

# **Environmental Incident Classification and Reporting**

9TP-PR-105/13.0

Procedure – Applicable to Transport Projects

# **Quality Management System**

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## **Document history**

Version	Date of approval	Desksite no.	Notes
3.0	August 08	631781	
4.0	23 Dec 09	696779_4	This document is updated to reflect the new document owner.
5.0	13 Aug10	867157	Reformatted for TCA transition and revised governance structure.
6.0	01 Oct 11	835272	This document is updated to include Incident classification Legislative requirements Incident and non-compliance reporting procedure.
7.0	21 Oct 11	867157_9	Definitions and Environmental Incident Sections – amend definition of environmental incident to read"impact has occurred, is occurring, or is likely to occur." This is consistent with POEO Act.
			6.2 – update to reflect changes to SA-FO-002
			6.3 – remove "or a contract/alliance-specific report form that is consistent with 9TP-FO101."
			7 – update title of SA-FO-002
8.0	1 Nov 11	867157_12	Reformatted for Transport Projects transition and revised governance structure.
9.0	2 Feb 12	1750099_1	Updated to include new legislative requirements as a result of changes to the Protection of the Environment Operations Act 1997.
10.0	1 Aug 12	867157_22	Revised section 6 and figure 1 of the document to reflect the use of the Incident Management System in incident/non-compliance reporting.
11.0	21 Mar 14	867157_23	A paragraph on incidents related to the discovery of asbestos is added to clarify that such incidents are to be reported as safety incidents in the IMS.
12.0	29 May 14	867157_25	Inclusion of incident investigation process and root cause analysis.
13.0	14 Apr 15	867157	Updated to be published to TfNSW website



## **Table of contents**

1.	Purpose and scope	4
2.	Accountabilities	4
3.	Definitions and acronyms	4
4.	Legislative requirements	
	4.1. Notifiable events	
5.	Incident classification	
	5.1. Environmental incident	6
	5.2. Environmental non-compliance	7
	5.3. Environmental issue	
6.	Incident and non-compliance reporting	8
	6.1. Verbal notification	8
	6.2. Incident reporting	8
	6.3. Notification to regulatory authorities	g
	6.4. Reporting pollution incidents to EPA and other authorities	g
	6.5. Incident investigations	10
	6.5.1. Incident investigation	10
	6.5.2. Root cause analysis	11
	6.6. Relationship to TPO Crisis Management Procedure	11
7.	Related documents and references	11
Аp	pendix 1 Root Cause Analysis Checklist	14

Project type: Not Applicable

## 1. Purpose and scope

The purpose of this document is to identify the process and procedure to be followed when classifying and reporting an environmental incident or non-compliance that has occurred during work being undertaken by, or on behalf of, TPO and defines TPO's standard.

This procedure applies specifically to the reporting of environmental incidents and non-compliances to TPO and relevant regulatory authorities, particularly the NSW Environment Protection Authority. It does not provide guidance on management responses or corrective actions required in response to those incidents, which should be detailed in the relevant environmental management plan or other management document as required for the project.

## 2. Accountabilities

The Technical Director Planning and Environment Services is accountable for this Procedure. Accountability includes authorising the document, monitoring its effectiveness and performing a formal document review.

Project directors are accountable for ensuring the requirements of this document are implemented within their area of responsibility.

Project directors who are accountable for specific projects/programs are accountable for ensuring associated contractors comply with the requirements of this document where required under TSR E – Environmental Management and the contract.

Contractors are accountable for compliance with this document, where this document forms a part of their contract.

## 3. Definitions and acronyms

All terminology in this procedure is taken to mean the generally accepted or dictionary definition with the exception of the following terms which have a specifically defined meaning:

<b>Environmental</b>
incident

An environmental incident is an occurrence or set of circumstances, as a consequence of which pollution (air, water, noise, or land) or an adverse environmental impact has occurred, is occurring, or is likely to occur.

Adverse environmental impact includes contamination, harm to flora and fauna (either individual species or communities), damage to heritage items and adverse community impacts.

**Environmental** 

non-

compliance

A non-compliance with any condition of approval, license condition or any other statutory approval or requirement relevant to the activity and/or area where the activity occurs.

