

ENVIRONMENT MANAGEMENT HANDBOOK



Northern Territory
Airports

Information for Tenants at

PROTECTING OUR ENVIRONMENT



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For further information please contact



Health, Safety and Environment Department

**PO Box 40996, Casuarina
Northern Territory, 0811**

Ph: (08) 8920 1811

Fax: (08) 8920 1800

Email: enviroinformation@ntairports.com.au

ABN: 83 081 258 139



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Message from the CEO

To all Airport staff, tenants and contractors,

This Tenant Environmental Management Handbook is for you to read and understand how we aim to manage the effects of our operations on our surrounding natural environment.

This handbook is specifically for the users of Northern Territory Airports to help users improve environmental management practices on the airport.

As you would be aware NT Airports is committed to maintaining and enhancing the quality of the environment through its environmental policy. On our Airports our task is to ensure that the policy is maintained and that we continue to conduct all our operations in an environmentally sensitive manner. By meeting industry best practice standards we will also comply with regulatory requirements.

I hope that you find this handbook informative and supportive in helping you to develop your own environmental management practices on our Airport.

Ian Kew

Chief Executive Officer



What's the purpose of this booklet?

The purpose of this Tenant Environmental Management Handbook is to act as a reference document to airport tenants on Northern Territory Airports (NT Airports). It will assist tenants in developing their own Environmental Management Plan (EMP) which will assist them and NT Airports in meeting their regulatory requirements as set out by the Airports Act and Regulations, NT Government legislation and the NT Airports' Airport Environmental Strategy (AES) (2004) for Darwin and Alice Springs Airports which has been approved by the Federal Minister for Infrastructure, Transport, Regional Development and Local Government. The document is designed to provide some background on the regulatory framework within which NT Airports operates, a summary of the key management and reporting requirements as well as more specific information for the management of identified environmental aspects through development of environmental management plans.

Basically this document was put together to:

- ✓ Inform and explain NT Airports role and responsibilities
- ✓ Provide environmental information that can be used as a basis for improving the environmental performance of all businesses at the airport;
- ✓ Increase environmental awareness;
- ✓ Strengthen environmental knowledge; and
- ✓ Help in managing or preventing potential environmental problems associated with businesses at the airport.

Why do Tenants need this information?

There are many benefits to be gained from businesses becoming environmentally responsible. These benefits include:

- ✓ Long term cost savings
- ✓ Increased customer patronage
- ✓ Improved environmental conditions at the airport and overall well being of the planet
- ✓ Minimising the potential for environmental fines and prosecutions
- ✓ A better company image

On the other hand, poor environmental performance may affect your business, your employees, your customers and the local community. There can be detrimental effects on health, safety, company image and financial performance. It can also result in prosecution and fines.



Roles & responsibilities

You as the Tenant

Develop appropriate procedures to minimise adverse environmental impacts resulting from operations on the airport by:

- ✓ Developing procedures to ensure continual attention is given to plant and equipment maintenance, design and operation;
- ✓ Assessing potential environmental impacts;
- ✓ Monitoring adherence to the *Airport (Environment Protection) Regulations 1997* as well as the NT Airports Airport Environmental Strategy (AES) approved by the Minister;
- ✓ Recommending modifications to your operational environmental management plan in order to achieve the objectives stated in the company Environmental Policy;
- ✓ Ensuring environmental accidents, incidents and complaints resulting from tenant operations are reported, investigated and corrective actions are recommended and implemented as appropriate;
- ✓ Ensuring internal audit reviews of the operation of the EMP are carried out at regular intervals;
- ✓ Ensuring all employees are committed to the company environmental policy and counselling any employee that fails to comply with the company environmental policy or EMP and provide action for further/repeated breaches.

The Airport

- ✓ Monitoring developments in environmental legislation and standards;
- ✓ Developing appropriate procedures to control adverse environmental impacts on the airport;
- ✓ Assess potential adverse environmental impacts and monitor adherence to the NT Airports' AES and the tenants EMP;
- ✓ Continually update and improve the EMP;
- ✓ Maintain appropriate/relevant environmental records;
- ✓ Liaise with external agencies with respect to standards, license requirements etc



- ✓ Ensure environmental accidents, incidents and complaints on the Airport are reported, investigated and corrective actions implemented; and
- ✓ Conduct environmental audits of at risk facilities and tenants to ensure compliance with the regulations.

The Airport Environment Officer

- ✓ To ensure environmental management is of the highest standard;
- ✓ Enforce Airport (Environmental Protection) Regulations;
- ✓ Enforce the environmental aspects of the Airports Act;
- ✓ Facilitate good environmental management through education, awareness raising and problem solving with NT Airports and tenants;
- ✓ Provide the Department of Infrastructure, Transport, Regional Development and Local Government with current information on all aspects of environmental management on the airport;
- ✓ Conduct environmental audit of tenants as required to ensure good Environmental Management;
- ✓ Inform NT Airports and tenants, as necessary, about environmental compliance requirements in relation to the AES and their EMP; and
- ✓ Help tenants and NT Airports to achieve best practice environmental management by advising them in meeting their requirements.

What are the key environmental issues for businesses on the airport?

