



Level 1, Unit 7 Skipping Girl Place,
561 Victoria Street
Abbotsford VIC 3067

www.pacia.org.au

Ph : (03) 9429 0670

Fax : (03) 9429 0690

A PUBLIC COMMITMENT



Plastics and Chemicals Industries Association

CODE OF PRACTICE

Environment Protection

ENVIRONMENT PROTECTION CODE OF PRACTICE

INTRODUCTION

Purpose

This Code governs member company actions regarding management of the environmental aspects of their activities, conservation of resources and reduction of waste; in order to fulfil the Guiding Principles of Responsible Care which state:

“In consultation with our stakeholders we will manage all our activities to ensure preservation of the environment, protection of the health and safety of employees and the community and a standard of performance the public has the right to expect”

“In line with our duty of care to the needs of future generations, we will aim for resource sustainability and work towards the elimination of waste in all our activities.”

In general, implementation of the Code will reduce the burden of member company activities on the environment and contribute towards a sustainable world.

It should be noted that many companies have tailored quality, environment and safety systems such as ISO 9001 and ISO 14001. Implementing equivalent elements from those systems would meet the requirements of this Code of Practice. Where a company does not have a recognised management system, this Code of Practice provides guidance for sound Responsible Care practices. Implementation of management practice equivalent to the examples given with appropriate evidence of actions to achieve compliance with the Policy intent is acceptable.

Scope

“Environmental Aspects” are defined as those elements of an organisation’s activities, products or services that can interact with the environment. As such, this Code relates to impacts such as noise, odour and dust; and to any material whether solid, liquid, gas, or vapour, which is not further used in the production of a commercial product or provision of a service, or which is not an intended commercial product, or which is unwanted, unusable, or surplus.

This includes discharges to air, both point source and diffuse, liquid effluent to water ways or to a sewerage or irrigation system, deposits to landfill and spills into soil and groundwater, fugitive discharges and material sent offsite for recycling, waste processing or treatment.

Drums, containers and packaging which contained materials used by a member company or which are used to contain a company’s product are within the scope of this Code. The Code is supportive of initiatives such as the National Packaging Covenant.

The Code also covers all the life-cycle stages of wastes from member companies, from generation to ultimate fate (“cradle to grave”). Wastes generated by the supply of materials to member companies and by the use of products from member companies are addressed by the code. This requires member company communication with suppliers, customers, end users and others.

The Code interfaces with all of the other Responsible Care Codes of Practice but, in particular, Product Stewardship, Community Right to Know and Manufacturing Process Safety.

Philosophy

Chemicals have the potential to cause harm to people and the environment if not managed correctly. Member companies are committed to handle and process chemicals responsibly at all times and to operate in a transparent and open manner. They recognise the need to monitor, control and continuously reduce the impact of their activities on the environment; not merely to satisfy legal requirements. Assessment of environmental aspects under this Code will consider not only short-term impacts but also the potential for persistent and cumulative effects, where appropriate.

The Code is consistent with Cleaner Production concepts, including the efficient use of energy and resources. Its emphasis is on the control and administration of the environmental aspects of member company activities. This includes reduction in emissions and waste prevention, elimination, reduction, recycling, treatment and disposal, in order of preference, (commonly referred to as the “Waste Management Hierarchy”). Other activities are the handling, storage and transport of waste.

The Industry is committed to providing information on environmental aspects to the interested public and to consulting with government and the community regarding environmental management practices.

Code Section/ Management Practice	Examples of acceptable implementation of management practice
1 COMMITMENT AND LEADERSHIP	
1.1 Policy Environment Protection shall be incorporated into the culture and core philosophy of each company and implementation shall require senior management commitment, active participation, publishing of written policies and procedures and effective communication. Policies and Standards shall meet or exceed all legal requirements in letter and in spirit.	1.1 (a) Published policy making specific reference to Protection of the Environment is displayed prominently at each location and by each major business unit. This could be by means of the Responsible Care Guiding Principles. (b) CEO and senior management make their commitment to environmental protection (EP) clear by regular face to face and written communications, including agenda items at regular meetings of senior management.
1.2 Accountability Commensurate with the potential impact of the environmental aspects of company activities, specific goals and responsibilities for implementing policy shall be established for individuals and teams throughout the organisation.	1.2 (a) Job descriptions (or equivalent) throughout the company include responsibilities for contributing to EP programs. (b) Appraisal systems and rewards reflect the level of individual and team commitment to those responsibilities.
1.3 Resources Each company shall commit the appropriate financial, time and human resources necessary to implement, maintain and continually improve environmental protection performance. Line functions shall be appropriately supported by qualified and experienced environmental specialists and technical experts.	1.3 (a) Senior management regularly assess, provide and document the resources necessary to implement environmental management plans and programs in accordance with policy and management directives.
1.4 Employee Participation Each company shall encourage and provide opportunities for employees to participate in developing, implementing and reviewing environmental management programs, thereby sharing the leadership with all levels of the organisation. Management shall establish a culture amongst employees towards a commitment to waste minimisation and effective waste management.	1.4 (a) A culture is established whereby employees at all levels are encouraged to share the leadership, particularly by processes which expect them to report areas of waste or environmental impact, and make suggestions for improvement. (b) These processes are appropriately documented and feedback given to all the participants.