Any occ

Environmental issue

Any occurrence or set of circumstances that has the potential to cause or lead to an environmental incident or non-compliance if not rectified.

EMR Alliance/contractor environmental manager
 EMR Environment management representative
 EPA NSW Environment Protection Authority

**EPL** Environment protection license

**EPM** Environment and planning manager

**ERM** Event report manager

IMS TPO's Incident management system

Project type: Not Applicable

Investigation

The process by which the cause(s) of an incident, non-compliance, issue or event is examined and identified.

Material harm to the environment

Has the meaning as defined in Section 147 of the POEO Act.

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

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.

Moderator

Person assigned with a lead role under an incident investigation, to determine it's

scope etc.

Notifiable event

Any environmental incident or non-compliance that triggers a specific statutory

requirement to notify a regulatory authority.

PD Transport Projects project director

PM Alliance/contractor project manager

PME Principal Manager Environment

POEO Act Protection of the Environment Operations Act 1997

**Pollution** Pollution, air pollution, water pollution, noise pollution and land pollution all have

the meanings as defined in the Dictionary to the POEO Act.

Pollution incident

Has the meaning as defined in the Dictionary to the POEO Act:

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.

SME Senior Manager Environment

TfNSW Transport for New South Wales

TPO Transport Projects Delivery Office (TfNSW)

TSR TfNSW Standard Requirement

## 4. Legislative requirements

There are a number of Acts and Regulations that include a specific requirement to notify a regulatory authority as a result of pollution, contamination or environmental harm occurring, including impacts to heritage items. Transport Projects has defined such incidents as notifiable events.

#### 4.1. Notifiable events

A notifiable event is:

Any environmental incident or non-compliance that triggers a specific statutory requirement to notify a regulatory authority.

For further guidance on the statutory requirements for the notification of environmental harm or pollution refer to the TPO EMS document <u>Summary of Environmental Legislation Notification</u> <u>Requirements – 2TP-SD-019</u>. Some event types are summarised in Table 1 below.

Table 1 Examples of notifiable events

Event type	Legislation		Notification to
	POEO Act	Part 5.7	Immediately after becoming aware of the
			incident to each relevant authority:  EPA Environment Line
Pollution		Section 101	Local Council
incident	POEO (General) Regulation 2009		Ministry of Health (via the Local Public Health Unit)
			WorkCover Authority
			Fire and Rescue NSW
Land contamination	Contaminated Land Management Act 1997	Section 60(1)	EPA in writing as soon as practicable after becoming aware of the contamination, where required as prescribed in the EPA 'Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997'
Discover aboriginal relic	National Parks and Wildlife Act 1974	Section 89A	Director-General of the Department of Premier and Cabinet in writing within a reasonable time after becoming aware
Discover Aboriginal Remains	Commonwealth Aboriginal and Torres Strait Islander Heritage Protection Act 1984	Section 20	Commonwealth Minister of Environment in writing as soon as practicable after becoming aware
Discover relic	Heritage Act 1977	Section 146	Heritage Council in writing within a reasonable time after becoming aware

Further information on reporting pollution incidents to EPA is provided in section 6.4.

## 5. Incident classification

#### 5.1. Environmental incident

Transport Projects Delivery Office has defined an environmental incident as:

An occurrence or set of circumstances, as a consequence of which pollution (air, water, noise, and land) or an adverse environmental impact has occurred, is occurring, or is likely to occur.

Adverse environmental impact includes contamination, harm to flora and fauna (either individual species or communities), damage to heritage items and adverse community impacts.

Table 2 Examples of environmental incidents

Туре	Example incident
Air	Odour that travels beyond the site boundary
Air	Dust exceeding reasonable levels without active management measures in place

Туре	Example incident
Air	Operation or maintenance of plant in a manner that causes or is likely to cause air pollution
Water	Discharge of water on or off site in a manner that causes or is likely to cause water pollution
Noise	Noise that travels beyond the site boundary as a result of poorly maintained plant or operation of plant in an inefficient manner
Noise	Failure to comply with the approved hours of work
Land	Cause any substance to leak, spill or otherwise escape (whether or not from a container) in a manner that harms or is likely to harm the environment
Land	Spill/deposit material or allow material to be deposited on land in a manner that causes or is likely to cause land pollution
Land	Cause contamination of land
Land	Dispose of waste in a manner that harms or is likely to harm the environment
Flora/ Fauna	Harm or "pick" a threatened species, endangered population or endangered ecological community
Flora/ Fauna	Damage to vegetation, fauna or habitat including watercourses
Heritage	Damage, disturbance, destruction or works to heritage items/relics
Heritage	Damage, disturbance, or destruction of Aboriginal objects or places

Note: an environmental incident may also be an environmental non-compliance.

