



Hazard/Incident Recording, Reporting and Investigation

Power and Water Corporation Procedure

1	Purpose.....	1
2	Scope.....	1
3	References	2
4	Roles and Responsibilities.....	2
5	Definitions	6
6	Records.....	8
7	Attachments	9
8	Overview	9
9	Response and Initial Corrective Action.....	10
10	Recording.....	10
11	Incident Classification.....	10
12	Incident Risk Ranking.....	11
13	Reporting	11
14	Injury/Illness Classification	13
15	Environmental Classification and Reporting.....	13
16	Initial Communication	14
17	Investigation	14
18	Corrective and Preventive Actions	16
19	Target Risk Ranking	16
20	Approval and Communication	16
21	Statistical Trending and Investigating System Failures.....	18

1 Purpose

To define the requirements for incident recording, reporting and investigation within the Power and Water Corporation. Power and Water Corporation shall undertake this process in order to meet the requirements of its Management Systems Policy.

2 Scope

This procedure shall apply to all Power and Water Corporation business units, employees, contractors, suppliers and visitors.

Approved by:	Prepared by:	Issue Date:	Status:
Andrew Macrides Managing Director	Andrew Hoffmann Continual Improvement Coordinator	01/02/2008	Approved
		File No:	Version:
		F2004/280	5

3 References

- 3.1 Work Health (Occupational Health and Safety) Regulations 2003 (NT)
- 3.2 Waste Management and Pollution Control Act 2003 (NT)
- 3.3 International Standards Organisation, 2000, ISO 9001 Quality Management Systems – Specifications with guidance for use.
- 3.4 International Standards Organisation, 2004, ISO14001 Environmental Management Systems – Specification with guidance for use.
- 3.5 Australian Standard, 2001, AS4801 Occupational Health and Safety Management Systems – Specification with guidance for use.
- 3.6 Australian Standard, 1990, AS 1885.1 Workplace Injury and Disease Recording Standard.
- 3.7 Power and Water Corporation, 2005, Risk Management Procedure

4 Roles and Responsibilities

Role / Title	Responsibility
Managing Director	<ul style="list-style-type: none"> • Authorise this procedure. • Report to the Board of Directors hazards/incidents as required. • Ensure that there are systems in place so that hazards/incidents are reported, recorded and investigated in accordance with this procedure.
Business Unit General Manager	<ul style="list-style-type: none"> • Participate at EMC OH&S meetings and provides guidance to Managing Director when approving this procedure. • Ensure that hazards/incidents that occur in their Business Unit are reported and recorded correctly within the time frames stated in this procedure. • Ensure hazards/incidents are appropriately investigated and corrective and preventative actions are determined as part of the investigations. • Ensure that corrective and/or preventive actions that are the responsibility of their Business Unit are completed successfully and within the given time frame. • Review and provide final approval for hazard/incident investigations that their Business Unit is responsible for. • In conjunction with the Branch/Section Manager, selects the investigation team. • In conjunction with the Branch/Section Manager, communicate the initial and final investigation information to the required workgroup. • Liase with Corporate Communications before releasing

Hazard, Incident Recording Reporting & Investigation Procedure

	<p>information outside the Power and Water Corporation.</p> <ul style="list-style-type: none"> • Notify Managing Director and the Manager Health and Safety or Manager Environment or Manager Risk Assurance and Quality of reported Extreme and High risk hazards/incidents. • Ensure those hazards/incidents reported through their Business Unit are raised at the monthly safety meetings and that all-relevant statistics are accurate. • Assume the role of "Relevant Supervisor" for hazards/incidents notified by direct reports. • Ensure that the investigation findings are communicated to member's of the public who may have been involved in an incident as required. • Ensure that external communication of hazards/incidents are approved by Corporate Communications prior to release.
Branch/Section Manager	<ul style="list-style-type: none"> • Ensure that their General Manager is notified of hazards/incident that have been reported to them. • Review and approve investigations that have been reported to them and forward the completed investigation to the relevant technical experts for endorsement. • In conjunction with the General Manager, select the investigation team. • Liase with Corporate Communications before releasing information outside the Power and Water Corporation. • Act as technical expert for any incident classified as Damage or Loss, Near Hit or Product or Service Quality Failure or Hazard Report that occur in areas that they are responsible for. • Ensure that hazards/incidents that occur in their areas of responsibility are reported and recorded correctly. • Assume the role of "Relevant Supervisor" for hazards/incidents notified by direct reports.
Co-ordinator	<ul style="list-style-type: none"> • Ensure that hazards/incidents that occur in their areas of responsibility are reported and recorded correctly. • Assume the role of "Relevant Supervisor" for hazards/incidents notified by direct reports.
Team Leader	<ul style="list-style-type: none"> • Ensure that hazards/incidents that occur in their work area are reported and recorded in accordance with this procedure. • Assume the role of "Relevant Supervisor" for hazards/incidents reported by direct reports.

