete bunded floor that will contain any spillage. The current operating procedure for the purchase and storage of chemicals is to purchase on an as needed basis thus minimising storage requirements.

# **Appendix 1.**

## **Contents:**

**Forms Associated with the Pollution Incident Response Management Plan.**

**Telephone Complaints Line**

# Notification of Actual or Potential Harm



EPA Licence Number **004652** File Number

The purpose of this document is to report on section R2.1 of the EPL, which states:  
***If anything happens on the premises that has caused, is causing or is likely to cause harm to the environment, whether on or off the premises, the licensee must report the event to the Regional Officer of the NSW EPA as soon as possible after it becomes known to the licensee or to one of the licensee’s employee’s or agents.***

This document is to be sent to the following:

- a) The EPA Phone: (02) 6969 0700 Fax: (02) 6969 0710

In the event that a EPA officer cannot be contacted then the (EPA) Pollution Hotline will need to be contacted on 1300729579

## DETAILS

Type of incident

.....  
.....

Pollutant (if known)

.....

Location

.....  
.....

Date of incident \_\_\_\_/\_\_\_\_/\_\_\_\_

Time incident occurred (if known) .....

Further Details

.....  
.....  
.....  
.....

Signature ..... Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Print Date 4/09/2010

**Coleambally Irrigation Cooperative Ltd**

**Chemical Use Log**

(Records in *italics* MUST be kept for 3 years)

<b>Date of Job:</b>	<b>Start:</b>	am/pm
/ /	<b>Finish:</b>	am/pm

**Owner of Treated Area:**  
 Name: Coleambally Irrigation Coop Ltd  
 Address: Broilga Place  
 Coleambally NSW 2707  
 Phone: (02) 6054 4003

**Person Applying Chemical:**  
 Name:

**Location of Use:**

Sketch or describe as appropriate:

GPS Ref: E N

<b>Target Treated:</b>	<b>Growth Stage:</b>	<b>Organic Farms NOT in vicinity:</b> <input type="checkbox"/>
		<b>Organic Farms in Vicinity:</b> <input type="checkbox"/>
		<b>Organic Farms Notified:</b> <input type="checkbox"/>
		(state Farm number/s)

<b>Products Used: (full product name)</b>	<b>Chemical Rate used:</b>	<b>Total Concentrate:</b>	<b>Total Amount of Chemical Mix:</b>
<b>Additive / Wetta Used:</b>	<b>Additive / Wetta Rate Used</b>	<b>Total Additive / Wetta Amount Used</b>	

**PPE Used:**

	<i>Mixing</i>	<i>Applying</i>
✓ Gloves		
Overalls		
Goggles		
Hat		
Respirator		
Filtered Cab		
Rubber Boots		
PVC Apron		

**Application Equipment Used:**

Handgun	<input type="checkbox"/>
Boom	<input type="checkbox"/>
Settings	
Nozzle	
Code	
Pressure	kPa
Speed	km/hr

**Weather Conditions:**

	<i>Before</i>	<i>During</i>
Temperature(°C)		
Relative Humidity(%)		
Wind Speed (km/h)		
Wind Direction		
Fog/Inversion (✓x)		
Cloud Cover (f0stS)		
Days since last frost		
Days since last rain		

Results: \_\_\_\_\_

Problems: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: / /

## **Telephone Complaints Line**

CICL, in accordance with section M5 of the Environment Protection Licence, publish the Telephone Complaints line phone number in their newsletter and associated pollutant awareness campaigns.

“Customers are reminded of the service we provide in relation to potential pollution issues within the Coleambally Irrigation District. We provide this service to customers as part of our Environment Protection Licence.

If you are aware of a pollution issue, please contact the Company Secretary on 6954 4003.

If a complaint is received, we will then notify any impacted public as soon as possible.”

## **Appendix 2.**

### **Contents:**

**Pollutant Application Record – Pollutant Spray Usage Log Register (Not attached here due to file size, available on request)**