## 5.2. Environmental non-compliance

An environmental non-compliance is a non-compliance with any condition of approval, license condition or any other statutory approval relevant to the activity and/or area where the activity occurs.

Examples of environmental non-compliances are given in the Table 3 below.

Table 3 Examples of environmental non-compliance.

Example non-compliance
Works without the required planning approval
Failure to comply with a condition of approval
Works without the required EPL
Failure to comply with an EPL condition
Works undertaken without any other required statutory approval
Failure to comply with any other statutory requirement that does not result in an adverse environmental impact or pollution

Note: an environmental non-compliance is not necessarily an environmental incident.

#### 5.3. Environmental issue

An environmental issue is any occurrence or set of circumstances that has the potential to cause or lead to an environmental incident or non-compliance if not rectified.

Project type: Not Applicable

Environmental issues may be identified during formal or informal inspections undertaken by an alliance, contractor, TPO employee or environmental management representative/environmental representative. Issues identified during TPO inspections (i.e. those conducted by TPO employees or representatives) should be documented using the TPO form: Environmental Site Inspection Report Template – 9TP-FT-307.

For any issues raised, a priority is to be given for action to be implemented, in accordance with the following:

Priority	Action required
Immediate	Immediately and closed out on day of inspection
High	Within 24 hours
Medium	Within 3 working days
Low	Within 5 working days
Other	By the date noted

If any issues raised during an inspection are also considered to constitute an environmental incident and/or non-compliance then this must be noted on the inspection report, including reference to then relevant condition of approval or other requirement. Any such incidents or non-compliances must also be reported separately in accordance with Section 6.

## 6. Incident and non-compliance reporting

All environmental incidents and non-compliances must be reported to TPO. The environmental incident/non-compliance reporting procedure is illustrated in Figure 1 (on page 12), which includes requirements for verbal notification, recording the incident in IMS and notification to the regulatory authority for a notifiable event, and EPA in the case of a notifiable pollution incident.

The Environmental Incident/Non-compliance Report – 9TP-FT-101 may be used for reporting in the following circumstances:

- where access to the IMS is not available
- for reporting non-compliances that do not require reporting in the IMS.

#### 6.1. Verbal notification

The TPO EPM and project manager must be notified verbally immediately after the alliance/contractor becomes aware of the incident or non-compliance. The EPM or SME should provide advice to the alliance/contractor on the classification of the incident/non-compliance and whether notification to any regulatory authority is required.

## 6.2. Incident reporting

Environmental incidents must be reported to TPO within 4 hours of occurring or first being observed. The IMS is accessed via <a href="https://tfnsw.inxsoftware.com">https://tfnsw.inxsoftware.com</a>. Additional details of the incident are to be recorded in the TPO IMS within 48 hours of the incident/non-compliance first being observed. Step by step guidance on how to use the IMS(INX) is provided in the TPO document <a href="mailto:Guide to Environmental Incident Reporting - Using the Incident Management System - 9TP-SD-005">https://disput/sistem.com</a> (INX) is provided in the TPO document <a href="mailto:Guide to Environmental Incident Reporting - Using the Incident Management System - 9TP-SD-005">https://disput/sistem.com</a> (INX) is provided in the TPO document <a href="mailto:Guide to Environmental Incident Reporting - Using the Incident Management System - 9TP-SD-005">https://disput/sistem.com</a> (INX) is provided in the TPO document <a href="mailto:Guide to Environmental Incident Reporting - Using the Incident Management System - 9TP-SD-005">https://disput/sistem.com</a> (INX) is provided in the INX) is provided in the TPO document <a href="mailto:Guide to Environmental Incident Reporting - Using the Incident Management System - 9TP-SD-005">https://disput/sistem.com</a> (INX) is provided in the INX) is provided in the INX (INX) is provided in the I

The event moderator (generally the SME) shall review the details and assign the incident to the EPM and/or relevant contractor's personnel (generally their environmental manager) to

Project type: Not Applicable

manage the incident and complete the preventative/follow-up actions and investigation. Details and completion dates of the actions are to be recorded by the SME and/or EPM and/or the contractor's personnel who have been assigned the incident in the IMS. The alliance/contractor shall input details and findings for the incident investigation in the IMS if required. The SME shall review the report and close the incident when all the actions are completed.