Hazard, Incident Recording Reporting & Investigation Procedure

<p>Relevant Supervisor</p>	<ul style="list-style-type: none"> • Receive Notifications from those involved in a hazard/incident. • Provide comment on the Hazard/Incident, calculate the initial risk ranking and note these on the Notification form. • Notify their relevant Branch/Section Manager and General Manager of the incident by the end of shift. • Notify the required Technical Experts as defined by the incident classifications by the end of shift of the incident occurring. • Ensure that positive confirmation of hazard/incident notifications has been received. • Ensure that the hazard/incident has been entered in the RISQ database within 24hrs of its occurrence where practical.
<p>Power and Water Corporation Employees and Contractors</p>	<ul style="list-style-type: none"> • Report hazards/incidents as soon as they occur to their relevant supervisor or contact and assist in completing the Hazard/Incident Notification by the end of shift where it is practicable to do so. • When involved or witnessing a hazard/incident, assist the investigation team where required. • Participate in investigations when directed to do so by their Branch/Section Manager or General Manager.
<p>Visitors</p>	<ul style="list-style-type: none"> • Report hazards/incidents as soon as they occur to their relevant Power and Water Corporation contact and assist in completing the Hazard/Incident Notification Form by the end of shift where it is practicable to so.
<p>Manager Environment</p>	<ul style="list-style-type: none"> • Act as the technical expert for environmental hazards/incidents and provide advice and guidance where it is requested. • Notify Environment Protection Agency of environment incidents in conjunction with relevant acts and regulations. • Act as single point of contact with regulatory bodies for environment incidents. • Endorse completed environmental related hazard/incident investigations where required. • Review environmental hazards/incidents reported and determine if classifications and risk ranking is satisfactory. • Notify investigation team if modifications are required to completed hazard/incident notification. • Nominate a suitable delegate for the above

Hazard, Incident Recording Reporting & Investigation Procedure

	<p>responsibilities if Manager Environment is unavailable.</p> <ul style="list-style-type: none"> • Issue Significant Incident Bulletin where applicable.
Transport Officer	<ul style="list-style-type: none"> • Act as the technical expert for incidents that are classified as Motor Vehicle Accidents. • In conjunction with the Manager Facilities, endorse completed motor vehicle accident investigations where required. • Review incidents reported and determine if classifications and risk ranking is satisfactory. • Notify Investigation Team if modifications are required to completed Hazard/Incident Notification form.
Manager Corporate Communications	<ul style="list-style-type: none"> • Review and authorise hazard/incident information released outside Power and Water Corporation.
Manager Health and Safety	<ul style="list-style-type: none"> • Review OHS hazard/incidents reported and determine if classifications and risk ranking is satisfactory. • Endorse OHS investigations as required. • Notify investigation team if modifications are required to completed hazard/incident notification. • Notify and liase with NT Worksafe in respect of accidents and occurrences requiring notification under the Work Health Act. • Ensure that statistical trending is conducted on Occupational Health and Safety related incident and any identified system failures are investigated. • Issue Significant Incident Bulletin where applicable.
Injury and Rehabilitation Co-ordinator.	<ul style="list-style-type: none"> • Liase with Business Units to ensure that work related injuries are managed appropriately.
Manager Risk Assurance and Quality	<ul style="list-style-type: none"> • Act as technical expert for Product or Service Failures and Improvements classified incidents. • Provide assistance and guidance where requested for Product or Service Failures and Improvements related incidents. • Ensure that incident statistics are recorded and information analysed and reported. • Endorse completed investigations where required and Product or Service Failures and Improvements classifications are correct in the incident investigation.
Investigation Team	<ul style="list-style-type: none"> • Gather evidence, determine contributing factors and investigate the root cause of incidents to ensure the most suitable corrective or preventive actions are in place to minimise the risk of the hazard/incident.

