



Corporate Standard

ENVIRONMENTAL MANAGEMENT SYSTEM

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1 INTRODUCTION

1.1 Foreword

This document describes Delta Electricity's Environmental Management System (EMS) and outlines the minimum requirements for environmental management and compliance that are to be implemented at all Delta Electricity facilities.

1.2 Objectives

To support Delta Electricity's Sustainability Policy by outlining an Environmental Management System (EMS) consistent with the principles of ISO 14001 Environmental Management Systems.

1.3 Scope

This Corporate Standard applies to all employees and contractors employed at Delta Electricity sites and facilities and sets out the requirements for environmental management of those sites and facilities.

1.4 Definitions

Biological diversity or biodiversity - is the variety of all living organisms, including all species, the genes they possess and the ecosystems they form.

Ecological integrity - maintenance of all the components of an ecosystem.

Ecosystem - consists of plants, animal, fungal and micro-organism communities and the associated non-living environment interacting as an ecological unit.

Environmental due diligence - is a demonstrated system of environmental management that ensures environmental protection under all but the most unforeseeable circumstances. It may assist in mitigating the penalty for an environmental prosecution.

Greenhouse emissions - are gaseous emissions suspected of causing an increase in the average temperature of the atmosphere. The main greenhouse gases are carbon dioxide, methane, nitrous oxide, ozone and refrigerant gases CFC's and HCFC's.

Regulatory authorities – Relevant regulatory authorities may include officers of the Departments of Environment and Climate Change (DECC), Planning, Primary Industries, Water & Energy, State Water and some local government.

Sustainable energy system - an energy system in which the source of the energy is continually renewed e.g. solar or wind energy.

1.5 Legislative/Regulatory Provisions and Standards

Energy Services Corporations Act 1995 - Section 4 Part 2 Para 5 (1)

Protection of the Environment Administration Act 1991 - Section 6 (2)

This standard is based on AS/NZS ISO 14004 Environmental Management Systems - General guidelines on principles, systems and supporting techniques.

2 ENVIRONMENTAL COMMITMENTS

2.1 Environmental Management

Delta Electricity will maintain a comprehensive environmental management program that targets compliance with all statutory environmental regulations and continual improvement of environmental performance.

Responsibility for environmental performance and its continual improvement is delegated to line managers and through them to staff throughout the organisation. All staff will be provided with the necessary technical and personal development skills and resources to achieve Delta Electricity's environmental objectives.

Managers, team leaders and staff with specific environmental responsibilities will have these outlined in position descriptions and included in performance assessments.

2.2 Reducing Environmental Impacts

Delta Electricity recognises that all activity may cause impacts on the environment. Where suitable economically viable technology exists to reduce or eliminate emissions or discharges, these technologies will be implemented.

Where emissions and discharges are unavoidable, these emissions will be monitored both at the source and in the external environment. The level of emission or discharge will be minimised and suitable measures taken to ensure that they comply with all regulatory requirements.

2.3 Ecologically Sustainable Development

Delta Electricity endorses the principles outlined in the National Strategy for Ecologically Sustainable Development, by:

“Using, conserving and enhancing the community’s resources so that ecological processes, on which life depends, are maintained and the total quality of life, now and in the future, can be increased”

2.4 Greenhouse Emission Reduction

Delta Electricity is committed to continuous improvement in greenhouse gas emissions performance and co-operation with state and national programs for greenhouse gas emission reductions.

Delta Electricity will implement, monitor and maintain programs to ensure that emissions of greenhouse gases are minimised. The programs will be reviewed and progress reported on an annual basis. Support will be given to the research and development of economically viable sustainable energy systems.

2.5 Improving Environmental Performance

Delta Electricity will continuously improve environmental performance by:

- reviewing environmental policy and standards regularly to ensure alignment with corporate strategic plans and imperatives, business effectiveness, clarity and policy compliance;
- incorporating power station and business unit environmental objectives and targets into annual business plans, and revision of these objectives and targets on an annual basis;
- regular review of environmental performance at power station, business unit, Executive and Board level;
- conducting regular environmental audits, waste audits and environmental risk assessments and incorporating identified improvements in the environmental planning process;
- regular environmental awareness training of all staff and contractors;
- targeted and specific environmental training for selected staff; and
- periodic review of the performance and adequacy of the environmental management system by senior management, including review of environmental due diligence.

2.6 Efficient Resource Usage

Delta Electricity is committed to the efficient use of resources (material, fuel and energy) and to minimising the production of wastes.

Delta Electricity will actively pursue opportunities to reduce, reuse and recycle waste materials and to convert wastes to useful by-products by supporting research, marketing and recycling activities.

In making purchasing decisions, favourable consideration will be given to suppliers who consider product life cycle by minimising or recycling their products and packaging.

2.7 Land Management

Delta Electricity will maintain land management plans for all its landholdings substantially consistent with the National Generators Forum *Guideline for Land Management*. Land management plans are to be reviewed or updated every 5 years.

Natural, aboriginal, historical and industrial heritage issues will be taken into account in the design, siting, construction, operation, decommissioning and disposal of facilities.

2.8 Elimination of Environmentally Harmful Materials

Where suitable substitute materials exist, Delta Electricity will eliminate the use of environmentally harmful material, including the phasing out of ozone depleting chemicals and poly chlorinated biphenyls, in accordance with state and national goals.

2.9 Considering the Interests of the Community

At all times, Delta Electricity will take account of the interests of the community in which it operates.

In making significant strategic decisions on environmental matters that may have community impacts, open communication and extensive community consultation will take place.

All public inquiries and complaints will be given prompt and courteous attention, including communication of any follow up activities.

Delta Electricity will seek active participation in community consultative environmental forums, conduct appropriate environmental research and projects, and support community based environmental activities.