For an incident related to the discovery of asbestos, the incident is to be recorded in the IMS as a safety incident.

A senior safety officer is to assign the incident to both the EPM and the safety officer of the project in order to manage both the safety and environmental aspects of the incident and any associated actions (see Figure 2 on page 13). It is the senior safety officer's responsibility to close the incident if all actions are completed.

## 6.3. Notification to regulatory authorities

If an incident or non-compliance is a notifiable event then a report must be provided to the relevant regulatory authority within the timeframe(s) specified by the relevant legislation. For notifiable events other than pollution incidents the alliance/contractor should seek advice from TPO on whether the notification is to be made by TPO or the alliance/contractor.

Requirements for reporting pollution incidents to EPA and other authorities are identified below in Section 6.4.

## 6.4. Reporting pollution incidents to EPA and other authorities

Pollution incidents which are causing or threatening material harm to the environment must be reported to each of the following authorities immediately after becoming aware of the incident, as required by Section 148 of the POEO Act. The contact numbers for these authorities are:

• EPA Environment Line 131 555

Local Authority Local Council (specific to area)

Ministry of Health
 Public Health Unit via 1300 066 055

(full local area contact details are available on the Public Health

Units pages of the NSW Health website)<sup>1</sup>

Workcover Authority 131 050

Fire and Rescue NSW 1300 729 579

Note: If the situation warranted calling 000 as a first point of notification, you do not need to ring Fire and Rescue NSW again.

Relevant information required to be given to EPA when making a notification is specified in Section 150 of the POEO Act as follows:

- (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

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<sup>&</sup>lt;sup>1</sup> http://www.health.nsw.gov.au/Infectious/Pages/phus.aspx

Project type: Not Applicable

- (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
- (f) other information prescribed by the regulations.

You are required to report the information known at the time of making the notification. If the information required by (c), (d) or (e) above is not known at the time of initial notification but becomes known afterwards it must be reported to each authority immediately after it becomes known. Verbal notification must be followed by notification in writing within 7 days of the date on which the incident occurred.

You are not required to report a pollution incident if:

- (a) you are aware that the incident has already come to the notice of each of the notification authorities
- (b) the incident is an ordinary result of action required to be taken to comply with an environment protection licence, an environment protection notice or other requirement of or made under the POEO Act
- (c) the pollution incident involves only the emission of an odour.

Failure to report a pollution incident as required by the POEO Act is an offence.

Where any work or activity is regulated by an EPL, notification of a pollution incident must be made by the licensee. Thus, where the alliance/contractor holds the EPL for the project, notification shall be made by the alliance/contractor. For projects where TPO holds the EPL notification shall be made by TPO.

For any work or activity that is not regulated by an EPL, notification of pollution incidents to EPA shall be made by TPO, unless the alliance/contractor is instructed otherwise by TPO. This includes pollution incidents that occur as a result of pre-construction activities which may be undertaken prior to an EPL being required for a project. Pre-construction activities are determined by the planning approval and may include, for example, geotechnical investigations, surveys or fencing.

## 6.5. Incident investigations

Incident investigation should be completed for all environmental incidents logged in the IMS (INX). The scope of the investigation is determined by the moderator of the incident in the IMS (INX) system.

#### 6.5.1. Incident investigation

Incident investigation is to be completed using the Investigation tab in the IMS (INX) system, with reference to any investigation reports, attached using the document tab. The Investigation tab includes four sections.

1. Sequence of events

This section is to record the sequence of events that led to the incident.

#### 2. Findings

Given the sequence of events, what are the key findings of the investigation (i.e. what are the main causes of the incident).