**Estimated pollutant usage in the CIA – From a surveys of local retailers conducted every 6 years.**

**Estimated pollutant usage in the CIA-  
1996-2013**

Common Name	Brand Name/s	Class	Application	Application Period	1996	2012/13
					Total L or Kg	Total L or Kg
2,4 - D Amine	Amicide	H	Wheat	JUL-AUG	2020	1670 l
2,4 - DB	Buticide	H	Wheat	JUL-AUG	660	
2,4 D Ester	Estercide Falcon	H	Burrs	JUL-AUG	9375	1070 l
Acifluorin	Blazer	H	Soy	DEC-JAN	680	
Alpha - cypermetherin	Blazer	H	Soy	DEC-JAN		10
Alpha - cypermetherin	Dominex Fastac	I	Pasture	APR-MAY		
			Rice	JAN-FEB		
			Soy, corn	DEC-MAR	202	
Amitrole	Amitrole T	H	Channels	ALL YEAR	2180	280 l
Atrazine	Gesaprim Primextra	H	Channels	AUG-SEP	2580	15100 l
	Atradex 900		corn	OCT-NOV		
			Sorghum			
Bensulphuron	Londax	H	Rice	OCT-SEP	1940	218 kg
Beta - cyfluthrin	Bulldock	I	Sorghum	NOV-FEB	30	420 l
Bifenthrin	Talstar	I	Canola	APR-MAY	13	
Bromoxnyl	Bromicide Jaguar	H	Cereal	JUN-SEP		
			Lucerne	APR-SEP	1340	
Bentazone	Basagran	H	Soy	NOV-JAN	100	
Chlorpyrifos	Lorsban/Strikeout/ Chlorfos	I	Rice	OCT-DEC		1755 l
			Sorghum	NOV	7605	
Chlorsulfuron	Glean Seige	H	Cereal	MAY-JUL	34	15 kg
Chlorthalonil	Bravo	F	Grapes	NOV-MAR	90	
Clethodim	Select	H	Canola	APR-JUL	480	302 l
Clopyralid	Lontrel	H	Canola	APR-JUL	380	84 l
Copper Sulphate	Bluestone		Rice	OCT-JAN	5000	21175 kg
Cyromazine	Vetrazine Arrest Clout-S	I	Sheep, cattle	ALL YEAR	400	
Deltamethrin	Decis	I	Soy	NOV-APR	575	60 l
Demeton - S - methyl	Metasystox	I	Sorghum	DEC-MAR	100	
Diazinon	Diazinon	I/A			1580	
Dicamba	Banvel	H	Cereal	JUN-SEP	2520	160 l
Dichlorovos	Dichlorovos	I/A	Silo Grain	ALL-YEAR	100	6 l
Diclofop	Hoegrass	H	Wheat	JUN-SEP		840 l
			Barley			
			Canola	JUN-SEP	1520	
Dimethoate	Roger Roxion	I	Pasture	APR-AUG	385	1320 l
Diquat	Reglone	H	Soy	MAR-MAY	1040	1550 l
Diuron	Diuron	H	Channels	JUL-SEP	400	120 l
Endosulphan	Thiodan	I	Soy	NOV-APR	5845	720 l
Fenoxaprop - P	Puma	H	Wheat	JUN-SEP	430	1820 l
Flutriafol	Vincit	F	Grain	ALL YEAR	2000	740 kg / 100 l
Fluazifop	Fusilade	H	Canola	APR-JUL		13 l
			Soy	NOV-JAN	225	
Formaldehyde	Formol	F/B			300	
Glyphosate 360	Glyphosate 360	H	Fallow	ALL YEAR	660	380 l
Glyphosate	Round up/Wipeout	H	Fallow	ALL YEAR	17900	3620 l
Glyphosate- Trimesium	Touchdown	H	Fallow	ALL YEAR	960	
Imazethapyr	Spinnaker	H	Soy	NOV-JAN	910	9.5 kg
Lamda-cyhalothryrn	Karate	I	Lucerne	ALL YEAR	425	2 l
Malathion	Malathion Maldison	I/A	(no longer used)		3040	
MCPA 500	MCPA 500	H	Cereal	JUN-SEP	5120	7000 l
MCPA 250	MCPA 250	H	Rice	NOV-DEC	4580	7440 l
Metachlor	Dual Prime Extra	I	Corn	OCT-NOV		3230 l
			Sorghum		980	
Methabenzthiazuron	Tribunil	H	Wheat	MAY-SEP	166	
Methomyl	Lannate Nudrin	I/A	Soy, Corn	NOV-APR	1380	1625 l
Methsulfuron	Ally Associate	H	Cereal	JUN-AUG	1.6	11.55 kg
Mevinphos	Phosdrin	I/A			5	3.5 kg
Molinate	Molinate / Ordram	H	Rice	OCT-DEC	67860	18980 l

Coleambally Irrigation Co-operative Limited – PIMRP

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Oryzalin	Surflan Yield	H	Cereal	APR-JUL		
			Canola	APR-JUL		
			Grapes	ALL YEAR	960	
Oxyfluorfen	Goal	H	Fallow	ALL YEAR	406	525 l
Paraquat	Gramoxone	H	Fallow	ALL YEAR		600 l
			Grapes	ALL YEAR	320	
Paraquat/Diquat	Sprayseed	H	Fallow	ALL YEAR		280l
			Grapes	ALL YEAR	660	
Pendimethalin	Stomp	H	Canola	APR-MAY	300	5600 l
Phosphine	Castien TABS	I/R	Grain	ALL YEAR	100	
Propanil	Ronicil	H	Rice	OCT-JAN	660	
Quizalofop	Targa	H	Canola	APR-JUL		
			Soy	NOV-JAN	18	
Sethoxydim	Sertin	H	Soy	NOV-JAN	500	300 l
Terbutryn	Igran	H	Cereal	JUN-SEP	580	
Thiobencarb	Saturn EC	H	Rice	OCT-JAN	5700	8760 l
Thiodicarb	Iarvin	I/M	Corn	NOV-APR		
			Sorghum	NOV-APR		
			Soy	NOV-APR	220	
Tri-allate	Avadex	H	Cereal	APR-JUL	320	
Trichlorfon	Lipidex / Dipterex	I	Rice	DEC-FEB	1570	60 l
Trifluralin	Trifluralin / Treflan	H	Canola	APR-JUL	2660	1860 l
Turbufos	Counter	I	Corn	OCT-NOV	1920	4010 kg
Zineb	Zineb	F/B	Grapes	NOV-MAR	160	
Zinc	Zinc Sulphate	B/FERT	All crops	ALL YEAR	2000	7200 kg