2 PLANNING**2.1 Environmental Aspects****2.1.1 Identification and Assessment**

Each company shall carry out and keep up to date a comprehensive review of the environmental aspects of their products and activities. The aim of the review shall be to identify assess and document those significant environmental aspects which should be addressed by the management program. The review should consider potential short and long-term impacts; and both routine operations and foreseeable emergency situations. Environmental aspects include packaging and transport issues.

- 2.1.1 (a) A comprehensive and documented review has taken place of those aspects of current company activities which could have measurable short or long term impact on the environment, taking into account the cost and time of undertaking the analysis and availability of reliable data.
- (b) The review at least includes a review and comparison of available data with legal and regulatory requirements; and places emphasis on higher risk materials and processes, including persistent and bio-accumulative materials.
- (c) The review includes the consideration of non-routine operations and reasonably foreseeable emergency situations; taking into account feedback from investigation of previous incidents, both internal and external.
- (d) The review includes assessment of product and packaging environmental aspects, to the extent to which the company can exert control and influence on those aspects. For example the requirements of the National Packaging Covenant have been considered.
- (e) Documentation of environmental aspects includes an examination of existing environmental management practices, procedures and controls.
- (f) Appropriate attempts have been made to assess and prioritise the environmental aspects for purposes of emphasis in management programs and improvement plans.

2.1.2 Management of Change

Each company shall establish and maintain procedures for the management of change, including the assessment of the potential environmental impacts of new or changed products or manufacturing equipment / processes.

- 2.1.2 (a) Change in company activities, facilities and processes is managed according to documented procedures which include the specific consideration of any potential impacts from environmental aspects of the changed situation; including emergencies.
- (b) Planning for changes involves wide participation of employees and other stakeholders.

Code Section/ Management Practice	Examples of acceptable implementation of management practice
<p>2.1.3 Waste Minimisation</p> <p>Each company shall apply waste minimisation concepts to product/packaging design and company operations, particularly to the research, development and design of new manufacturing processes and to the redesign and modification of existing manufacturing processes. Consistent with Product Stewardship obligations, this shall involve adopting a “cradle to grave” approach. Companies shall also support research and development into relevant new technologies, as far as is practicable for their size and resources.</p>	<p>2.1.3 (a) Company procedures for the development and design of new or modified products/packaging and processes require consideration of lower toxicity materials and an awareness and implementation of waste minimisation concepts.</p> <p>(b) Those individuals/teams involved in the Product Stewardship process participate actively in consideration of lower toxicity and waste minimisation requirements and opportunities.</p> <p>(c) Procedures include providing advice to customers and downstream users on resource recovery, waste use and recycling of chemicals and products unfit for normal use.</p>
<p>2.1.4 Shutdown and Decommissioning</p> <p>Each company shall place specific emphasis on the prevention of residual community and environmental effects which might remain or could develop after the facility is closed down or dismantled.</p>	<p>2.1.4 (a) Initial design of the facility makes specific provision for the avoidance of long term residual impacts.</p> <p>(b) In the event of shutdown and/or dismantling, these activities are conducted according to specific plans aimed at eliminating residual impacts.</p>
<p>2.1.5 Historical Practices</p> <p>Each company shall assist appropriate regulatory authorities to assess previously used non member-operated disposal sites, where appropriate; and conduct their own assessment of their own sites where previous practices could result in harm to human health or to the environment.</p>	<p>2.1.5 (a) Planning processes for future environmental management include documented consideration of the possible impact of historical practices.</p> <p>(b) The company has conducted their own assessment of any previously used company owned disposal sites and reflected this assessment in planning.</p> <p>(c) Where appropriate, the company has assisted regulatory agencies to assess non-company operated disposal sites, which the company has used in the past; with a view to co-operating as appropriate in future actions.</p>
<p>2.2 Legal / Other Requirements</p> <p>2.2.1 Existing Arrangements</p> <p>Each company shall establish systems to identify and maintain knowledge of legal requirements and industry best practice in relation to environment protection.</p>	<p>2.2.1 (a) Formal systems are maintained for identifying and keeping up to date on legal requirements for environmental management and protection.</p> <p>(b) Company representatives participate actively in industry research and technical forums to keep up to date on best practice and share experience.</p>