Project type: Not Applicable

#### 3. Management methods

Used to record the management methods to be changed and/or implemented to avoid the incident reoccurring.

#### 4. Key learnings

What can we learn from this investigation into the incident? Are there any elements of this incident investigation that can be or need to be shared with other projects or the wider TPO as a Lessons Learned process, environmental alert or similar?

Further guidance is provided in <u>Guide to Environmental Incident Reporting – Using the Incident Management System – 9TP-SD-005</u>

## 6.5.2. Root cause analysis

Root cause analysis must be undertaken for incidents with a risk rating of high and above, and for other lower risk incidents where determined by the incident moderator. The Root Cause Analysis Checklist is presented in Appendix 1 and is located as a template checklist in the Procedures section of the IMS (INX).

The Root Cause Analysis Checklist is designed to assist in the identification of the causal factors that contributed to the incident and provides the information to be included in the Findings section of the Investigation tab.

When this template is completed it must be attached to the Document tab of the IMS (INX).

Further guidance is provided in <u>Guide to Environmental Incident Reporting - Using the Incident Management System – 9TP-SD-005</u>.

## 6.6. Relationship to TPO Crisis Management Procedure

Incidents which are likely to cause major damage to the environment will be managed in accordance with the TPO <u>Crisis Management Procedure – 1TP-PR-008</u>. Determination of whether the environmental incident requires the activation of a crisis management team will be made by TPO in accordance with the assessment process and activation/escalation triggers identified in Sections 6.1-6.3 of the Crisis Management procedure.

## 7. Related documents and references

#### Related documents and references

Environmental Management System Manual - 1TP-ST-052

Environmental Site Inspection Report Template – 9TP-FT-307

Environmental Incident/Non-compliance Report – 9TP-FT-101

Guide to Environmental Incident Reporting - Using the Incident Management System - 9TP-SD-005

Safety and Environmental Incident Report 90-FT-002

Crisis Management Procedure - 1TP-PR-008

<u>Summary of Environmental Legislation Notification Requirements – 2TP-SD-019</u>

EPA 'Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997'