3 ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)

3.1 ISO 14001 EMS

All operational sites shall establish and maintain an environmental management system based on the ISO14001 Environmental Management System.

3.2 Other EMS requirements

3.2.1 Register of Environmental Legislation

The Manager/Environment shall maintain a Register of Environmental Regulations containing:

- a list of all relevant environmental legislation
- the jurisdiction to which the legislation applies
- the regulatory scope of the legislation
- penalties applicable to individuals and the corporation
- defences available under the legislation
- any other relevant information

The Register shall be maintained as a controlled document in electronic form and should be updated on a regular basis. It shall be available for perusal by interested staff.

3.2.2 Maintaining Awareness of New Legislation

The Manager/Environment shall maintain a process whereby all levels of the organisation are informed of the substance and implications of changes in environmental legislation and relevant court decisions.

The Manager/Environment and Production Environment Managers shall maintain an awareness of current and proposed environmental legislation and impacts by:

- maintaining contact with government agencies, industry associations or groups;
- subscribing to commercial databases and newsletters; and
- using professional legal or other services.

3.3 Assignment of Responsibilities

3.3.1 Board Environment Committee

The primary objective of the Board Environment Committee is to assist the Board in discharging its responsibilities relating to compliance with Environmental policies and legislation.

The Committee shall consist of at least three members of the Board, one of which shall be the Chief Executive. The Convenor of the Committee will be one of the non-executive Directors. Members shall be appointed by the Board for an initial period of one year, after which appointments may either be reconfirmed by the Board or subject to annual rotation.

The Committee shall hold four meetings per year and such additional meetings as the Convenor shall decide in order to fulfil its duties. A quorum shall consist of a majority of members.

The General Manager/Human Resources will be appointed as Minutes Secretary to keep the agenda and minutes of meetings.

- The Minutes Secretary shall record proceedings of each meeting and circulate them to members of the Committee and to the Board.
- The Convenor is to report to the Board summarising work performed by the Committee to fully discharge its duties.
- Delta's annual report should include a statement describing the responsibilities and activities of the Committee.

The Committee shall have unlimited access to Executive Management and shall have the ability to consult independent experts and invite various parties to attend its meetings where the Committee considers it necessary to carry out its duties. The Convenor of the Committee will consult with Delta's Chairman before engaging any independent experts..

The duties of the Committee shall be to:

- (a) review and approve environmental and related management plans;
- (b) review all significant proposed policy changes and make recommendations to the Board;
- (c) review and approve the program of environmental audits;
- (d) require reports from senior management of any significant incidents promptly after their occurrence and review management's response to such incidents;
- (e) evaluate the overall effectiveness of environmental policies and procedures;

- (f) review regular reports of the status of all observations arising from environmental audits and monitor management's responses and remedial actions;
- (g) identify and direct any special projects or investigations deemed necessary.

3.3.2 Executive Environment Committee

The Executive Environment Committee is responsible for:

- setting and reviewing environmental policy and commitments;
- receiving and reviewing environmental audits;
- developing major new environmental initiatives;
- reviewing environmental performance; and
- determining the organisation's response to other significant environmental incidents.

The Executive Environment Committee shall meet on a quarterly basis and shall consist of the following:

- Chief Executive (Chairman);
- Manager/Environment (Secretary);
- General Managers of Production Business Units, Delta Maintenance, Strategy; and
- Production Business Unit Environment Managers.

Proceedings of the Executive Environment meetings shall be communicated to the Board Environment, Occupational Health and Safety Committee on a quarterly basis by the Manager/Environment.

3.3.3 Production Environment Committee

The Production Environment Committee is responsible for environmental matters within the production area, including:

- setting and reviewing environmental objectives and targets consistent with the corporate Policy and commitments;
- designating responsibilities and allocating resources to achieve environmental objectives and targets;
- reviewing and communicating the implications of new environmental legislation;
- reviewing environmental management programs, land management programs, environmental studies, audit issues and any other issues of environmental significance;
- responding to community related concerns; and
- reviewing environmental performance matters within area of operations covered by station environmental licences, including licence compliance, public inquiries, environmental incidents and reporting procedures

The Production Environment Committee shall meet on a minimum quarterly basis at least two weeks prior to the Executive Environment Committee Meeting.

Membership of Production Environment Committees shall consist of the following:

- Production Business Unit General Managers - (one as Chairman);
- Production Environment Managers (one as Secretary);
- Manager/Environment;
- Senior representatives of power station production, environment , asset management, chemical , Delta Maintenance or other groups as deemed appropriate by the Chairman or as defined in local environmental instructions; and
- Representatives of service groups, contractors, public authorities or interested groups, by invitation of the Chairman as deemed appropriate for specific issues.

Significant issues arising from the Production Environment Meeting shall be communicated to the next Executive Environment Committee meeting.

3.3.4 Executive Management Committee

The Executive Management Committee is responsible for:

- reviewing environmental compliance on a monthly basis;
- setting terms of reference for and establishing investigations into all Category 1 and significant Category 2 environmental incidents; and
- ensuring that appropriate corrective actions are taken in response to licence compliance, environmental incidents and public complaints or enquiries.

The Executive Management Committee consists of Senior Executives of Delta Electricity as designated by the Chief Executive.

3.3.5 Chief Executive

The Chief Executive is responsible for:

- establishing the overall direction of environmental management within Delta Electricity;
- ensuring appropriate levels of human, physical and financial resources are provided so that the environmental management system is adequately maintained;
- convening the Executive Environment Committee and Executive Management Committee and ensuring these committees adequately perform the roles and duties as defined in these standards; and
- communication of significant environmental issues directly to the Board.

3.3.6 General Manager Strategy

The General Manager/Strategy is responsible for:

- reviewing and approving environmental strategies, policies and plans to ensure that the corporation meets legislative and community obligations in environmental management and the objectives of the Corporate Business Plan.