- ✓ Stormwater quality management
- ✓ Soil quality/contamination management
- ✓ Trade waste management
- ✓ Hazardous materials management
- ✓ Waste management
- ✓ Noise management
- ✓ Air quality management
- ✓ Responsible land management
- ✓ Erosion Control
- ✓ Flora and fauna management



Environmental Legislation

All NT Airports are located on Commonwealth Land and as a result are required to comply with the *Airports Act 1996* and the *Airport (Environment Protection) Regulations 1997*. Under this legislation both Darwin International and Alice Springs Airports and their tenants have a “duty of care” to not pollute the environment.

Under this legislation Darwin International and Alice Springs Airports were required to develop Airport Environment Strategies to outline how they would conduct environmental management. Currently both Airport Environment Strategies (AES) came into effect in September 2004. These documents have a 5 year life and are due to be updated by September 2009.

The purpose of the AES is to outline for the following 5 years plans for the approach and actions of an Airport Lessee Company to manage its environmental issues, obligations and risks and to strive for continual improvement in the management of the environment.

There are many laws, regulations, policies and guidelines to help protect the environment in the Northern Territory. While most businesses off-airport operate under Territory laws, here at the airport our main legislation is provided by the Commonwealth Government. Where Commonwealth legislation does not exist we are required to meet Territory legislative requirements.

If you break these laws, even if you are not aware that you are, then you could end up being fined or prosecuted.

You and others in your business should be aware of the laws and penalties and take all reasonable steps to prevent any damage to the environment.

What should you know about environmental laws?

Be aware of your environmental responsibilities. Also ensure all your staff and contractors are aware of their responsibilities as you have a duty of care to ensure they are aware of how to work in a safe and environmentally friendly manner.

Water Pollution

No one is allowed to pollute water. This includes groundwater, natural waterways and stormwater drains. Pollution includes the introduction of anything that could impact on the water including its use by humans, fauna and flora. This includes such things as litter, wash water, oil, fuel, paint, nutrients etc.



Soil Pollution

No one is allowed to contaminate the soil. Pollution includes the introduction of anything that could impact on the soil or groundwater which would affect its use by humans, fauna and flora. This includes such things as litter, wash water, oil, fuel, paint, nutrients, etc. If pollution occurs the responsible tenant will be financially responsible for the necessary remediation works.

Air Pollution

This includes the emission of particulates, odours and gases into the atmosphere. Equipment and plant should be operated efficiently to minimise any air pollution in accordance with relevant standards and manufacturers manuals.

Waste Management

All waste must be appropriately disposed of. It is illegal to dispose of waste anywhere other than in a place designated for that type of waste. You must also be able to show that you have disposed of your waste in an environmentally/legislatively acceptable manner.

Noise Pollution

There are limits on the noise levels allowed for construction and maintenance activities, road traffic, ground based aircraft operations, aircraft refueling and the operation of plant and machinery. All attempts must be made to minimise the impact of noise on employees, other tenants and neighbours.

Hazardous Materials

There are special regulations under Territory laws and regulations for businesses that use, store, transport or sell dangerous goods. The goods must be stored, handled and transported in accordance with the regulations.

Duty to notify pollution incidents

All tenants have a duty to report all pollution incidents or excessive noise occurrences to NT Airports as soon as possible after it occurs or as you become aware of it.

Who polices environmental law?

The Commonwealth Department of Infrastructure, Transport, Regional Development and Local Government (DITRD LG) regulate both NT Airports and its tenants under the *Airports Act 1996* and the *Airport (Environment Protection) Regulations 1997*. The Airport Environment Officer (AEO) is DITRD LG representative on the Airport.

The Department can issue notices or prosecute individual persons or a company. They have the power to enter a premise at any time, issue clean up directions or request information.

What about other licenses or permits?

Some businesses must have a permit to discharge trade wastewater to the sewer. This must be arranged with Power Water. The permit will stipulate the quantity and quality of the waste water that is allowed to be discharged to



sewer. Any waste not acceptable for discharge to sewer must be disposed of in accordance with the relevant legislation.

The *NT Dangerous Goods Regulations* specifies the types of hazardous materials and their storage and handling requirements. Tenants who use dangerous goods may be required to have their facilities licensed.

Tenants who have fuel and oil or grease traps installed to treat wastewater are required to have Power Water approved equipment.

In summary

All businesses, employees and staff have a responsibility to protect each other and the environment. This is called "duty of care". This means that all employers, managers, directors and contractors:

- ✓ Need to take all reasonable and practicable steps to prevent pollution;
- ✓ Need to take all precautionary and control measures to ensure the risk of an environmental incident is minimised (i.e. an environmental management plan, staff training and supervision of contractors, inspections and audits);
- ✓ Must do all that is reasonably possible to prevent an incident occurring.



Energy & Water Use

Reducing energy use

Energy costs are a major expense for all businesses. An energy management program can reduce the overall costs of energy and also reduce the long term environmental impacts of excessive energy use. Many practical cost saving measures are well known. Power Water can offer advice on energy saving.

Consultants can also provide services in the area of energy efficiency. The NT Government has a division called Energy Management Services who can produce information on energy efficiency including:

- ✓ Energy Self Assessment
- ✓ Energy Auditing
- ✓ Energy Conservation in lighting, heating and cooling.