Code Section/ Management Practice	Examples of acceptable implementation of management practice
<p>2.2.2 New Laws</p> <p>Each company shall work actively, alone or through selected organisations, and if possible, in consultation with other affected parties, to assist governments in developing public policies, legislation and regulations governing environment protection.</p> <p>2.3 Objectives</p> <p>Senior management of each company shall highlight the importance of environment protection by establishing appropriate overall objectives for the implementation of policy and in particular for emissions reduction and waste minimisation. Objectives shall include the regular evaluation of opportunities for source reduction and waste elimination, reduction, recycling and re-use; followed by appropriate action.</p> <p>2.4 Management Plans / Programs</p> <p>Each company shall develop an overall plan and specific programs for environmental management, in consultation with stakeholders and with regulatory authorities as appropriate. The plans and programs shall be appropriate to the potential impact of the environmental aspects and shall ensure that specific responsibilities and necessary resources are assigned to the teams / individuals involved. Plans shall include the management of issues related to historical practices. The plans and programs shall be structured so that progress towards the objectives can be measured.</p>	<p>2.2.2 (a) Company representatives participate actively in direct activities or co-operative industry processes to assist in developing appropriate new laws governing EP.</p> <p>2.3 (a) Statements of strategic direction and expectations make specific reference to the maintaining and improvement of environmental performance.</p> <p>(b) Overall goals for EP include targets for reduction in emissions and regular evaluation of source reduction / waste minimisation opportunities.</p> <p>(c) Overall expectations are translated into specific objectives for each significant operating unit.</p> <p>2.4 (a) Specific plans are developed for Environmental Management and performance for each operating unit and/or business area.</p> <p>(b) Plans are prepared, as appropriate, in consultation with regulatory agencies and other stakeholders; and reflect understanding of priorities of these groups.</p> <p>(c) Plans and programs allocate specific responsibilities and the required timing.</p>

Code Section/ Management Practice	Examples of acceptable implementation of management practice
<p>3 <u>IMPLEMENTATION</u></p> <p>3.1 Structure and Responsibility</p> <p>Each company shall establish a structure for the implementation for this Code, which includes defined roles, responsibilities and authorities for an overall co-ordinator and for individual operating area co-ordinators as appropriate. These co-ordinators shall interface closely with responsible line functions and supporting experts. Operators of Major Hazard Facilities should endeavour to integrate the implementation of this Code with their responsibilities under the National Standard and Code of Practice for Control of Major Hazard Facilities.</p> <p>3.2 Training, Awareness and Competence</p> <p>3.2.1 Information on Environmental Aspects</p> <p>Each company shall establish systems and procedures to have available complete and up to date information on significant environmental aspects of their activities; and the measures which are in place or planned to minimise their impact. Standards shall be established for plant product/packaging/labelling design, siting, equipment design, construction and operation, which not only comply with relevant legal requirements but are also aimed at best practice. Particular emphasis shall be placed on providing complete information on critical environment protection systems and devices.</p> <p>3.2.2 Job Skills and Descriptions</p> <p>Each company shall establish a system for the identification and documentation of the skills and knowledge necessary in each job to understand and control its environmental aspects; and for regular assessment of employee competency. Job descriptions shall include a clear statement of each person's functions, authorities and responsibilities.</p>	<p>3.1 (a) There is an overall coordinator and/or team for EM and EP and a network of area coordinators or equivalent, appropriate to size and complexity.</p> <p>(b) There are consultation processes between coordinators and other employees with support as required from environmental specialists.</p> <p>(c) Key environmental management system responsibilities are well defined and communicated.</p> <p>3.2.1 (a) Product/Packaging/Labelling Design and Material Safety Data Sheets (MSDS) incorporate appropriate information on control of environmental aspects.</p> <p>(b) Information arising from the identification and assessment (refer to Clause 2.1.1) of environmental aspects and relevant design information on environment protection measures is systematically retained and readily available to those with a need.</p> <p>(c) Company standards for design, construction and operation of environmental control measures not only comply with legal requirements but are aimed at industry best practice.</p> <p>(d) Special emphasis is placed on the purpose, design and operation of critical protection systems and devices.</p> <p>3.2.2 (a) Skills and knowledge required to carry out job functions in an environmentally responsible manner are identified and documented; at least for higher risk processes and significant environmental aspects.</p> <p>(b) Processes are in place for regular assessment of employee competency, especially on environment aspects of the job.</p> <p>(c) Job descriptions (or equivalent) are prepared at least for higher risk jobs, which include clear statements of each person's functions, authorities and responsibilities.</p>