3.3.7 Production Business Unit General Managers

Production Business Unit General Managers are responsible for the environmental performance of power stations and other facilities under their control that are covered by environmental approvals and licences. This includes ensuring:

- the existence of adequate operational and management procedures;
- maintenance of an adequate level of training and awareness;
- maintenance of emergency response plans, procedures, equipment and resources;
- regular performance reporting and accountability;
- ensuring appropriate levels of human, physical and financial resources are provided so that the environmental management system is adequately maintained; and
- convening the Production Environment Committee and ensuring the committee adequately performs the role and duties as defined in these standards.

3.3.8 General Manager Development

The General Manager Development is responsible for the environmental performance of staff and contractors working on Delta Electricity corporate development projects, both on and off Delta Electricity sites.

3.3.9 Production Business Unit Strategy and Development Manager

The Production Business Unit Strategy and Development Manager is responsible for development of strategies, policies, plans and procedures for effective environmental management within the Production Business Unit, to ensure all production facilities meet legal, community and organisational standards.

3.3.10 Manager Environment

The Manager Environment is responsible for:

- development of strategies, policies, plans and procedures for effective environmental management of Delta Electricity and its facilities to ensure the organisation meets legal, community and organisational standards;
- identification and preparation of the organisation for new environmental concerns and ensuring matters of environmental significance are brought before the Executive Environment Committee;
- establishing and maintaining a system of environmental management reporting and communication between all levels of the organisation;
- monitoring new legislation and communicating the substance and implications of changes in environmental legislation throughout the organisation;

- the conduct of investigations and environmental audits, ensuring audit findings are communicated to Executive and Board level, and maintenance of a review process to ensure effective action on audit findings;
- monitoring environmental compliance, incidents and public complaints at all Delta Electricity facilities, investigating and reporting to Executive Management on significant incidents and progress on corrective actions;
- attending regulatory, industry and community forums, reviewing and responding to government and industry discussion papers; and
- maintenance of documentation and procedures as defined by these standards or as directed by the Executive Environment Committee.

3.3.11 Production Environment Managers

Production Environment Managers are responsible for:

- development and implementation of strategies, policies, plans and procedures for effective environmental management within their responsibility area, to ensure all Delta Electricity facilities meet legal, community and organisational standards;
- ensuring the development, scheduling and presentation of effective training to raise the level of environmental awareness in all station staff and ensuring specific operating and emergency response skills are available in targeted groups;
- identifying emerging local environmental issues and development of initiatives to address these;
- ensuring that statutory environment requirements are complied with and necessary reports and documents are accurately prepared and submitted on time;
- representing Production Business Unit in various regular and non-routine environmental community and public authority committees, meetings and external forums; and
- assisting Manager/Environment in implementing corporate environmental responsibilities.

3.3.12 All Staff

Each person in Delta Electricity is responsible for caring for the environment by:

- compliance with Delta's Sustainability Policy and Environmental Standards;
- compliance with local instructions and procedures from persons or committees authorised by this Standard; and
- bringing issues of environmental concern or practices inconsistent with Delta Electricity's Sustainability Policy and Environmental Standards to the attention of the relevant team leader, manager or committee.

3.4 Environmental training

3.4.1 Environmental Awareness Training

All Delta employees shall receive basic environmental awareness training within three months of employment at operational sites. Such training shall:

- detail Delta's Sustainability Policy and commitments;
- highlight the importance of compliance with Objectives and Targets;
- define the employee's role and responsibilities;
- ensure that duties are performed in an efficient and competent fashion;
- include knowledge of possible impacts of incorrectly performed activities;
- include details the environmental management system;
- detail any relevant internal standards;
- highlight the risks of non-compliance;
- encourage the reporting of environmental incidents and "near-miss" events;
- encourage active participation in Delta's environmental management process; and
- include a knowledge of regulatory requirements.

3.4.2 Specialized Environmental Training

Employees performing duties that may have significant impact on the environment shall receive specialised training prior to undertaking those duties.

Employees requiring specialised training may include but is not limited to:

- employees handling CFCs, PCBs, asbestos, dangerous goods, bulk chemicals, oils, solvents, pesticides or other environmentally hazardous materials;
- operators of major plant with significant air, water or noise emissions;
- employees with defined environmental compliance and land management roles;
- team leaders of maintenance and plant operational groups;
- environmental emergency response teams.

All such employees shall receive a training needs analysis that shall include:

- identification of employee training needs, including the necessary knowledge and skills;
- development of a training plan to address the defined needs;
- relevance of the training program to specific environmental risks and requirements outlined in the Aspects and Impacts database and Register of Regulatory and Other Requirements;
- documentation of training received; and
- evaluation of training received.

If an employee does not possess the necessary knowledge and skills to perform defined duties that may have significant impact on the environment, the employee shall not perform those duties.

3.4.3 Refresher Environmental Training

All employees shall regularly receive notification of significant environmental matters via team meetings, electronic or hard copy bulletins.

In addition, all employees at operational sites shall receive refresher environmental awareness training at interval not exceeding 3 years. Such training shall include:

- revisions to Policies, Standards, Objectives and Targets;
- significant regulatory changes; and
- significant changes to the Environmental Management System.

3.4.4 Contractor Environmental Induction, Training and Supervision

Prior to employment on Delta sites, all contractors shall be made aware of the relevant environmental objectives of the site and undertake induction training. They must demonstrate the required knowledge and skills to perform the work in an environmentally responsible manner.

Business Unit General Managers shall ensure that at all times contractors are under the control of an appropriately qualified Delta employee who is responsible for ensuring the highest standard of environmental care is maintained.

Delta employees with such controlling roles shall have the authority to cause work to cease immediately if significant environmental harm has occurred or is likely to occur.