Reducing water use

Water is a highly valuable resource. To reduce water costs to businesses NT Airports promotes water conservation through collection, storage and supply sources.

It is to your advantage to ensure that you are water efficient. Regular maintenance of taps, bores, reticulation services and other water using equipment will ensure cost savings through efficient water use.



Hazardous Materials

Most materials can be hazardous or dangerous to the environment if handled or stored inappropriately. Businesses must have practices and procedures in place to prevent accidental leaks and spills. Correct storage, handling and disposal of hazardous materials can minimise any risk of contamination of the ground, stormwater drains, local waterways and the air.

Material safety data sheets (MSDS)

- ✓ An MSDS is an information sheet on the safe use and disposal of a material. You should get an MSDS with every hazardous substance you buy, handle or use. If you don't have one for a material, contact your supplier. An MSDS must be easily accessible.

Use of chemicals

- ✓ Always read and follow the instructions on the labels of any chemical products.
- ✓ Think about the chemicals you are currently using. There may be a less environmentally damaging product on the market you could use instead. Ask your supplier for alternatives.
- ✓ Always read the manufactures' health warnings and follow safe practices.

Chemical Storage, disposal and spills

- ✓ Ensure that all chemicals are stored in a designated and legibly labelled container and in an area away from stormwater drains.
- ✓ Bund and cover storage areas to contain spills, prevent rusting of drums, overflows and contamination from rain. Place drip trays where leakage is possible.
- ✓ Certain products are classified as Dangerous Goods, and their usage and storage is controlled by the *NT Dangerous Goods Regulations*. These substances include fuels, solvents, certain gases and other select chemicals.
- ✓ Store and dispose of each type of chemical in clearly labeled separate containers. Keep current lists of all chemicals including their quantities held on the premises.
- ✓ Inspect all storage areas regularly and keep a record of the inspections and any resulting actions.
- ✓ Put waste solvents, cleaners, paints, oils and other chemicals in sealed containers for hazardous waste collection.
- ✓ Send all chemical waste to a licensed contractor for recycling or disposal and keep a verifiable record of such disposals.



- ✓ Take care not to spill materials such as solvents, paints and other chemicals. Clean up spills to prevent contamination of the ground and stormwater. Have a spill kit in a clearly signposted and accessible area.

Emergency response to spills

- ✓ If a spill occurs that threatens or harms the environment, you must report it to the Airport Operations Officer as soon as you become aware of it.

- **Darwin International Airport** **89 201 852**
- **Alice Springs Airport** **89 511 227**

- ✓ Make all staff aware of emergency telephone numbers to call in the case of a large spill. For small scale spills, follow the MSDS for the spilled substance.
- ✓ Prepare and practice a spill clean up procedure. It is important that everyone on the premises knows what to do in the event of a spill, where to find emergency equipment and how to use it.
- ✓ A spill kit might be a wheelie bin with rags, brooms, mops and oil or chemical booms/pads in it. There are commercial kits available or you can make your own up in accordance with appropriate guidelines. These should be regularly checked.

General spill Procedures:

1. Stop the source of the spill if it is safe to do so.
2. Contain the spill and control its flow. Block off any stormwater drain inlets.
3. Clean up the spill promptly by following the MSDS instructions. Never wash a spill into a drain!

Asbestos

The code of practice for the Safe Removal of Asbestos is available from NT Work Safe on worksafe.deet@nt.gov.au or 1800 019 115

Contact NT Work safe for advice regarding working with and disposal of asbestos products.

Petroleum products

- ✓ Petroleum products can be highly volatile and flammable. They should be stored away from heat, direct sunlight, other flammable liquids and ignition sources.
- ✓ Collect waste oil for recycling by a licensed operator.



- ✓ You must not tip old oil or solvents down the sewer or stormwater drains or on the ground.
- ✓ Store small containers off the floor and have them tapped where possible (To avoid the need to pour). Larger drums should be in a bunded area preferably under cover. Transportable pallet bunds or permanent concrete bunds are best but provision must be made for the draining of storm water.

Ground and groundwater contamination

- ✓ You must not allow any hazardous materials to soak into the ground. If they do you may end up with a contaminated site that will be costly to clean.
- ✓ If a contaminant soaks into the ground and reaches the groundwater, it may flow off your premises and affect a neighbor's business, or local waterways and remedial work can be very costly.



Waste Management

As our population increases and the demand for goods and services increases, so too does the amount of waste that has to be disposed of. Waste disposal is expensive and will only increase in cost as landfill space becomes scarce. There are three methods to improve your current waste management practices.

- ✓ **Reduce** your use of materials. Apart from anything else, this saves money!
- ✓ **Reuse** materials. This saves more money!
- ✓ **Recycle** materials. This can also save money and preserves scarce resources.

Disposal to landfill or similar should be the last option if you can't do any of the first three. Contact the airport if you are interested in contributing to a whole airport approach to recycling.

Separate and label wastes

Try, wherever possible to separate wastes so that it is easy for them to be reused or recycled.

Clearly label waste containers and put them in convenient areas to encourage their use.