Hazard, Incident Recording Reporting & Investigation Procedure

	<ul style="list-style-type: none"> • Ensure that the investigation and corrective/preventive action information is entered into the RISQ database.
Business Unit Safety Advisors	<ul style="list-style-type: none"> • Endorse completed investigations for their relevant Business Unit. • Participate in investigations at the discretion of the Branch/Section Manager or General Manager.

5 Definitions

Where terms or words are not included in the definitions section, refer to Power and Water's Glossary for clarification. The glossary is available on Power and Water's intranet.

Word	Definition
Appropriate Person	For assigning actions, a person who has sufficient authority and knowledge within the Corporation and whose job description is relative to the desired action to be completed.
Coordinator	Power and Water employee whose role is to ensure required resources, (human and other), are available and managed in order to complete assigned work tasks.
Consequence	The outcome of an event or situation expressed qualitatively or quantitatively being a loss, injury, damage or disadvantage.
Contractor	An individual or organisation who has been appointed under a contract by Power and Water Corporation to perform an agreed set of duties or supply skills to the benefit of the corporation.
Contributing Factor	Factors that may contribute to an incident occurring. These factors can be grouped into four categories, Human, Environment, Design and Systems.
Corrective Action	Action to eliminate the cause of a detected non-conformity or other undesirable situation. The corrective action is the action required to rectify the non-conformity as it stands.
Current Risk	The potential risk calculated for an incident before any root causes or further risk controls have been identified and actions put in place to control them.
Environmental Harm	Any harm to or adverse effect on the environment of any degree, or; Any potential harm (including the risk of harm and future harm) to or potential adverse effect on the environment of any degree or duration.
Environmental Nuisance	An adverse effect on the amenity of an area that – <ul style="list-style-type: none"> • is caused by noise, smoke, dust, fumes or odour; and • unreasonably interferes with or is likely to unreasonably interfere with the enjoyment of the area by persons who occupy a place within the area or are otherwise

Hazard, Incident Recording Reporting & Investigation Procedure

lawfully in the area; or

- An unsightly or offensive condition caused by contaminants or waste.

Hazard Report	The notification of a situation that could lead to an incident if not investigated and actions raised to prevent its occurrence. Used to bring hazards to the attention to the corporation.
Hierarchy of Control	<p>A progressive list of applications that allow control of the root causes of an incident. From the most effective to the least effective in reducing overall risk.</p> <ol style="list-style-type: none">1. Eliminate2. Substitute3. Isolate4. Administrate5. Engineering6. Apply Personal Protective Equipment
Incident	A sequence of events which causes or could have caused (near hit) personal injury or illness, environmental nuisance or harm damage or loss, or Product or Service Quality Failure.
Incident Classification	One or more scenarios that have or may have occurred as the result of an incident.
Likelihood	The qualitative description of the number of possible occurrences of an event in a given time.
Motor Vehicle Accident	An incident that results in, or could have resulted in damage to a piece of mobile equipment. Regardless of whether the equipment was in motion at the time of the incident.
Near Hit	A situation, activity or process that could have resulted in an incident but due to a number of unexpected outcomes did not.
Person Reporting	A person within the Power and Water Corporation or a company contracted to the Power and Water Corporation that witness or is involved in an incident or near hit.
Practicable	An acceptable level of activity that is both effective and cost efficient.
Preventive Action	Action to eliminate the cause of a potential nonconformity or other undesirable situation.
Product or Service Quality Failure	Deviation from or failure to meet identified service delivery requirements or accepted industry product guidelines. This may include both internal and external product/service quality trigger levels, project performance indicators or

Hazard, Incident Recording Reporting & Investigation Procedure

company expectations.