3.4.5 Training Records

Business Unit General Managers shall ensure that an adequate level of environmental training and awareness are maintained, and that accurate records of such training are kept

3.4.6 Review of Training, Awareness and Competence

The Executive Environment Committee shall review on a quarterly basis Environmental Awareness Training records including:

- total employees at each region,
- number of untrained employees,
- percentage untrained,
- number employees untrained in 3 years, and
- number employees untrained in 2 $\frac{3}{4}$ years.

An Environmental Training Matrix, Training Registers and records of Specialised Environmental Training Courses shall be maintained in Delta Electricity's corporate document management system. The Executive Environment Committee shall review these at intervals not exceeding 3 years to ensure:

- the knowledge, skills and competencies are appropriate to the activities, operations and responsibilities of the various positions throughout the organisation,
- the employees lists in training registers are current and up-to-date,
- the training material is relevant to the necessary knowledge and skills for addressing specific environmental risks and requirements, and
- training programs are initiated on completion of the review.

3.5 External Communications

3.5.1 Requests for Internal Reports or information by an external party

Where an external party requests the supply of an internal Delta Electricity environmental report or other environmental information, the report or information may be released under authority of the Manager/Environment (for corporate information) or Production Environment Managers, provided:

- the information is of no commercial value to Delta Electricity; and
- it contains no information likely to be detrimental to Delta Electricity's interests.

Where the information is of commercial value or contains sensitive information, such information may be released under the authority of the General Manager/Strategy (for corporate matters) or the relevant Business Unit General Manager.

Release of any information or report should be conditional on Delta Electricity retaining copyright ownership and the right to restrict the use of the material in other publications without prior written permission.

3.5.2 Comments on Legislative Proposals or other Government Environmental Initiatives

All submissions to Government Departments, Commissions of Inquiry or similar bodies on significant environmental initiatives shall be prepared by the General Manager/Strategy in consultation with relevant General Managers and issued by or under the authority of the Chief Executive.

3.5.3 Development Approvals

The relevant Business Unit General Manager is responsible for obtaining appropriate development consent or other regulatory approval for developments taking place on an operational site and associated with existing plant operations.

Delta Electricity may be the determining authority under Part 5 of the EP&A Act for some developments. To determine if Delta Electricity has rights and responsibilities under this part of the Act, reference should be made to the "*Guide to Delta Electricity Environmental Impact Assessment Process*"

located in the Sustainability Procedures and Work Instructions area on DeltaWeb. Only the Chief Executive may approve such developments.

The General Manager/Delta Maintenance is responsible for obtaining development consent and other regulatory approvals for activities on de-commissioned sites associated with de-commissioning or demolition.

The General Manager/Development is responsible for obtaining development consent and other regulatory approvals for activities on any site associated with major new plant construction and commissioning. When such plant is fully operational, ongoing regulatory approvals are the responsibility of the relevant Business Unit General Manager.

3.5.4 Reports to External Bodies on Environmental Performance.

Reports on environmental performance of operational or other sites required as a condition of a licence or other regulatory approval condition and any other business unit environmental performance reports shall be prepared by the relevant Environment Manager and issued by or under authority of the relevant Business Unit General Manager.

Reports on environmental performance of Delta Electricity shall be prepared by the Manager/Environment and issued by or under the authority of the Chief Executive. Such reports shall include:

- greenhouse emission performance;
- environmental performance with respect to codes of environmental practice;
- summary of environmental performance for use in Corporate Annual Reports; and
- any other environmental reports of a corporate nature.

Significant environmental aspects are not routinely reported externally. Some selected aspects are reported in the Annual Report or Annual Sustainability Report at the discretion of the Chief Executive.

3.5.5 Response to Public Complaints and Inquiries

Environmental officers at operational sites are responsible for investigating and responding promptly and courteously to all public complaints and inquiries.

The Production Environment Managers at operational sites are responsible for keeping a legible record of all complaints or inquiries received in relation to pollution from or on the premises, or in relation to other operational matters.

The record must include details of the following:

- the date and time of the complaint;
- the method by which the complaint was lodged;

- any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- the nature of the complaint; and
- the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant.

The record of each complaint must be kept for at least 4 years after the complaint was received and must be produced to any regulatory officer with appropriate legal status who asks to see them.

Production Environment Managers shall prepare a monthly summary report of all complaints and inquiries for inclusion in the monthly Business Unit Performance Review. The Manager/ Environment shall provide corporate summary reports of public complaints and inquiries to the Board Environment Committee on a quarterly basis.

3.5.6 Routine communication with environmental regulatory authorities

The Business Unit General Manager responsible for the operational area should act as or appoint a delegate, normally the relevant Production Environment Manager, to act as spokesperson for the corporation, and where possible all communication with environmental regulatory authorities should be through that spokesman. Where the General Manager and their designated delegate are not available, the senior officer in charge of operations shall act as spokesperson. All communication with environmental regulatory authorities should be documented.

3.5.7 Site Visits by environmental regulatory authority staff

Business Unit General Managers and Production Environment Managers should ensure that environmental regulatory authority officers visiting sites are accompanied by suitably qualified Delta Electricity staff at all times. Suggestions and comments on operational and other matters made by the regulatory authority officer should be noted and forwarded to the Production Environment Manager. Any agreed actions shall be documented and subsequently confirmed in writing with the regulatory authority and included in reports to the next Production Environment Committee meeting.

3.5.8 Communication with regulatory authorities involving possible prosecution

In the event of an environmental incident that might give rise to a prosecution, advice should be sought as soon as practical from Delta Electricity's legal advisers through Delta's Legal and Compliance Manager. Most environmental regulatory authorities have the legal right to request information and documents. In the case where Delta Electricity is being investigated, directors, managers and employees (officers) must answer questions, even though such answers may incriminate them or the

organisation. Where an officer is to be interviewed they should seek legal guidance on their rights and obligations before such an interview.