Containers

- ✓ Reduce your waste disposal costs by buying products from suppliers that provide a collection, reuse or refill service for containers.
- ✓ Try to buy in bulk as this will save you money and reduce the amount of packaging to dispose of.

Metal Waste

- ✓ Most metal recyclers will pay you for almost any type of metal waste.

Batteries

- ✓ Old batteries should be stored in spill trays or banded areas under cover where no acid can run or be washed into stormwater drains or onto the soil.

Tyres

- ✓ Old tyres can be breeding grounds for mosquitoes and should be stored to prevent water fill until correctly disposed of. Tyre disposal to the tip is costly and uses much space in the tip. The possibility of recycling tyres for other commercial/industrial uses is rapidly evolving and should be investigated to help reduce environmental impact.



Filters and oily rags

- ✓ Used filters should be drained thoroughly, preferable while they are hot, into a waste oil container. The waste oil can then be recycled.
- ✓ After draining, filters should be crushed to allow larger numbers to be placed in the bin before emptying is required.
- ✓ Filters, oily rags and other products contaminated by fuel products should not be disposed of with general domestic rubbish. The disposal bin for these products should be provided by an approved disposal company.

Cardboard, paper, glass and plastics

- ✓ Cardboard, paper, glass and plastic wastes can all be recycled. Contact your local waste removalist to find out how this can be done. Also discuss with your suppliers the possibility of reducing packaging.

Liquid and hazardous wastes

- ✓ Some wastes such as containers of waste sludge, gas cylinders, and asbestos require special attention for safe and proper disposal.
- ✓ All waste liquids such as oil should be drained and poured into storage containers. Never allow waste liquids to drain or spill onto the floor or ground.
- ✓ Non toxic liquid waste can sometimes be treated and discharged to the sewer but a trade waste permit must be obtained first.
- ✓ Make sure sludge is removed from fuel and oil or grease interceptor traps regularly disposed of in the correct manner and that a verifiable record is kept..
- ✓ Store any liquid wastes awaiting collection by a licensed contractor within a sealed, bunded and covered area.

Waste Contractors

An approved waste removal contractor must be contracted to remove hazardous waste from your premises,.

Make sure that you keep all you receipts for at least three years as evidence that you have disposed of your wastes properly.



Trade Waste

What is trade waste?

Trade waste is any waste produced by a commercial or industrial activity. It does not include wastewater that goes into the sewer from toilets, bathrooms or laundries.

Trade waste is not necessarily a problem but can be if it is put directly into the sewer without first having harmful substances removed.

Do you need a trade waste permit or agreement?

If you run a business that produces contaminated water then you may be required to discharge this water to sewer.

Water contaminated by fuel will normally require treatment by a fuel and oil interceptor trap before being allowed to discharge to sewer. Wastewater with high nutrient levels may also need to undergo some treatment as nutrients could upset the operation of wastewater treatment plants.

Water contaminated with disinfectants, heavy metals, pesticides or other materials that could harm or kill living organisms are generally not permitted to be discharged to sewer.

What types of maintenance is required for pre-treatment interception equipment?

Pre-treatment Equipment	Maintenance Regime
Grease Traps	Pumped out & cleaned on a 3-monthly basis. Heavily loaded grease traps may require a shorter interval.
Oil Water Separators	Inspected on a 3-monthly basis, internal plates cleaned as per manufacturers recommendations.
Settling Pits	Inspected on a 6-monthly basis. Pumped out annually, heavily loaded pits may require additional cleaning.
Triple Interceptors	Inspected on a 6-monthly basis. Pumped out annually, heavily loaded pits may require additional cleaning.

Maintenance programs and records must be kept for evidence of for audit and investigation purposes.



Erosion and Sediment Management

Why is sediment and erosion a problem?

Development activities disturb soil, by stripping vegetation, digging holes or re-contouring the land surface. Once soil is disturbed it becomes easier to wash into drains.

The material that is most likely the first to be washed away is the soil that contains the most nutrients, seed and other materials that create a healthy soil.

The problem with soil, sand, cement, leaves and other debris making their way into the stormwater drains is that they can;

- ✖ Provide a breeding place for mosquitoes
- ✖ Increase the risk of flooding
- ✖ Block drains
- ✖ Spread weeds
- ✖ Result in offensive odours
- ✖ Interfere with the ecological health of creeks and rivers
- ✖ Lower the quality of drinking water and create a health risk
- ✖ Result in algal blooms

Erosion and sediment controls

The following control measures should be considered when earthworks are necessary on your premises:

- ✓ Install erosion and sediment control silt traps before work starts.
- ✓ Leave as much vegetation as possible.
- ✓ Divert runoff from upslope away from the site, but ensure you do not flood your neighbour's property.
- ✓ Install sediment retention pits down slope of the site to catch sediment. Water from these should be clear before it enters the stormwater system.
- ✓ Check the erosion and sediment controls everyday if it has been raining and ensure they are in good condition.
- ✓ Leave or lay a curbside turf slip to slow the speed of water and trap sediment.
- ✓ Limit vehicle entry and exit to one point and stabilise it for all weather access.



