

**CITY OF DARWIN CRUISES**  
**Environmental Management**  
**System**

## 1. Introduction

Environmental Management Systems (EMS) are designed to enable organisations to address both environmental concerns and economic imperatives by creating a system of processes and procedures that examine their performance against their environmental goals. The International Standard emphasises continual improvement in the performance of the system and, through this, improvements in the organisation's environmental performance are expected to result. Further, since a systematised approach to environmental performance fosters a more efficient use of resources by the organisation, the prospect of benefits to the organisation's bottom line should be a powerful incentive for implementing an EMS.

City of Darwin Cruises – (CODC) believes that sound environmental management is an important component of the organisation's overall management responsibility. CODC seeks to demonstrate its environmental performance through the implementation of an Environmental Management System (EMS) which addresses all of CODC's operations. The cornerstones of the EMS are:

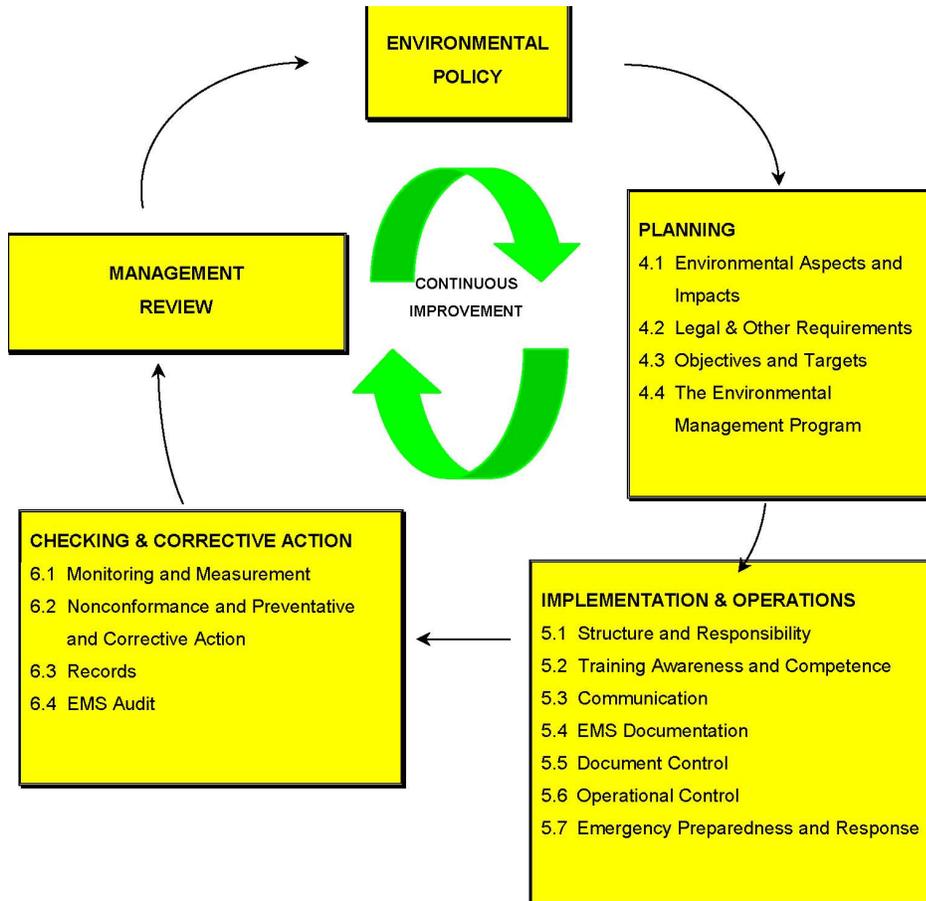
- Development of an Environmental Policy;
- Development and implementation of Environmental Objectives and Targets;
- The ongoing monitoring and reviewing of environmental performance; and
- Continuous improvement of the EMS to further enhance CODC's environmental performance.