Relevant Supervisor	A position within the Power and Water Corporation that has had an incident reported to them either by one of their subordinates or as the result of an activity or process that they are responsible for.
Root Cause	An unchecked or undetected weakness in an underlying system.
Sequence of Events	A list of actions, situations and conditions that occurred before, during or after an incident.
Shall	Mandatory
Should	Advisory or discretionary
Significant Incident Bulletin	Documented notification to all employees of a lost time injury, environmental incident or other significant event.
Supervisor	A position within the organisation that has one or more employee reporting to them.
Supplier	An individual or organisation who provide goods or services.
Target Risk	The expected risk calculated once the root causes of the incident have been identified and action(s) defined to control them.
Team Leader	Power and Water employee who, as part of a work team, assumes responsibility for completion of that team's work assignments.
Technical Expert	Personnel within the Power and Water Corporation who have recognised skills and experience to provide knowledge and guidance in their area of expertise.
Visitor	A person or group who are required to come onto Power and Water Corporation property but are not expected to perform any task or activity.

6 Records

6.1 Records being created from this procedure may include:

- Completed Incident Notification Form
- Completed Incident Investigation Form
- Completed Motor Vehicle Accident Form
- Attached Investigation Records and Reports
- Completed Incident Advice Bulletin
- Completed Investigation Findings Bulletin
- Completed Significant Incident Bulletin

Hazard, Incident Recording Reporting & Investigation Procedure

- 6.2 Incident investigation information including notifications and corrective/preventive actions shall be entered into the RISQ database and retrieved through the use of the Discoverer Reporting System and the RISQ database.
- 6.3 Hardcopy records shall be filed in accordance with the Records Management System and tracked using the Electronic Document Management System.

7 Attachments

- 7.1 Attachment 1: Incident Recording Reporting and Investigation Process Flow Diagram
- 7.2 Attachment 2: Hazard/Incident Investigation Process Map
- 7.3 Attachment 3: Hazard, Incident and Near Hit Notification Form
- 7.4 Attachment 4: Hazard/Incident Investigation Form
- 7.5 Attachment 5: Hazard/Incident Notification Bulletin
- 7.6 Attachment 6: Hazard/Incident Investigation Findings Bulletin
- 7.7 Attachment 7: Motor Vehicle Accident Report Form
- 7.8 Attachment 8: Significant Incident Bulletin

8 Overview

- 8.1 Power and Water Corporation shall ensure that identified incidents are reported, recorded and investigated and that the root causes have been identified. Corrective and/or preventive actions shall be put in place to ensure that the identified root causes of each incident have been suitably controlled and that the results have been communicated to the relevant personnel of the Power and Water Corporation.
- 8.2 The process for successfully reporting, recording and investigating incidents shall be completed using the following steps:
 - Recording, reporting and communication of the initial incident information;
 - Preparation of the investigation team along with the tools and services required to conduct the investigation;
 - Conducting the investigation to identify the root cause(s) of an incident;
 - Determining the corrective and/or preventive actions required;
 - Calculation of the target risk of the incident subject to the identified actions, and;
 - Communication of the incident/investigation findings to the workforce.
- 8.3 The incident recording, reporting and investigation procedure shall be used to notify the corporation of hazards that have been identified in the workplace.

9 Response and Initial Corrective Action

- 9.1 Upon the identification of an incident, the scene is to be made safe but not altered in such a way as to prevent the retrieval of information for the investigation. Included in this is the requirement for emergency care to be given to those personnel that are injured.
- 9.2 In the case of an environmental incident occurring, the incident area shall be made safe by controlling and containing the relevant substance or emission where it is practicable to do so.
- 9.3 Those involved shall only control the incident scene to the level that they are capable of.
- 9.4 Issue Significant Incident Bulletin where applicable.

10 Recording

- 10.1 Once an incident has occurred and any initial actions have been implemented, those involved shall report the incident to their relevant supervisor immediately taking into account the following areas:

Incident Details

Incident Classification

Injury/Illness Details (if applicable)

Environmental Details (if applicable)

Immediate Actions Taken

- 10.2 Those involved in the incident should enter the incident directly into the RISQ database to ensure that the necessary notifications occur as soon as possible.
- 10.3 Alternatively, the Incident Notification Form shall be completed and passed onto the relevant supervisor by the end of shift.