- ✓ Protect all drains with a boom made from a geotextile.
- ✓ Save topsoil and stockpile it for use in revegetation. Never place it around trees as this can kill them.
- ✓ Build a sump or sediment trap down slope from the area used for cutting tiles, concrete and bricks.
- ✓ Sweep areas rather than wash them down with water.
- ✓ Never place any materials in the gutter or on the road.



Noise Management

A lot of work that goes on around the airport can be noisy. Noise can be bad for your health and annoying for your neighbouring businesses or residents.

Every business at the airport has a responsibility not to exceed the Excessive Noise Guidelines in the *Airports (Environment Protection) Regulations 1997*. How much noise you are able to generate depends on who your neighbours are, the background noise levels, the time of day the noise occurs and the tonal character and impulsiveness of the noise.

Does it matter that landing and take off of aircraft creates more noise than most operations?

No, the timing, frequency, loudness and varying tones and pitches of different sources of noise can be more of a problem for employees, visitors or residents at or nearby the airport.

For example, a constant banging or a high pitched siren during the day may be more irritating to people than the short impact of aircraft noise overhead.

How can I reduce the noise my business makes?

- ✓ Reduce noise by shielding, enclosing and muffling equipment. House machinery on rubber and surround with walls.
- ✓ Regularly service equipment and make sure it is in good operating order.
- ✓ Avoid after hours work.
- ✓ If your workplace is noisy, ensure employees and visitors wear hearing protection.
- ✓ Adhere to procedures if you conduct engine ground running.



Air Quality Management

Air pollution can be caused by dust, gases, smoke and other particulates coming from things you do or products and equipment you may use.

Refrigerant gases

- ✖ Do not allow refrigerant gases to escape from air-conditioning units. Chlorofluorocarbon (CFC) refrigerants such as R12 deplete the ozone layer. Some new refrigerant blends contain Hydrochlorofluorocarbons (HCFC's) which also deplete the ozone layer.

Dust

Dust from your premises may contain heavy metals, asbestos particles, dirt or other substances that can cause serious health problems.

- ✓ Seal or wet down heavy traffic areas to minimise dust generation. Placing oil emulsions on unsealed roads is not permitted under today's environmental standards.
- ✓ Do any sand blasting on a concrete paved area that is covered and bunded.

Oxy-acetylene gases

Make sure there is adequate ventilation for all welding and cutting work.

- ✓ Try to minimise the use of oxy-acetylene torches. For small jobs use cut off saws instead.

Solvents

Organic solvents used in strippers and cleaners are highly volatile and evaporate readily into the atmosphere. Keep solvents and cleaners in a covered container with a tap (To avoid the need to pour).

- ✓ Ensure that containers are kept closed when not in use.
- ✓ Try to minimise spillages. If they do occur, clean them up as soon as possible and place absorbents into sealed bags to minimise evaporation.
- ✓ Use water based or biodegradable products wherever possible as these are less volatile.
- ✓ Avoid spraying solvents. Use only a steady stream or brush to gently agitate the parts being cleaned.

Burning

- ✖ Do not burn any wastes. It is against the law to do so. Oily or greasy rags, oil soaked paper or saw dust, plastics and rubber should be placed in dedicated waste bins.



General Information

Design of new premises

Any new premises or modifications to old premises or infrastructure will be required to conform to relevant environmental standards. The DITRD LG Airport Building Control Officer must be consulted before any construction or building operations are undertaken and will assist in ensuring that standards are met. It is also crucial throughout the design stage that your environmental responsibilities are considered. The AEO can also be consulted to ensure requirements are met. It is much better to get it right the first time than to have to make modifications later.

Bunding

A bund is a low wall built to contain liquids. It can be made of any impervious material such as concrete or plastic and can be permanent or transportable. However, provision needs to be made for wet season conditions.

Generally bunds should be large enough to hold the contents of the largest container in the bund plus 10%.

There are special requirements for bunds that hold dangerous goods or for facilities that require a license under the *NT Dangerous Goods Regulations*.

Employee Training

Environmental management at airports is required to be included in a company's training regime and should be explicitly explained to all personnel. Train your staff in the environmental aspects of their work and in the methods and procedures in this guide. Show them;

- ✓ Where stormwater drains are
- ✓ How to clean up a spill
- ✓ Who to notify in the case of an incident
- ✓ Proper waste disposal practices

Ensure all personnel are aware that it is a legislative requirement to understand their responsibility under the Airports (Environment Protection Regulations).

Make sure you document your employees training and have them sign off as understanding his/her requirements.

Training should be repeated each year as legal requirements, standards and technology can change.



Environmental Management System and Plans

An environmental management system is an effective way of managing the impact of your business on the environment. Your system should include the following:

- ✓ An environmental policy which states your business's commitment to the environment;
- ✓ An environmental management plan;
- ✓ Defined roles and responsibilities of employees;
- ✓ Proposed programs for Training employees in environmental requirements;
- ✓ Proposed preparation or review of operating procedures to include environmental requirements;
- ✓ Emergency response procedures;
- ✓ Programs for Monitoring your impacts (surface water, groundwater, soil, air quality etc); and
- ✓ Regular environmental reviews (inspections and audits).