All written or electronic mail communication with the regulatory authority, regardless of whether such communication results from a licence requirement or from informal requests for information (such as electronic mail or telephone calls), should be regarded as a request for evidence involving possible prosecution.

3.5.9 Response to Media

All responses to the media on environmental incidents should be in accordance with the Delta Electricity's Media Policy (DEP BM 012). In essence, the Chief Executive is the spokesperson for Delta Electricity on all matters unless a person is a nominated representative for public or media comment on a specific issue.

Any staff not authorised to speak to the media should take down the nature of a media inquiry without making a comment, and refer the inquiry to the relevant General Manager who will then consult with the Corporate Relations Manager. An appropriate line of response will then be agreed before any comments are made or information is given to the media.

Business Unit General Managers may speak to local media on non-contentious community and operational issues.

3.5.10 Consultation Meetings with regulatory authorities

The General Manager Strategy and Manager Environment shall meet with senior officers of the regulatory authorities as required to discuss matters of mutual interest. Production Environment Managers shall meet with local regulatory authorities as required to discuss matters of mutual interest.

Matters of interest arising from these meetings shall be documented and communicated to Executive Management either directly or included in matters discussed at Production and Executive Environment meetings.

3.5.11 Community Liaison

Business Unit General Managers are responsible for community liaison activities. Representatives from local community groups should be consulted on a regular basis and issues raised should be promptly and courteously addressed.

3.5.12 Presentations to the Public

Delta staff must ensure that prior to their finalisation and delivery, all speeches, presentations and other material for public release that could be construed to represent the views of Delta Electricity, is approved by the

responsible team leader and Business Unit Manager; and subsequently approved by the Chief Executive.

3.5.13 Mandatory Incident Reporting

The following are required under the *Protection of the Environment Operations Act*:

- A person carrying out an activity must, as soon as practicable after they become aware of a significant environmental incident causing or threatening material harm, notify the appropriate regulatory authority of the incident and all relevant information about it.
- An employee in carrying on an activity must (as soon as practicable) after the person becomes aware of the incident, notify their employer of the incident and all relevant information about it.
- If the employer cannot be contacted, the person is required to notify the appropriate regulatory authority.

The relevant information about a pollution incident consists of the following:

- the time, date, nature, duration and location of the incident;
- the location of the place where pollution is occurring or is likely to occur;
- the nature, the estimated quantity or volume and the concentration of any pollutants involved;
- the circumstances in which the incident occurred (including the cause of the incident, if known); and
- the action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution.

Harm to the environment is material if:

- it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
- it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, 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.

It does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.

3.6 Internal Communications

3.6.1 Reporting actual and potential environmental incidents

For internal reporting, incidents are categorised into four categories with appropriate investigation and reporting procedures, as shown in Table 3.1.

The primary repository for information relating to all environmental incidents is Delta's Work Management System (WMS), under the Standard Job code "ENVINC". Production Environment Managers are responsible for ensuring this information is as accurate and complete as possible and that the incident is correctly categorised. The summary information extracted from WMS is reported at Production, Executive and Board level.

Each recommendation arising from investigation of environmental incidents shall be entered as a separate Work Order task under the original WMS Work Order.

Production Environment Managers are to ensure that for every environmental incident entered into WMS, one of the Work Order tasks includes a review the EMS Aspects and Impacts and KnowRisk registers. This is to ensure that the aspect and impacts have been correctly identified and that corrective and preventive controls have been appropriately amended. This Task should be the final step before closing out the WMS Work Order.

Unless extenuating circumstances apply and only with approval of the Executive Environment Committee, recommendations arising from investigation of Serious (Category 1) Incidents should be addressed within 3 months of receipt of the recommendations; those from Significant (Category 2) Incidents within 6 months; and those from Minor and Potential incidents within 12 months

In some instances Plant Incident Reports (PIR), Plant Outage Reports (POR) or other plant incident investigation procedure may be used to highlight or maintain focus on a particularly significant incident. Such reports are not the primary means of recording environmental incidents. Where they are used, an appropriate link or reference to the report must be included in the WMS incident report Work Order.

TABLE 3.1 ENVIRONMENTAL INCIDENT INVESTIGATION & REPORTING

| Category 1 Serious Incident |
|--|
| <ul style="list-style-type: none">▪ A breach of EPA licence condition including operational, monitoring limit, reporting or other compliance condition where clear documentary or other physical evidence of the breach exists. (Evidence could include: samples, photographs, internal or external reports, graphs, test results, statement by witnesses and EPA inspection reports);▪ A breach of any other environmental regulation where physical evidence exists (POEO, Bushfire Act, etc);▪ An incident requiring mandatory reporting to the EPA such as spills or emissions where there is physical evidence of actual or potential harm to the health or safety of human beings or to eco systems that is not trivial; OR▪ A pollution incident related to Delta operations, either on or off Delta property, where actual or potential loss or property damage exceeds \$10,000 (including costs to prevent, mitigate or make good harm to the environment). |

- Any other major environmental incident

An incident is considered to be major if it involves one or more of the following:

- It is beyond the control of available station personnel or extends outside the immediate station area. It will probably require the Emergency Response Plan to be invoked.
- It requires the involvement of outside agencies and resources to control and clean up.
- It has the potential to result in adverse publicity, prosecution and a substantial (Tier 1 or Tier 2) fine.

Immediate Action:

Where necessary, emergency response procedures should be invoked to contain, mitigate or make good any harm to the environment.

When a licence breach is known or suspected it should be reported immediately to the Production Environment Manager.