CODC has developed an Environmental Management System (EMS) and has established an EMS Management Team as part of its commitment to minimise the environmental impacts of its operations using the EMS. The EMS Management Team comprises administrative officers from each area and an Environmental Management System (EMS) Coordinator. A commitment from senior management has been required in order to establish the CODC EMS. Senior management of CODC have happily accepted this role.

The CODC EMS is based on the international standard ISO 14001:1996 Environmental management systems - specifications with guidance for use. Reference was also made to ISO 14004:1996 Environmental management systems General guidelines on principles, systems and supporting techniques. These Standards should also be used for ongoing development of the EMS.

The Environmental Policy, Procedures Manual and the Procedures Registers are the key EMS documents. They are found within the CODC EMS file.

# 1. Overview of EMS



## 2. The Functional Units of EMS Explained

EMS Principle	Unit of Principle	Description
Planning	Environmental Aspects	An element of an organisation's activities, products or services that can interact with the environment.
	Legal and Other Requirements	Identification of the most pertinent legislation and other requirements.
	Objectives and Targets	Outlines objectives and targets relating to the most significant environmental impacts identified.
	The Environmental Management Programme	Assigns responsibility for meeting the environmental targets, specifies a framework for their achievement, and provides a timescale specifying completion dates.
Implementation and Operation	Structure and Responsibility	Sets out CODC's structure and staff responsibilities for implementation of the EMS.
	Training, Awareness and Competence	Establishment and implementation of a training and awareness programme.
	Communication	Communication of results from EMS monitoring, audits and management reviews to all relevant personnel who are responsible for environmental performance.
	Environmental Management System Documentation	List of EMS documentation.
	Document Control	Procedures to control all EMS documentation such as the Procedures Manual and Registers.
	Operational Control	Minimises adverse environmental impacts through the development and maintenance of documented standard operating procedures to ensure that the objectives and targets are achieved.
	Emergency Preparedness and Response	Procedures and action plans in case of emergency situations and to reduce the environmental impact of emergencies.
	Checking and Corrective Action	Monitoring and Measurement Nonconformance and Corrective and Preventive Action Records Environmental Management System Audit
Management Review		Review of the EMS at least once a year.

### **3. Planning**

#### **3.1. Environmental Aspects and Impacts**

##### **Requirements of the Standards**

AS/NZS 140001 requires an organisation to 'establish and maintain a procedure(s) to identify the environmental impacts of its activities, products or services that it can control and over which it can be expected to have an influence, in order to determine those which have or can have significant impacts on the environment' (AS/NZS ISO 14001:1996, 4.3.1).

To meet the requirements of the Standards, CODC has identified those environmental aspects of its activities, products and services that it can influence. The identified environmental impacts of each identified aspect are outlined in the Register of Environmental Aspects and Impacts (DIN).

A risk assessment model is used to rank the identified impacts in terms of significance. The models assessment criteria are based on a consideration of business and environmental factors. The model assesses the environmental impacts according to the:

- probability of occurrence; and,
- Severity of impact.

This risk assessment allows CODC to prioritise the relative risks of its current activities and determine the significance of each environmental impact for each of the environmental aspects identified.

Procedures have been established to identify and evaluate the environmental aspects and impacts of CODC's operations. These are listed in the Procedures Manual - Environmental Aspects Procedure (DIN). Reassessment of the environmental aspects and impacts is required by the CODC EMS Coordinator annually or when there are changes to the Business's operations to ensure the information is kept current.

#### **3.2. Legal and Other Requirements**

##### **Requirements of the Standards**

ISO 14001 requires an organisation to 'establish and maintain a procedure to identify and have access to legal and other requirements...that are applicable to the environmental aspects of its activities, products or services' (AS/NZS ISO 14001:1996, 4.3.2).

CODC understands the importance of meeting, and where practicable, exceeding, its regulatory obligations. CODC has met the above requirements by developing a Legislation and Other Requirements Register (DIN) in accordance with a Legislative

and Other Requirements Register Procedure (DIN). This Procedure, detailing the mechanisms by which the Register has been established, can be reviewed and updated as required.