There is an International Standard (AS/NZS ISO 14001:2004) that specifies in more detail how an effective environmental management system should be operated.

In order for NT Airports to meet their environmental requirements and to assist tenants to understand and meet their environmental requirements, an EMP will be required to be submitted by all tenants to NT Airports. Companies which have an existing EMP should discuss the EMP with the NT Airports Health, Safety and Environment Department to ensure it meets requirements. Companies which do not have an EMP will be required to develop one and the Airport Environment Department is happy to assist or advise the company in doing this.

What is an EMP?

An environmental management plan (EMP) is a program for your business. It states all your actual or potential impacts on the environment and how you plan to minimise or eliminate these impacts. A good EMP will also include deadlines and a review or audit program to make sure aspects are not forgotten and appropriate standards are maintained.

Basically an EMP is:

- ✓ A management tool for caring for the environment;



- ✓ A Structured planning approach; and
- ✓ A plan to Implement environmental measures.

Why do we need an EMP?

- ✓ We are obligated under the Airport Environment Strategies; and
- ✓ To improve and potentially reduce costs of daily operations and eliminate or reduce potential future remediation costs.

What are the benefits of having an EMP?

- ✓ It integrates environmental management into the daily operations of the company;
- ✓ Compliments quality assurance and OH&S management systems; and
- ✓ Can reduce operational costs while increasing operational efficiency.

How do I develop an EMP?

- ✓ By referring to the information in this handbook;
- ✓ By consulting with other tenants and employees in your organisation; and
- ✓ By referring to the Airport EMP development pack which can be obtained from the Northern Territory Airports Environmental Department on (enviroinformation@ntairports.com.au).

What makes up an EMP?

- ✓ Introduction
- ✓ Description of Operations
- ✓ Company Environmental Policy
- ✓ Environmental Legislative Requirements
- ✓ Assessment of Environmental Risks and Impacts
- ✓ Standard Operating Procedures to Minimise/Control Impacts (that includes a structured compliance monitoring program if required)
- ✓ Documentation, Review and Improvement
- ✓ Emergency Preparedness
- ✓ Tenant Self Auditing
- ✓ Staff Training
- ✓ References and Appendices



Checking Environmental Performance

Will my environmental performance be checked by anyone?

The Department of Infrastructure, Transport, Regional Development and Local Government Airport Environment Officer (AEO) may at any time enter your lease area for an inspection.

In addition, NT Airports may conduct an audit of your business and its operations to assess your standard of environmental performance against your EMP.

What's the purpose of an environmental audit?

To collect information about a business to allow its environmental performance to be assessed against required standards and EMP commitments. The information from the audit should be used as a basis for improving the environmental performance of the business.

How can the environmental performance of businesses at the airport be improved?

The environmental audit process and findings can help inform business owners, managers, employees and contractors about;

- ✓ Their environmental responsibilities;
- ✓ How the various activities on their site could be detrimental to the environment; and
- ✓ How the site's various activities can be controlled/improved so the site's environment can be improved and impacts minimised.

What does an audit involve?

Questions similar to those in the tenant self audit will be asked and verification of your answers will be required. This can be by visual checking or sighting written evidence (i.e. inspection lists, receipts, procedures, reports etc) that prove you are doing what you say that you are doing. Generally your word is not enough evidence.

Environmental representatives from NT airports may visit your business for anywhere from an hour up to a full day depending on the complexity of your operations.

You will get a brief report indicating your strengths and weaknesses plus a list of requirements (under legislation) and recommendations.



How often are these likely to be conducted?

This depends on the nature of your business and the actual or potential environmental impact your business might have.

Some businesses may never undergo an audit whilst others may have one as frequently as once every year. Where identified problems are not being appropriately addressed more frequent audits may be carried out.



Developing Your EMP

Step 1 Introduction

The introduction should summarise how the environmental management plan (EMP) will address your requirements with respect to environmental management. All new tenants are required to prepare an EMP as part of their lease agreements and existing tenants are required to also develop an EMP in accordance with schedule 1 Rules and Regulations in all leases and the NT Airports Environment Strategies.

Step 2 Description of operations

The operation description section of the EMP should include a brief description of the key function of the business. It should provide sufficient detail to enable the reader to understand the core business, main activities, goods and/or services undertaken of the organisation. This section should include the hours of operation, the size/area of the facility and location with respect to significant environmental features such as storm water drains, creeks, public amenities etc.

An organizational chart should be included that outlines the number of employees and management structure, as well as the employees/positions with environmental responsibilities.

Step 3 Company environmental policy

If your company does not already have an environmental policy, you will need to develop one in consultation with your Company management.

The environmental policy should define the overall intentions and direction of the organization related to its environmental performance. The policy should:

Reflect the nature and scale of the organization, its activities, products and services;

- ✓ Include a commitment to the prevention of pollution and enhancement of the environment;
- ✓ Include a commitment to compliance with all applicable legal and other requirements to which the organization is subject;
- ✓ Be documented and authorized by the organization's top management; and
- ✓ Be communicated to all employees working for, or on behalf of the organization.



Step 4 Environmental Legislative Requirements

This section should provide details of all NT and Commonwealth legal and other requirements applicable to the organization, i.e. legal, statutory and regulatory compliance requirements and should include any specific NT Airports lease requirements or conditions.