If satisfied that the incident is a Category 1 Incident, the Production Environment Manager or their delegate shall immediately notify the Business Unit General Manager and any other relevant site staff. The regulatory authority shall also be notified where this is required under the licence or other statutory condition (Section 3.5.13 Mandatory Incident Reporting).

The Business Unit General Manager shall communicate details of major incidents to the Chief Executive, GM Strategy, Corporate Relations Manager, Legal and Compliance Manager, and Manager Environment as soon as practicable.

Follow-up Action:

All Category 1 incidents shall be formally investigated in accordance with Clause 3.6.2.

Subject to the preservation of Delta's rights to claim legal professional privilege, and following discussion with Delta's Legal and Compliance Manager on this subject, a summary report on the incident, subsequent investigations and remedial actions shall be communicated to the Business Unit General Manager, and the Manager Environment as soon as practicable.

Production Environment Managers shall enter details of the incident into the Work Management System (WMS) under the ENVINC Standard Job. Details should include the mandatory data required in Section 3.5.13 and any subsequent corrective and preventative actions resulting from investigations of the incident.

The Manager/Environment shall review the incident report and include a summary in a monthly written report to the Executive Management Committee and quarterly written report to the Board Environment Committee. The report shall indicate whether the incident is critical, substantive or a technical breach only.

Category 2 Significant Incident:

- A potential, possible or suspected breach of licence condition or other regulation where there is no available physical evidence of a breach. (eg significant and prolonged noise, short term stack dust emission, dust emissions from ash dams, coal stacks and roads, short term odour, spill to waters that has not caused measurable detrimental effects); or
- A non-trivial discharge that flows to but is contained within a final a holding pond, retention basin or other facility designed as a last line of defence against spills or discharges to the external environment.

Such an incident could be a result of failure or overload of upstream protection equipment. If costs of clean up exceed \$10,000, the incident becomes a reportable Category 1 Incident.

Immediate Action:

Where necessary, emergency response procedures should be invoked to contain, mitigate or make good any harm to the environment.

When a breach of regulation is suspected it should be reported immediately to the Production Environment Manager. If satisfied that the incident is a Category 2 Incident, the Production Environment Manager or their delegate shall notify the Business Unit General Manager, Corporate Manager Environment and any other relevant site staff as soon as practicable.

Where there is any doubt as to whether the incident is a Category 1 or Category 2 incident, the matter shall be referred to the GM Strategy for determination. If considered sufficiently serious, the GM Strategy may seek Executive approval for a formal investigation committee as defined in 6.3.2.

Follow-up Action:

If satisfied that the incident is a Category 2 Incident, the Production Environment Manager or their delegate and a representative from the relevant production group shall conduct an investigation into the root cause of the incident and instigate action to prevent recurrence.

A summary report on the incident, subsequent investigations and remedial actions shall be prepared by the Production Environment Manager and communicated to the Business Unit General Manager and the Manager Environment as soon as practicable.

Production Environment Managers shall enter details of the incident into the Work Management System (WMS) under the ENVINC Standard Job. Details should include the mandatory data required in Section 3.5.13 and any subsequent corrective and preventative actions resulting from investigations of the incident.

The Manager/Environment shall review incident reports and include a summary in a monthly written report to the Executive Management Committee and quarterly written report to the Board Environment Committee. The report shall indicate whether the incident is critical, substantive or a technical issue only.

Category 3 Minor Incidents

Trivial discharges to the environment or other on-site incidents contained locally and not included in any of the above categories.

Follow-up Action:

If satisfied that the incident is a Category 3 Incident, the Production Environment Manager or their delegate shall conduct an investigation into the root cause of the incident and instigate action to prevent recurrence.

Production Environment Managers shall enter details of the incident into the Work Management System (WMS) under the ENVINC Standard Job. Details should include the mandatory data required in Section 3.5.13 and any subsequent corrective and preventative actions resulting from investigations of the incident.

Summary reports of such incidents shall be tabled at Production Environment Committee meetings.

Category 4 Potential Incidents

A potential incident is a “near miss” or un-planned event that did not result in Category 1, 2 or 3 environmental incidents but had the potential to do so. Only a fortunate break in the chain of events prevented the incident from occurring. Commonly results from human error but can be the result of a faulty process or system that permits or compounds the potential harm.

Follow-up Action:

If satisfied that the incident is a Category 4 Incident, the Production Environment Manager or their delegate shall conduct an investigation into the root cause of the incident and instigate action to prevent recurrence.

Production Environment Managers shall enter details of the incident into the Work Management System (WMS) under the ENVINC Standard Job. Details should include the mandatory data required in Section 3.5.13 and any subsequent corrective and preventative actions resulting from investigations of the incident.

Summary reports of such incidents shall be tabled at Production Environment Committee meetings.

3.6.2 Category 1 incident investigation

All Category 1 incidents shall be investigated by a Committee of Inquiry established by the Chief Executive. Prior to establishing this Committee, legal advice should be sought regarding appropriate Terms of Reference and conduct of the inquiry.

The Committee of Inquiry shall include:

- A representative from the Corporate Strategy business unit nominated by the GM Strategy;

- a representative nominated by the Executive from another non-production business unit and possessing skills that could contribute to the investigation ;
- a representative with appropriate skills from the Production business unit nominated by GM Production. This person shall not be directly involved in the incident work area and would preferably be from a different geographic region; and
- Any other internal or external party as determined by the Chief Executive

The Terms of Reference and Committee Convenor shall be determined by the Chief Executive prior to formation of the investigation committee.

Unless withheld for legal reasons, the Terms of Reference shall be communicated to personnel who are required to contribute to the inquiry.

The investigation should use the Environmental Incident Investigation Procedure outlined in Appendix 1 of this Standard, or other approved Incident Investigation Procedure as directed by the Chief Executive.