11 Incident Classification

- 11.1 The person reporting shall classify the incident under the following criteria:

Injury/Illness;

Environmental;

Motor Vehicle Accident;

Product or Service Quality Failure;

Damage or Loss - including equipment damage, fire, motor vehicle accident, security issues, business interruption or service loss;

Hazard Report, or;

Near Hit.

12 Incident Risk Ranking

- 12.1 Upon notification of the hazard/incident and receipt of the Notification form, the relevant supervisor shall calculate the initial risk of the incident and note the result on the Notification form.
- 12.2 When identifying the consequence and likelihood of the incident those involved shall take into account the "credible worst case" outcome if the situation was to repeat itself based on all the factors of the incident. The incident risk ranking should not be based on just the actual result of the incident that has occurred at the specific time.
- 12.3 The risk ranking shall be analysed in terms of the credible worst case consequence of the incident and the likelihood of the credible worst case consequence occurring. When ranking, the qualitative assessment process shall be used where the team uses its knowledge and industry experience to best determine the credible consequence and likelihood.

13 Reporting

- 13.1 Where a hard copy form has been used as notification, the relevant supervisor shall ensure that the incident notification information has been entered into the RISQ database within 24 hours of the incident occurring where it is practical to do so.
 - 13.2 Upon receipt of the Incident Notification Form or notification through the RISQ database, the relevant supervisor shall obtain a copy of the Incident Investigation Form and attach it to the Incident Notification form.
 - 13.3 The relevant supervisor shall report the incident immediately to their Branch/Section Manager who in turn shall inform their General Manager.
 - 13.4 Where a Business Unit has an assigned Safety Advisor, they shall be informed of the incident as soon as is practicable by the relevant supervisor.
 - 13.5 In all notifications, positive confirmation of the notification shall be received before assuming the message has been successfully reported.
 - 13.6 The relevant supervisor shall immediately inform the following positions within the corporation of the incident depending on the classifications that the incident has been given:
 - Injury/Illness – Manager Health and Safety;
 - Environmental – Manager Environment;
 - Motor Vehicle Accident – Transport Officer;
 - Product or Service Failure – Manager Risk Assurance and Quality;
 - Damage or Loss – Relevant Branch/Section Manager, or;
 - Hazard Report – Relevant Branch/Section Manager
 - Near Hit – Relevant Technical Expert.
- These personnel are the "Technical Experts" for particular classifications of incident.
- 13.7 Once the incident has been raised in the RISQ database, those who need to be notified are sent an e-mail of incident notification. The responsible business unit should ensure that confirmation of notification has been received.

Hazard, Incident Recording Reporting & Investigation Procedure

- 13.8 The Branch/Section Manager or General Manager shall proceed to select the investigation team. The size and skills of the investigation team shall be relative to the incident classification and risk ranking and consideration should be given to including a relevant union representative to the investigation team.

Note: The investigation shall begin as soon as practicable after the incident occurs.

- 13.9 The Branch/Section Manager shall inform the Manager Health and Safety, Manager Environment or Manager Risk Assurance and Quality of any High or Extreme ranked incidents as part of the reporting process.
- 13.10 The General Manager shall inform the Managing Director. Where it is deemed necessary, the Managing Director shall inform the Board of the incident.
- 13.11 The Manager Health and Safety shall ensure that OHS incidents requiring notification to NT Worksafe have been sent to NT Worksafe within 48 hours of the incident occurring. Corporate Communications should be consulted in this process to ensure that appropriate information is released. Section 64 to 66 of the Workplace Health and Safety Act and Section 46 of the Workplace Health and Safety Regulations prescribes a comprehensive list of incidents to be reported and is available on their web site at:

<http://www.worksafe.nt.gov.au/corporate/legislation.shtml>

- 13.12 NT Worksafe shall be notified immediately the incident has occurred by telephone by the Health and Safety Unit, and followed up with a written report signed by the Manager Health and Safety in the approved NT Worksafe Form 137 within 48 hours of the incident's occurrence. The reference number provided at the time of the initial notification is recorded on the approved form and demonstrates that the employer met the duty to notify as soon as practicable.