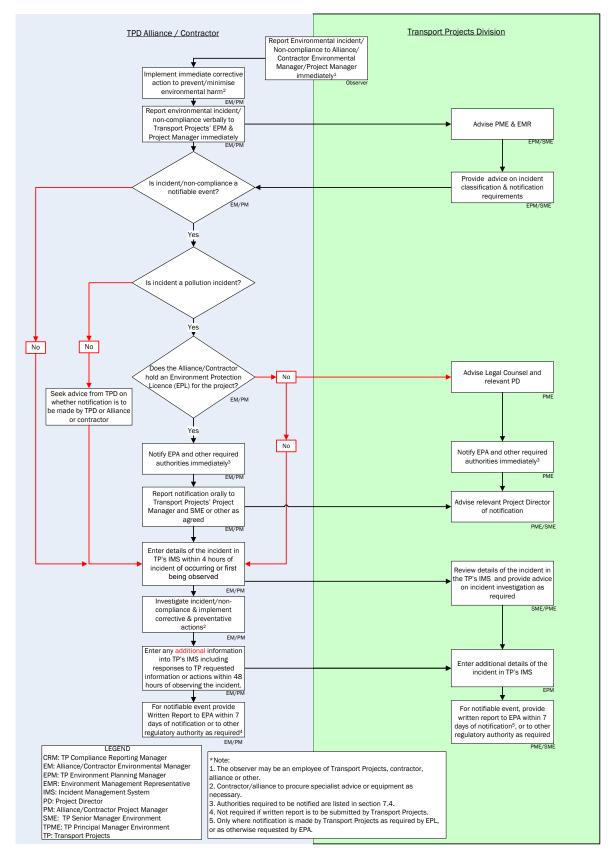


Figure 1 Environmental incident/non-compliance reporting procedure

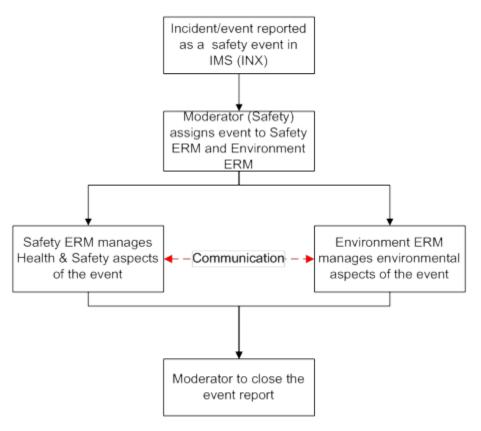


Figure 2 Reporting asbestos find process

Project type: Not Applicable

# **Appendix 1** Root Cause Analysis Checklist

Environmental factors / w	ork s	ite description (Tick all that	apply	<b>(</b> )	
A description of the immedia incident or event	ate ar	nd surrounding environment th	at are	e contributing factors to the	
Sensitive receptors / receiver		High winds		Vibration	
Lighting/ light levels		Snow / Ice		Noise	
Surface water / storm water or natural drainage		Rain		Vegetation or ecology	
Groundwater		Heat/humidity		Fauna or fauna habitat	
Geology and soils		Slippery surface		Trip hazard	
Access and transport		Signage		Other (specify)	
Equipment / tools (Tick all		apply)  ag used and how it contributed	l to th	o incident occurrence	
Type of equipment 1 (Specify make and model)		Type of equipment 2 (Specify make and model)		Type of equipment 3 (Specify make and model)	
Equipment malfunction		Inappropriate equipment		Pre-operation checks	
Faulty equipment		Maintenance schedule		Incorrect use	
Instruction/training on use on equipment		Safety device bypassed / lack of guarding		Unsafe equipment use	
Operated beyond specifications		Difficult to use		Not trained on equipment	
Inappropriate / inadequate storage or stowage		Design / controls site layout problem		Operator not familiar with equipment	
Other (specify)					
Specifically describe how th	e fact	or contributed to the occurren	ice		





Communication and training (Tick all that apply)						
Identify what training, information and communication occurred or did not occur that contributed to the incident						
Appropriate formal training		Refresher training		Pre start briefing or tool box talk		
Shift debriefing / handover		Risks and hazards identified / communicated		Induction		
Confusing message		Incomplete message		Hand signals		
Language barrier		Accent difficulties		No communication		
Communication method / type		Speech issues				
Other (specify)						
Procedures / task instructi	ons	(Tick all that apply)				
What procedures applied to	the ta	ask, were they appropriate and	d wer	e they understood and followe	d?	
Procedure not correct for task or non existent		Procedure not documented		Procedure not communicated		
Deviated from procedure		Procedure not trained		Procedure or training not reinforced		
Not familiar with procedure		Procedure / Task too difficult		New procedure or task or recent task change		
Failed to plan for task				Other (specify)		
Specifically describe how the checked factor contributed to the occurrence (point form) (mandatory if box ticked)						
Individual factors (Tick all	that					
Fatigue		Stress	브	Peer pressure	부	
Body size or strength		Personal event		Workplace distraction / interruption		
Memory lapse (forgot)		Situational awareness (failed to identify hazard or risk)		Time constraints		





Failure to adhere to policies or procedures		Job / task experience		Physical health / medical condition (hearing / sight / other)			
Other (specify)							
Specifically describe how the checked factor contributed to the occurrence (point form) (mandatory if box ticked)							
Leadership / supervision (			contr	ibuted to the incident ecourren	00		
Planning / organisation of task	uperv	Prioritisation of task		ibuted to the incident occurren  Delegation of task	Ce		
Unrealistic attitude or expectation		Amount or availability of supervision		Responsibility not assigned to task			
Communication of requirements		Coordination of task		Workload management			
Other (specify)							
Specifically describe how the checked factor contributed to the occurrence							
Organisational/culture fact	,	Tick all that apply) anisation cultural factors were	rolov	vent a the incident			
Provision of resources – people		Provision of resources – other		Corporate change or restructure			
Previous corrective / preventive actions or other audit findings		Normal or accepted practice		Complacency with work processes			
Other TPO policies or directives (specify)		Conflicting policies or procedures		Risk / hazards not properly identified			
Financial constraints							

#### **Environmental Incident Classification and Reporting**



Planning and Environment Services: Environmental Management

Specifically describe how the checked factor contributed to the occurrence	