The Chief Executive shall review the final investigation report to ensure that the findings and recommendations fully address the Terms of Reference. When approved by the Chief Executive, the GM Production shall ensure that the recommendations are translated into an action plan in a manner similar to audit findings, as detailed in Section 3.8.

3.6.3 Communicating environmental values, Policy and commitments

The Chief Executive shall ensure that the environmental values, Sustainability Policy and commitments are communicated and understood throughout the organisation.

Delta Electricity's Sustainability Policy and commitments shall be reviewed and re-issued under the Chief Executive's signature to team leaders at intervals not exceeding three years or whenever amended. A copy of the current Policy and Environmental Standards shall be available on a secure web server for access by staff. A copy of the current Sustainability Policy shall be available for public review on the Delta web page.

3.6.4 Responding to employees environmental concerns

Employees of Delta Electricity should be encouraged to report any environmental concerns regarding the operation of plant or equipment, potential or actual environmental incidents, their environmental roles and responsibilities or the environmental management systems.

General Managers and Production Environment Managers shall institute procedures to ensure that such concerns are addressed by the appropriate

committee or environmental staff, and that the follow up action is communicated to the concerned staff member.

Where appropriate, suggestions for improvements and subsequent actions should be documented in minutes of the station or Production Environment Committee meetings.

3.6.5 Reviewing environmental performance

Environmental performance shall be reviewed at Production environmental meetings. Delegates attending these meetings are responsible for communicating relevant matters from the meeting to their team. Matters to be reviewed shall include:

- the status of environmental plans and audit actions;
- legislation updates;
- licence compliance and changes;
- environmental incidents, public pollution complaints and issues;
- significant environmental investigations and reports;
- Executive Environment committee action items;
- environmental training and emergency response exercises; and
- status of environmental management system

A summary "Environmental Non-conformance and Corrective and Preventative Action Report" shall be extracted from the WMS and reviewed at each Production Environment meeting. This review should include the status of overdue tasks and reasons for delays, and and setting planned finish dates where required.

Production Environment Managers shall ensure that significant environmental performance issues are also reviewed at weekly team leader and monthly Business Performance Reviews.

A summary report on Licence compliance, significant environmental incidents and public concerns shall be reviewed monthly at business performance reviews and a quarterly summary provided to the Board Environment Committee. The summary shall include details of the incident classified as per Table 3.1, plus corrective actions taken.

3.6.6 Changes to EPA Licences and Legislation

Production Environment Managers are responsible for monitoring and communicating to other staff any changes to EPA Licence conditions or significant environmental legislation.

A summary of such changes and relevant court cases shall be distributed at Production and Executive Environment Committee meetings. Copies of this summary shall be distributed to other staff.

3.6.7 Annual Environmental Report

The Manager Environment is responsible for the collation of information required for annual environmental reports.

3.6.8 Corporate Environmental Documents

The Manager/Environment is responsible for ensuring that Delta Electricity's Sustainability Policy, corporate Environment Standards and other corporate environmental documentation is reviewed at regular intervals and appropriate modifications approved by the Executive Environment Committee.

The Manager Environment shall maintain and review the Register of Environmental Regulations at least every two years. The register shall be maintained as a controlled document in electronic form on DeltaWeb.

The Manager Environment shall maintain quarterly Executive Environment Committee meetings minutes in the Corporate section of Delta Electricity's document control system

3.7 Emergency Preparedness and Response

Business Unit General Managers are responsible for ensuring that appropriate Emergency Response Plans are prepared and emergency response exercises are conducted at least yearly at each power station site. Where possible these should also be incorporated into site general emergency response exercises. Full documentation should be maintained of the exercise, lessons learnt and steps taken to improve future response.

The number of emergency response exercises held at each power station shall be reported to the Executive Environment Committee on a quarterly basis.

3.8 Environmental Performance Monitoring

Production Environment Managers shall establish and maintain a procedure for monitoring all public complaints, environmental incidents and Licence Compliance and shall report these on a monthly basis to the Business Performance meeting. The Manager/Environment shall ensure that a summary report of these is provided to the Board Environment Committee on a quarterly basis.

The Manager/Environment shall arrange for appropriately qualified external auditors to review compliance with EPA Licence conditions, other statutory requirements, industry standards and Codes of Practice at intervals as specified in the following table. Such audits shall include a review of response to previous compliance audit findings.

| Audit type | Audit frequency | Auditors |
|------------------------|--|------------------------------------|
| Facilities and Process | Every 4-6 years plus internal self-audits as per local Standards | External environmental consultants |
| Environmental | Every 2-3 years | External environmental |

| | | |
|-------------------------|---|------------------------------------|
| Management Systems | | consultants |
| Compliance | Every 2-3 years | External environmental consultants |
| ISO 14000 Surveillance | As required by ISO Standard | External environmental consultants |
| ISO 14000 Certification | Every 3 years or as otherwise defined by ISO Standard | External environmental consultants |

Auditors should have qualifications and experience relevant to the type of audit and where applicable should be certified to the relevant standard set by the Quality Society of Australia or equivalent body.

Compliance audits shall include compliance with EPA Licence conditions, other statutory requirements, industry standards and Codes of Practice and a review of response to previous compliance audit findings.

Environmental audit reports shall be located in Delta Electricity's document management system and be available for perusal by relevant managers and team leaders when required.

All audits shall include findings and recommendations, classified into the following categories:

- High - may cause significant environmental harm or nuisance if not rectified;
- Medium - significant departure from best environmental practices or significant off site environmental effects, and
- Low - minor departure from best environmental practices or minimal off site environmental effects.

Following receipt of a final audit report, Production Environment Managers shall prepare an Audit Action Plan for approval at the next Production Environment Committee meeting and for endorsement by the subsequent Executive Environment Committee meeting. Unless extenuating circumstances apply and only with approval of the Executive Environment Committee, recommendations classified "High" should be addressed within 3 months of receipt of the audit report, those classified "Medium" within 6 months and those classified "Low" within 12 months.