<http://www.worksafe.nt.gov.au/justice/worksafe/corporate/documents>

- 13.13 If the Manager Environment deems the incident is significant enough to require environmental regulator notification, the manager Environment or their delegate shall provide notice to the Environment Protection Agency (EPA) as soon as possible. In any case notification to the Environment Protection Agency shall occur within 24 hours of a person becoming aware of the incident. Section 14 of the Waste Management and Pollution Control Act requires the notice contain information on:

The nature of the incident;

Place;

Date and time;

How the pollution occurred;

Measures used to contain and clean up; and

Identity of the person providing the notice.

The Manager Environment shall provide a liaison function with EPA and serve as a single point of initial contact.

- 13.14 In the case of an incident being classified as a Motor Vehicle Accident the Motor Vehicle Accident Form shall be completed by the relevant supervisor in conjunction with those involved in the incident and sent to the Transport Officer as part of the

Hazard, Incident Recording Reporting & Investigation Procedure

notification. A copy of the completed MVA form shall be included in the incident investigation.

14 Injury/Illness Classification

- 14.1 Upon receipt of the incident information the Manager Health and Safety, shall track the status of any injuries and ensure that they have been properly classified under one of the following areas:
- First Aid Injury;
 - Medically Treated Injury;
 - Lost Time Injury, or;
 - Fatality.
- 14.2 This is an ongoing process where an injury or illness may escalate in classification over time. The Manager Health and Safety shall ensure that the final classification is noted as part of the incident investigation, see Section 20.1.
- 14.3 The Manager Health and Safety shall ensure that the injury/illness details are entered into the RISQ database.
- 14.4 The Rehabilitation and Injury Management Coordinator will liaise with the Manager Health and Safety to ensure relevant workers compensation information is identified to direct injury/illness classifications.
- 14.5 The Rehabilitation and Injury Management Coordinator shall ensure that worker's compensation information is entered into the RISQ database.
- 14.6 Injury and Illness information should be recorded as per AS 1885.1 Workplace Injury and Disease Recording Standard.
- 14.7 The injured person(s) Branch/Section Manager assisted by the Rehabilitation and Injury Management Coordinator shall ensure that any work-related injury is properly managed so that any injured person(s) are fit for duty and are able to return to work as efficiently as possible.
- 14.8 The Manager Health and Safety shall issue a Significant Incident Bulletin to all Power and Water staff to communicate all Lost Time Injuries or any Significant OHS incident.

15 Environmental Classification and Reporting

- 15.1 Any spill, release, escape or discharge of a substance to land, water or air, either accidental or deliberate, and whether contained or not within a building or by pollution control measures shall be reported to the Environmental team.
- This is because environmental risk depends on the toxicity of a released substance and the sensitivity of the surrounding environment and the assigning of risk requires technical expertise.
- 15.2 In the event that the relevant supervisor is unable to confirm that the Manager Environment has been informed of the incident, the relevant supervisor shall inform the Branch/Section Manager or General Manager of this fact.
- 15.3 The Branch/Section Manager, General Manager or their delegate(s) must then make a judgement to report the incident via the 24 hour Territory wide Pollution Hotline

Hazard, Incident Recording Reporting & Investigation Procedure

on 1800 064567 to meet the requirement to notify the regulator within 24 hours of first becoming aware of the incident.

- 15.4 Upon receipt of an environmental incident notification the Manager Environment or their delegate shall ensure the initial level of risk determined by the relevant supervisor is appropriate and shall track the status of the environmental incident.
- 15.5 The relevant General Manager and Manager Environment shall ensure that the environmental incident is properly managed, appropriate on-site remediation is undertaken as required, and any regulator requirements are met.
- 15.6 The Manager Environment shall ensure that environmental incident information is kept up-to-date and reported to senior management at regular intervals.
- 15.7 The Manager Environment shall be responsible to issue a Significant Incident Bulletin to all Power and Water staff to communicate the Incident if required.