As a key component of the EMS the Legislation and Other Requirements Register (DIN) provides a summary of applicable Commonwealth and State Laws, Codes of Practice, Commonwealth Government Policies, Initiatives, Licensing and Permits. Important Commonwealth Policy initiatives include the Greenhouse Challenge and the Packaging Covenant.

### **3.3. Objectives and Targets**

#### **Requirements of the Standard**

ISO 14001 requires an organisation to 'establish and maintain documented environmental objectives and targets, at each relevant function and level within the organisation' (AS/NZS ISO 14001: 1996 4.3.3).

In accordance with the Standard CODC has established objectives and targets (refer to the Register of Objectives and Targets -(DIN)) by considering legal and other requirements, environmental goals arising from its environmental policy and by identifying significant environmental impacts. As required by the Standard, technological options, views of interested parties and financial, operational and business requirements were also considered.

The CODC Environmental Objectives and Targets relate to the following aspects, determined to have significant environmental impacts:

***List the aspects identified as having highly significant environmental impacts.***

***Refer to the Register of Environmental Aspects and Impacts (DIN). For example***

- ***Consumption of goods;***
- ***Consumption of energy; and,***
- ***Generation of waste.***

The EMS Coordinator shall coordinate an annual review of the objectives and targets. A review is also required to assess the impacts of changes to CODC's operations, the results of management reviews as well as environmental audit findings and recommendations. The revision of objectives and targets shall form the basis for continual improvement in CODC's environmental performance.

Procedures relating to the establishment, progress and review of objectives and targets can be found in the Procedures Manual - Environmental Objectives and Targets Procedure (DIN).

### **3.4. The Environmental Management Programme**

#### **Requirements of the Standard**

ISO 14001 requires that an organisation establish and maintain (an) Environmental Management Programme(s) for achieving its objectives and targets. The programme shall include:

1. designation of responsibility for achieving objectives and targets at each relevant function and level of organisation; and,
2. the means and time-frame by which they are to be achieved.

Where a project relates to new developments and new or modified activities, products or services, 'programmes shall be amended where relevant to ensure that environmental management applies to such projects' (AS/NZS ISO 14001:1996 4.3.4).

To meet these requirements, CODC has developed an Environmental Management Programme (DIN) to address those aspects assessed as having environmental impacts of high significance. The Environmental Management Programme Procedure (DIN) assigns tasks and responsibility for meeting environmental targets and specifies a framework for their achievement.

The Environmental Management Programme will be revised by the EMS Coordinator annually and upon significant changes to CODC's portfolio and operations.

#### **4. Implementation and Operation**

Effective implementation and operation of the CODC EMS requires the business to develop capabilities and support mechanisms necessary to achieve the EMS objectives and targets. CODC shall achieve this through the development of the following EMS areas:

- Structure and responsibility;
- Training, awareness and competence;
- Communication;
- EMS documentation;
- Document control;
- Operational control; and
- Emergency response and preparedness.

## **4.1. Structure and Responsibility**

### **Requirements of the Standard**

ISO 14001 requires roles, responsibilities and authorities to be defined, documented and communicated in order to facilitate effective environmental management. Senior management shall provide human, technological and financial resources and appoint a management representative(s) who shall:

- 1 ensure the environmental management system requirements are established, implemented and maintained in accordance with the International Standard;
- 2 report on the performance of the environmental management system to top management for review and as a basis for improvement. (AS/NZS ISO 14001:1996, 4.4.1)

To meet the requirements of the standard, the CODC has appointed an EMS Coordinator to coordinate the development and implementation of the environmental management system and the nomination of an EMS officer. These appointed personnel represent the EMS Management Team who work together to implement and maintain the EMS.

The EMS Coordinator has the authority to ensure compliance, identify and implement solutions, and act upon incidents. The EMS Coordinator is also responsible for assisting and informing personnel and contractors of their roles and responsibilities with respect to the CODC EMS, and shall coordinate audits and management reviews.