The section should detail, or provide reference to, process(es) for the identification, access and maintenance of legal and other requirements to which the organization is subject. This section should reference a register of legal and other requirements to be included in the EMP.

Key considerations should include:

- ✓ What legislation, standards or other requirements are applicable to the organization?
- ✓ How legislation is identified and accessed; and how currency is maintained.
- ✓ What other obligations does the organization have in terms of non-legislative requirements (eg Airport Environment Strategy)?
- ✓ How does the organization ensure compliance with its obligations

Step 5 Assessment of Environmental Risks & Impacts

This section should provide detail of the environmental risk assessment process, the outcomes of the process and control measures proposed based on the level of risk. Environmental risk assessment should effectively identify potential or actual environmental impacts associated with activities goods or services over which the organization may have influence or control.

Once identified, risks should be ranked, prioritised and where required, controls established to reduce the level of risk to an acceptable level. The resulting environmental risk register must be provided in the EMP. Further guidance on the risk assessment process can be obtained from Standards Australia.

The risk assessment process is composed of three key stages:

1. Risk identification - Identify and document environmental risks and impacts associated with the organisation activities, goods and services;
2. Qualitatively ranking potential environmental impacts to establish relative significance; and
3. Establishing and documenting control measures to mitigate potentially significant environmental impacts.

Risk ranking is generally undertaken by assigning numeric likelihood and consequence levels to each identified risk issue.



For guidance, the NT Airports likelihood and consequence criteria and levels are presented below. These values are then classified together to provide an overall risk ranking

NT Airports Consequence Table

Category	Risk	Description
Negligible	1	No damage to the environment.
Medium	2	Minor environmental effects: minor local environmental impact, no environmental impact beyond the Airport boundary.
High	3	Major environmental damage: Potential for spill or release to have major impact within the Airport boundary. Potential for spill or release to impact beyond the Airport boundary.
Catastrophic	4	Severe damage to the environment: Regional environmental impact. Potential for spill or release to have major within and/or beyond the Airport boundary impacts such as ecosystem degradation or failure.

NT Airports Likelihood Table

Category	Level	Description
Rare	A	The event may occur only in exceptional circumstances.
Unlikely	B	The event is possible.
Likely	C	The event is probable.
Almost Certain	D	The event is almost inevitable.

Risk matrix

Frequency Category	Consequence Category			
	1 Negligible	2 Medium	3 High	4 Catastrophic
(D) Almost Certain	C	B	A	A
(C) Likely	C	B	B	A
(B) Unlikely	D	C	B	B
(A) Rare	D	D	C	C



Risk Rating Categories

	3D, 4C, 4D	Extreme (A)	Must be mitigated with appropriate engineering and/or administrative controls to a risk ranking of High or less as quickly as is feasible. Mitigation measures will be audited annually by the Airport.
	2D, 2C, 3C, 3B, 4A, 4B	High (B)	Must be mitigated with appropriate engineering and/or administrative controls to a risk ranking of Medium or less within a specified time period. Mitigation measures will be audited annually by the Airport.
	1D, 1C, 2B, 3A	Medium (C)	Should be verified that procedures or controls are in place. Internal audits are required to check the effectiveness of the procedures and/or controls in place. Mitigation measures will be audited biennially by the Airport.
	1B, 1A, 2A	Low (D)	Should be verified that procedures and controls are in place. Mitigation measures will be audited biennially by the Airport.

Outcomes of the risk identification and assessment process should form the basis of the company's environmental management measures and assist with the identification and planning of training requirements, emergency planning and the setting of environmental objectives.

This section should also provide detail of when and how environmental risks are reviewed.

Where an established risk assessment process is documented in an existing management system procedure, a summary of the process and reference to the procedure is acceptable.



Airport Assigned Environmental Risk Ratings in comparison to the Airports Act 1996

Level of Adverse Effect (<i>Airports Act 1997</i>)	Rating Description	Rating
Serious Environmental Harm: Occurs if the pollution harms or has the potential to harm an area which is identified in the Final Environment strategy as environmentally significant; or the effect of the pollution is or has the potential to be of high impact and irreversible; or the pollution results or has the potential to result in substantial harm to public health or public safety; or the pollution results or has the potential to result in substantial damage to property <i>EG. Fuel from Fuel Storage Tanks</i>	Extreme Risk Tenants	A
Material Environmental Harm: Occurs if the pollution harms or has the potential to harm the environment and; the effect of the pollution is or has the potential to result in significant impact; or the pollution results or has the potential to result in harm to public health or to public safety; or the pollution results or has the potential to result in damage to property (other than minor damage). <i>EG. Detergents and wash down products from wash down areas</i>	High Risk Tenants	B
Environmental Harm: Occurs if the pollution harms or has the potential to harm the environment and; the effect of the pollution causes a change to the existing environment at a level considered less than that causing material environmental harm. <i>EG. Leaking Industrial Waste Disposal Bins</i>	Medium Risk Tenants	C
Environmental Nuisance: A person must not by act or omission directly or indirectly cause environmental pollution that affects an area that consists of or is included in an airport site and; the pollution takes the form of smoke, dust or odour or the effect of the pollution is of low impact and transient; or the effect of the pollution interferes unreasonably or has the potential to interfere unreasonably with the enjoyment of the area by a person occupying or lawfully using the area. <i>EG. Dust and/or Noise from Construction Works</i>	Low Risk Tenants	D



Step 6 Standard Operating Procedures to Minimise/Control Impacts

With the activities and associated management strategies identified in Step 5, provide a detailed description of the standard operating procedures to be followed to achieve best practice environmental management, starting with the activities given the highest risk ranking.