16 Initial Communication

- 16.1 The Branch/Section Manager or General Manager shall communicate the details of the incident to the workforce. A basic understanding of the incident and the actions to date shall be communicated. Communication shall be dependent on incident risk as detailed below:

Moderate Risk – Business Unit

High Risk – Corporation Wide

Extreme Risk – Corporation Wide

- 16.2 Low risk incidents should only be reported to the immediate work group once the investigation has been completed and as part of the final communication process detailed in Section 20.2. For information on how incidents can be communicated refer to the Communication Procedure.
- 16.3 The General Manager of the responsible business unit shall determine if external communication of the incident notification is required.
- 16.4 If the Incident is deemed Significant, the Manager Health and Safety, Manager Environment or Manager Risk Assurance and Quality shall be responsible to issue a Significant Incident Bulletin to inform staff of the Incident if required.
- 16.5 Communication of the incident notification externally or to a member of the public shall be approved by Corporate Communications.

17 Investigation

- 17.1 All incidents shall be investigated.
- 17.2 The investigation team shall conduct the investigation to identify the root causes of the incident and determine corrective and/or preventive actions that shall be implemented to control the hazards associated with the root causes and lower the risk of the incident occurring again.
- 17.3 The depth to which the investigation is conducted shall be relative to the risk of the incident.

17.4 Preparation

Hazard, Incident Recording Reporting & Investigation Procedure

- 17.4.1 The investigation of the incident shall begin once the investigation team has been established.
- 17.4.2 The incident investigation can be conducted using the Incident Investigation Form as a guide with information being entered into the RISQ database by the end of the investigation.
- 17.4.3 The investigation shall be recorded electronically using the RISQ database.
- 17.4.4 Both the Branch/Section Manager and General Manager shall ensure that any necessary information and services are provided for the investigation team.
- 17.4.5 The number of personnel in an investigation team shall depend on the risk of the incident. The personnel selected should possess skills in the investigation process and knowledge in the relevant classification area of the incident.

17.5 Gathering the Evidence

- 17.5.1 Once the investigation team has been established, the evidence gathering process begins. The relevant evidence surrounding the incident shall be collated and documented. The process of evidence gathering is through the use of techniques such as:

- Reviewing the scene
- Collecting physical evidence
- Interviewing the personnel involved
- Interrogating any relevant documentation

Any evidence collected shall be either attached to or referenced in the Incident Investigation.

17.6 Determining the Sequence of Events

- 17.6.1 Once all the evidence has been collated, the investigation team shall determine the sequence of events of the incident. The following issues shall be taken into account:

- Events prior to the Incident;
- Events of the Incident;
- Events after the Incident (methods for control of the incident), and;
- Determining the Contributing Factors.

The sequence of events shall be documented in the RISQ database incident investigation section.

17.7 Contributing Factors

- 17.7.1 Once the sequence of events has been determined, the investigation team shall identify which steps contributed to the incident and record them the incident investigation. Each identified contributing factor shall be classified under four areas:

- Human – Issues with respect to the people side of the incident;

Hazard, Incident Recording Reporting & Investigation Procedure

Environment (Physical) – How the physical work environment contributed to the incident;

Design – How the equipment/machinery and design processes contributed to the incident, and;

Systems – Issues with respect to the controls identified through the Environmental, Safety, Quality, Maintenance and other systems that should have prevented the incident.

17.8 Root Cause Analysis

17.8.1 Once the contributing factors have been identified then the investigation team shall identify the underlying systems failures that caused the incident. These are termed root causes and are often identified by continuing to ask “why” a particular event occurred. When asking why a particular event has occurred the questions shall only be based on the evidence gathered through section 17.2. Such questions shall continue to be asked of each contributing factor until the deficiencies in one or more systems are found.

18 Corrective and Preventive Actions

18.1 Once the investigation team has identified the root causes of the incident they shall decide on suitable corrective and/or preventive actions to rectify them.

18.2 Corrective and preventive actions shall be considered in such a way as to best control the sources of risk identified through the root causes of the incident

18.3 The use of the hierarchy of control shall be used with a view to decreasing the risk of the incident occurring again. Elimination, substitution or isolation of the identified deficiencies identified in the root cause best achieves this.