The following organisational chart outlines the key responsibilities attributed to CODC personnel involved in the development and implementation of the Environmental Management System. More extensive role and responsibility descriptions can be found in the Procedures Manual. The following is a suggestion only. Agencies may approach the structure based on specific requirements but the intent of the standard must be met.

## 4.2. Training, Awareness and Competence

### Requirements of the Standard

ISO 14001 requires that an organisation establish and maintain a programme to identify and address environmental training and awareness for all its stakeholders. CODC's stakeholders include employees, contractors, suppliers and customers. It requires that personnel whose work may create a significant impact on the environment receive appropriate training (AS/NZS ISO 14001:1996, 4.4.2).

In accordance with the International Standard, an Environmental Training, Awareness and Competence Procedure (DIN) has been developed to ensure that:

- The importance of compliance with the environmental policy, EMS procedures and requirements is communicated to stakeholders;
- Stakeholders are aware of the significant environmental impacts (actual and potential) of their work activities and of the environmental benefits of improved personal performance; Stakeholders are aware of their individual roles and responsibilities in conforming with legal, environmental policy and emergency preparedness and response requirements, and aware of the potential consequences of departure from specified operating procedures; and Stakeholders are adequately trained to successfully perform their designated roles and responsibilities.
- CODC's most significant environmental impacts relate to administrative activities. The EMS Model has been written for office-based operations. Alter the above sentence to reflect the activities of your Agency having the most significant environmental impacts.

An Environmental Training and Awareness Programme and Register (DIN) has been developed to equip stakeholders with a level of knowledge required to minimise adverse environmental impacts related to the Agency's administrative activities, (***again alter as required***) and to gain support for the CODC EMS. Documentation for the Environmental Training and Awareness Programme and Register shall be maintained by the EMS Coordinator. This information shall be recorded in accordance with the Environmental Records Procedure (DIN).

## 4.3. Communication

### Requirements of the Standard

ISO 14001 requires that an organisation establish and maintain procedures for internal communication between various levels and functions of the organisation regarding its environmental aspects, environmental management system.

The Standard also requires an organisation to consider processes for external communication on its significant environmental aspects, together with a mechanism to record these communications (AS/NZS ISO 14001:1996, 4.4.3).

CODC recognises that communicating its environmental objectives, targets and performance to all stakeholders is an essential component of the EMS. It provides for a greater understanding of CODC's environmental impacts and an acceptance of the organisation's effort to improve its environmental performance. CODC encourages the use of electronic communication to reaffirm its commitment to the protection of the environment through avoiding excess use of paper. Through effective internal communication, particularly results of EMS monitoring, audits and management reviews, employees will be well informed and thereby generate greater ownership of the environmental process. This will result in a higher level of motivation to the continuing environmental improvement of CODC.

In accordance with the requirements of the standard CODC has established an Environmental Communications Procedure (DIN). The EMS Coordinator is responsible for documenting and maintaining all communication records.

CODC shall encourage two-way communications and information for both internal and external stakeholders.

#### **4.4. Environmental Management System Documentation**

##### **Requirements of the Standard**

ISO 14001 requires that an organisation shall establish and maintain information, in paper or electronic form, to:

- describe the core elements of the EMS and their interaction;
- provide direction to related documentation (AS/NZS ISO 14001:1996 4.4.4).

CODC satisfies these requirements by maintaining its EMS in paper form/read-only electronic form located at file number/website address.

The core elements of this environmental management system are:

- **The Environmental Policy** demonstrating the CODC commitment to and providing direction for continual improvement in environmental performance.
- **The Procedures Manual** consisting of general procedures to enable implementation, accreditation and reviewing of the EMS to ultimately achieve continued improvement in environmental performance. It refers to other documents that register and record the processes and outcomes of these procedures.
- **The Procedures Registers** are the working documents of the EMS. Typically, performance of the procedures requires the recording of information within these registers.

All EMS documents contained within and related to the above core elements will be assigned a unique document identification number (DIN) that will enable interested parties to locate referenced documents. Documentation related to, but not contained within the EMS, shall be sufficiently referenced to be accessible.