Step 7 Documentation, review and improvement

This section should describe the processes used by the organisation for the management of environmental documents and records, and all other documents which affect the environmental management practices of the organisation. Other documents in this context may include: procedures, forms and work instructions, job descriptions and standards, acts and other legislation etc. The responsible person(s) for document authorisation and document and records management should be nominated. Where document or records registers are established, these should be referenced.

Where established document control and records management processes are documented in existing management system procedures, a summary of the processes and references to the procedures is acceptable.

This section should also detail how actions arising from complaints, incidents (including near misses), audits, inspections or other events which may potentially result in an environmental impact, or adversely affect the environmental performance of the organisation are managed and closed-out. Sufficient detail should be provided to clearly explain the methodologies and requirements for the identification of corrective actions, the assignment of timeframes and responsibilities for their implementation and the relevant authorities for review and sign-off. The process for tracking and reporting on the status of corrective actions should be documented.

Where an established corrective and preventive action process is documented in an existing management system procedure, a summary of the process and reference to the procedure is acceptable.

Step 8 Emergency preparedness

The organisation should, through the risk assessment process, and/or based on previous incidents or experience, identify potential emergency situations which may arise. This section should include information on how emergency situations are identified and the management practices to be applied in the case of their realisation. It should also specify requirements for emergency response planning, training and emergency exercises. It is recommended that site emergency response plans which encompass environmental emergencies are developed and referenced in this EMP. Emergency response documentation should include key contacts within the organisation and detail how NT Airports personnel are to be integrated into emergency response.

Where an established emergency response process is documented in an existing management system procedure, a summary of the process and reference to the procedure is acceptable. It is however essential that potential emergency scenarios associated with the activities undertaken at the facility



are appropriately addressed in any emergency response documentation (e.g. plans or manuals).

Step 9 Tenant self auditing

Targets, policies, responsibilities and procedures should be documented. All of which should be reviewed on a regular basis to determine areas of further improvement and greater operational efficiency.

One of the most effective forms of review is an audit. Audits are designed to:

- ✓ Highlight areas of non-compliance;
- ✓ Identify Areas of potential improvement on a periodic basis; and
- ✓ Draw attention to improvements made as a result of the EMP implementation.

The intention of an audit is to assist you in checking your own performance – do you actually do what you say you do?

A basic audit will comprise of the following components

- ✓ Checking whether what you have said you would do has been done;
- ✓ Determine whether you have complied with your own document;
- ✓ Identify and document areas for improvement; and
- ✓ Implement changes as necessary.

An audit will involve looking at the standard operating procedures (the ones you set out in Step 6 and determining whether or not you actually follow the procedures.

Step 10 Staff Training

Staff training leads to:

- ✓ Environmental awareness among staff;
- ✓ Familiarisation with the responsibilities for implementing the EMP; and
- ✓ Opportunities to improve operational aspects of the EMP by way of staff input.

Ways to monitor staff training include;

- ✓ Training as part of new staff inductions and regular refresher courses;
- ✓ Staff appraisals; and
- ✓ A training register to document training.



An example staff training register is below;



Darwin International
Airport

DIA TRAINING AND COMPETENCY MATRIX SECTION OF COMPANY

TRAINING COMPLETED & COMPETENT TO OPERATE			TRAINING PLANNED			TRAINING NOT APPLICABLE			
			TRAINING REQUIRED						
	INDUCTION		ENVIRONMENT			EXAMPLE			
	Company Induction	Environment Management at the Airport	Spill Response Training	Waste Management in Workshop	Compliance Monitoring	Example	Example	Example	Example
Position									
Name	12/3/08	12/6/08		24/3/08					
Position									
Name	12/3/08	12/6/08		24/3/08					

There are several methods that can be used for staff training, and include;

- ✓ Presentations at staff meetings
- ✓ Focus workshops
- ✓ Regular incident response exercises
- ✓ Videos
- ✓ Posters and leaflets in the staff room etc.

**Step 11 References**

This section should provide references to documents of external or internal origin specified in the text. Where the EMP is based on an existing management system, only documents outside that system specified in the text should be included here, and a listing of management system procedures should be included in the Appendices.

Step 12 Appendices

This section should provide examples of templates of external or internal origin specified in the text. These may include Standard Operating Procedures, Incident Report Forms, and Internal Audit Templates etc.

For further information please contact



Health, Safety and Environment Department

**PO Box 40996, Casuarina
Northern Territory, 0811**

Ph: (08) 8920 1811

Fax: (08) 8920 1800

Email: enviroinformation@ntairports.com.au

ABN: 83 081 258 139