18.4 Each action shall be assigned to an appropriate person with an achievable due date. The investigation team shall ensure that each person selected to complete an action be given adequate consultation prior to the action description and due date being agreed to by all parties. If agreement is not met then the investigation team shall readdress the action details and provide suitable information before continuing.

18.5 Agreed corrective or preventive actions shall be entered into the RISQ database and attached to the relevant incident.

19 Target Risk Ranking

19.1 Once the corrective and/or preventive actions have been agreed to, the investigation team shall rank the incident for target risk. The agreed corrective and/or preventive actions shall ensure that the target risk is lower than the initial risk of the incident.

19.2 The desired target risk is only achievable provided the agreed actions are completed successfully and within the identified timeframe.

20 Approval and Communication

20.1 Incident and Investigation Approval

Hazard, Incident Recording Reporting & Investigation Procedure

- 20.1.1 Once the information relating to the incident investigation has been completed, and entered into the RISQ database, an email alert is sent to the Branch/Section Manager advising the incident investigation is ready for approval.
- 20.1.2 If the Branch/Section Manager does not approve the incident investigation, then the RISQ database will return the investigation to the investigation team leader for further work.
- 20.1.3 Once the Branch/Section Manager endorses the incident investigation, then where applicable the RISQ database sends an email alert to the Business Unit Safety Advisor or Technical Expert advising the incident investigation is ready for approval.
- 20.1.4 If the Business Unit Safety Advisor or Technical Expert fails to endorse the incident investigation the RISQ database will returned the investigation to the investigation team leader for further work and the approval process is restarted. The Business Unit Safety Advisor or Technical Experts shall ensure that the relevant information is given to the investigation team to enable the approval process to continue.
- 20.1.5 Once the Business Unit Safety Advisor or Technical Expert endorses the incident investigation, the RISQ database sends an email alert to the Manager Health and Safety (Injury/illness), Manager Environment (Environment) or Manager Risk Assurance and Risk (Product or Service failure) advising the incident investigation is ready for approval.
- 20.1.6 The Manager Health and Safety (Injury/illness), Manager Environment (Environment) or Manager Risk Assurance and Risk (Product or Service failure) shall endorse incident investigation as specified above. If the Manager Health and Safety (Injury/illness), Manager Environment (Environment) or Manager Risk Assurance and Risk (Product or Service failure) fail to endorse the incident investigation the RISQ database will returned the investigation to the investigation team leader for further work and the approval process is restarted.
- 20.1.7 Once the Manager Health and Safety (Injury/illness), Manager Environment (Environment) or Manager Risk Assurance and Risk (Product or Service failure) endorses the incident investigation, the RISQ database sends an email alert to the Business Unit's General Manager advising the incident investigation is ready for approval.
- 20.1.8 The Business Unit General Manager shall give final approval.
- 20.1.9 If the General Manager refuses to approve the incident investigation, the RISQ database will returned the investigation to the investigation team leader for further work and the approval process is restarted.

20.2 Final Communication

- 20.2.1 The relevant Branch/Section Manager or General Manager shall ensure that information from the completed incident and investigation is communicated to the workforce. This is completed in such a fashion that Power and Water personnel are aware of the incident, the root causes identified through the investigation and the corrective and/or preventive actions raised to control them.
- 20.2.2 The incident investigation details are communicated to the required workforce based on the same risk definitions as detailed in Section 16.

Hazard, Incident Recording Reporting & Investigation Procedure

- 20.2.3 Where an incident has occurred that involved the injury/illness of a member of the public, the responsible General Manager shall ensure that the investigation findings are communicated to those involved outside the organisation.
- 20.2.4 Where communication of incident investigation findings is to be carried out, the responsible business unit shall liaise with Corporate Communications prior to releasing the information externally.

21 Statistical Trending and Investigating System Failures

- 21.1 The Manager Health and Safety shall conduct statistical trending on Occupational Health and Safety related incidents.
- 21.2 Identified trends shall be used to determine any system failures that have contributed to the incidents occurring. These system failures shall be investigated using the process defined in Section 17.
- 21.3 When investigating system failures an incident shall be raised and managed through this procedure.