CODC shall encourage two-way communications and information for both internal and external stakeholders.

#### **4.5. Document Control Requirements of the Standard**

In accordance with ISO 14001, CODC has established an Environmental Document Control Procedure to control all EMS documentation such as manuals, forms, records and registers. The EMS Coordinator is responsible for the original copy of the EMS to ensure that its documents are controlled. The standard states that this documentation will be kept legible, dated, identifiable and retained for a specified period. The Environmental Document Control Procedure is required to include provisions for the creation and modification of various types of document (AS/NZS ISO 14001:1996, 4.4.5).

A Document Control File and Register (DIN), and, an Obsolete Environmental Records File and Register (DIN) have been established by CODC to ensure that in accordance with the standard:

- All relevant environmental documents can be easily located within CODC's offices;
- Periodic reviews of documents are revised as necessary under the authorisation of the EMS Coordinator ;
- Up to date versions of relevant documents are available at locations where operations essential to the effective functioning of the environmental management system are performed;
- Obsolete documents are immediately removed to prevent their inadvertent use; and
- Obsolete documents retained for legal or other purposes are held within the Obsolete Environmental Documents File and are suitably identified in the Obsolete Environmental Documents Register.

The EMS Coordinator is responsible for implementing the Environmental Document Control Procedure, and maintaining and updating all EMS manuals and associated documents.

#### **4.6. Operational Control Requirements of the Standard**

ISO 14001 requires that when actual or potential significant impacts have been identified the activities associated with these impacts are identified and control measures are implemented. Control and planning measures must include:

- documented procedures to prevent deviations from the system;
- the establishment of operational criteria within the procedures;
- identifying procedures that have significant environmental aspects;
- establish procedures to ensure suppliers and subcontractors are aware of the

requirements of the EMS. (AS/NZS ISO 14001:1996, 4.4.6)

CODC has met these requirements by developing Standard Operating Procedures (SOP) (DIN) to reduce the significance of environmental impacts associated with its activities.

Operational Control is required to ensure that activities associated with potential significant environmental impacts are conducted under controlled conditions. Functions and activities of the CODC's that have significant environmental impacts have been identified and are recorded in the Register of Environmental Aspects and Impacts (DIN).

Standard Operating Procedures (SOP) (DIN) have been developed for each significant impact of CODC's activities. Each SOP identifies the environmental impact associated with an aspect of CODC's Operations, and suggests management measures that could reduce these impacts.

The EMS Coordinator is responsible for ensuring that all SOP are established in accordance with the Operational Control Procedure (DIN) and are documented in the Operational Control Register (DIN). The EMS Coordinator is also responsible for communicating the requirements of the SOP to stakeholders.

#### **4.7. Emergency Preparedness and Response Requirements of the Standard**

ISO 14001 requires that an 'organisation shall establish and maintain procedures to identify potential for and respond to accidents and emergency situations, and for preventing and mitigating the environmental impacts that may be associated with them'.

The standard also requires that these procedures shall be reviewed and revised when necessary, in particular after the occurrence of accidents, and that they shall be periodically tested where practicable (AS/NZS ISO 14001:1996, 4.4.7).

To meet these requirements CODC has developed an Environmental Emergency Preparedness and Response Procedure (DIN). This will ensure that potential accidents and emergency situations are adequately managed to prevent or minimise any potential adverse environmental impacts.

It is the responsibility of the EMS Coordinator to identify, with the assistance of the building manager and qualified personnel, the potential environmental impacts of accidents and emergency situations and to ensure that contract services are performed consistently with the EMS.

The Environmental Emergency Preparedness and Response Procedure (DIN) will be annually reviewed and revised to reflect the current operations at CODC's sites. This review process shall be undertaken and coordinated by the EMS Coordinator who may seek external professional advice. The EMS Coordinator shall carry out an investigation and review of the procedure following any emergency incident where a significant environmental impact has, or potentially may have occurred.

Figure 1. CODC Environmental Management System Major Responsibilities Chart