Audit Action Plans shall include:

- the recommendation and a reference to the relevant audit report
- actions proposed to address the recommendation;
- name or position of person responsible for that implementing the action;
- the estimated action completion date;
- progress comments for review by the Production and Executive Environment Committee

- an auditable document and action reference or other words to ensure that when an action is indicated as complete, an auditor can easily track the documents or drawings amended

The Manager Environment shall prepare a quarterly summary progress report of Audit Recommendations for review by the Executive Environment Committee and subsequent Board Environment Committee meeting.

3.9 Sustainability Policy review

The Executive Environment Committee will review the Sustainability Policy annually and provide input on the adequacy of the policy with respect to:

- the nature and type of activities that cause impacts on the environment at the time of the review
- the commitment to continual improvement of environmental performance and prevention of pollution
- the commitment to comply with relevant environmental legislation and regulations
- the framework for setting and reviewing environmental objectives and targets

Any changes to the Policy shall be submitted to the Board Environment Committee for approval.

APPENDIX 1 – Environmental Incident Investigation Procedure

1. Define the scope of the investigation.

For Category 1 Incidents this will come directly from the Terms of Reference (TORs) as determined by the Chief Executive. Investigating committees should confine the investigation and recommendations strictly to the TORs. If the investigation team believes that the TORs are unclear or too narrowly defined, this should be referred back to the Chief Executive for clarification.

For all other incident categories, the TOR will be set by senior station management or the Production Environment Manager. Generally these would include establishing:

- the background to the incident including where & when it occurred, who & what was involved, and the operating personnel & witnesses to the incident;
- an account of the incident including the sequence of events, the type of incident (eg spill, odour, noise emission etc), duration and extent of impact, energy source driving incident (eg gravity, wind rain etc);
- a discussion of how and why the incident happened including :
 - Direct causes -plant or equipment failure
 - Indirect causes – departure from proper procedures, improper operation or maintenance of plant
 - Basic causes - no procedure, procedure used in the wrong environment, operation in wrong environmental conditions, untrained or poorly trained personnel
- recommendations to prevent recurrence.

2. Select the investigation team.

For Category 1 incidents the Chief Executive will appoint the committee as per 3.6.2 of this Standard.

For all other categories of incident, the investigation team should include the Production Environment Manager (or delegate) and a representative from the plant area where the incident occurred.

3. Collect basic incident information and documentation

- Description of the incident and estimates of damage
- Normal operating procedures
- Detailed location of incident including maps and photographs of the site

- List of witnesses
- Sequence of events leading up to the incident

4. Conduct and inspection of the incident site.

Update photographs, maps sketches from different perspectives. Keep accurate records of these. Take measurements if safe to do so.

5. Interview all witnesses including those present before and after the incident and keep accurate records of these.

- Interview witnesses as soon as possible after the incident. Appoint a speaker for the interview who should explain the purpose of the interview and the terms of reference if legal advice permits.
- Establish the role, qualifications and experience of each witness with respect to the area of operation where the incident occurred.
- Listen, let witnesses speak freely and be courteous and considerate. Do not argue with the witness or try to persuade them to change their opinions.
- Take notes but do not distract witnesses by doing so. Don't use tape recording unless the witness has given permission to do so.

Use photos, sketches and maps to assist the witness. If relevant, locate witness positions and viewing direction on map or chart and note times.

Record accurately what is said. Note what is a direct observation and what is hearsay or opinion.

- Ask witnesses to prepare a written statement, signed and dated if the witness agrees.

After all witnesses have been interviewed, assemble these in logical sequence and analyse these along with data from the incident site. If necessary, re-interview witnesses to clarify key points.

6. Determine what was abnormal before the incident, when it became abnormal, when this was first noticed and how it became abnormal.

- What happened and what should have happened
- What, where, when and what extent this represents a change from the norm
- What was and was not impacted by the change
- What were the possible causes of the change

7. Make a preliminary determination of :
 - Why the incident occurred (See “Elements of Root Cause Analysis” below)
 - A likely sequence of events and probable cause(s)
 - Alternative sequences of events.
8. Check each possible sequence of events against the data. It may be necessary to repeat some of steps 1 – 6 to complete this assessment.
9. Determine the most probable sequence and the most probable cause(s).
10. Prepare a summary report including recommendations to prevent recurrence. The report should follow the terms of reference sequence listed in step 1:
 - Background
 - a. Where and when the incident occurred
 - b. Who and what were involved
 - c. Operating personnel and other witnesses
 - Account of the Incident
 - a. Sequence of events
 - b. Type and extent of impact
 - Analysis of Incident
 - a. Direct causes (Plant and equipment failures)
 - b. Indirect causes (Failure to use correct procedures)
 - c. Basic causes (Inadequate or non-existent procedures or equipment)
 - Recommendations to prevent recurrence
 - a. Address direct, indirect and basic causes from analysis

Check that the report has addressed all the inquiry terms of reference and have all investigating committee sign off report.

Elements of Root Cause Analysis

- Materials
 - Defective raw materials
 - Wrong type for job
 - Lack of raw materials
- Equipment
 - Incorrect equipment selection
 - Poor maintenance or design
 - Poor equipment placement
 - Defective equipment
- Environment
 - Design or layout of work

- Physical demands of task
- Forces of nature

- Man
 - No or poor management involvement
 - Inattention to task
 - Risks ignored
 - Other (horseplay, controls bypassed)
 - Task overload

- Methods
 - No or poor procedures
 - Practices are not the same as written procedures
 - Poor communication

- Management System
 - Training or education lacking
 - Poor assessment of risk
 - Risk previously identified but not eliminated
 - Inadequate preventative or corrective controls