Code Section/ Management Practice	Examples of acceptable implementation of management practice
<p>3.3 Communications</p> <p>3.3.1 New Facilities or significant changes</p> <p>As early as possible, appropriate information, consistent with the obligations under the Responsible Care Code for Community Right to Know, shall be given to employees, adjacent industries and the community regarding proposed new facilities or significant changes.</p> <p>3.3.2 Employee and Community Dialogue</p> <p>Each company shall establish procedures for active involvement of employees and community representatives in dialogue concerning environmental management issues; thereby addressing their concerns about potential environmental risks. If practicable, a community liaison panel shall be established or, failing this, other techniques used to ensure community input and suggestions. The community shall be actively involved, particularly in the event of such activities as a formal Environment Improvement Plan.</p> <p>3.3.3 Suppliers, Contractors and Toll Manufacturers</p> <p>Each company shall seek to ensure that suppliers, contractors and toll manufacturers apply relevant sections of this Code to their operations when supplying or handling company materials. This shall be done by supplying appropriate information and maintaining a regular dialogue with them; taking into account the environmental risk characterisation of the products involved.</p>	<p>3.3.1 (a) Information on the environmental aspects of new facilities or significant changes in existing facilities is prepared in a convenient and easily understood form.</p> <p>(b) The scope of information prepared is consistent with the RC Code of Practice for CRTK with the emphasis towards providing at least basic information as early as possible.</p> <p>3.3.2 (a) Ongoing consultation processes are operating actively to maintain face to face dialogue with employees and community representatives on environmental issues.</p> <p>(b) Processes are two-way, both providing information and encouraging input on concerns and recommendations for improvement</p> <p>(c) Processes are appropriately structured and documented, at least in accordance with legal requirements. A community liaison panel or equivalent is the preferred option.</p> <p>3.3.3 (a) Documented consideration takes place of the extent of information and consultation needed with on-site contractors and outside processors regarding the environmental aspects of their activities for the company.</p> <p>(b) Consultation regularly takes place, consistent with the level of risk.</p> <p>(c) Consultation and training includes assessment of individual contractor competency and commitment regarding environmental issues.</p> <p>(d) Particular emphasis is placed on formal induction programs for all on-site contractor employees.</p>

Code Section/ Management Practice	Examples of acceptable implementation of management practice
<p>3.3.4 Customers</p> <p>Each company shall seek to ensure that all customers apply appropriate sections of this Code to their use of company products and shall require customers to do so if there is a significant environmental hazard associated with the handling or the use of a particular product.</p>	<p>3.3.4 (a) Appropriate information on environmental aspects of products and packaging is provided to customers in a timely manner.</p> <p>(b) Appropriate consultation takes place with customers to encourage and assist them to apply appropriate sections of this Code.</p> <p>(c) Clear communications and consultation ensure that customers apply appropriate sections of this Code if there is a significant environmental hazard associated with the handling or use of a particular product.</p>
<p>3.4 Documentation</p> <p>Documentation of the environmental management program shall be of a detail sufficient to describe the core elements and their interaction and to provide direction on where to obtain more detailed information on specific programs / procedures, environmental controls and protective devices. Documentation may be in paper or electronic form.</p>	<p>3.4 (a) The documents necessary to set up and implement the practices required to meet this Code are identified and in place</p> <p>(b) Documentation is properly developed and maintained. The need for meeting the requirements of ISO14001 has been considered.</p>
<p>3.5 Document Control</p> <p>Each company shall establish and maintain procedures for controlling all documents so that they are readily available, regularly reviewed and updated; and only the current version is used. The intent of this requirement is to ensure effective operation and emphasis on environmental performance, not to establish a complex documentation control system.</p>	<p>3.5 (a) Documentation on the environmental management programs and EP controls/procedures is regularly reviewed and updated; and only the most up to date version is used.</p>
<p>3.6 Operational Control</p> <p>3.6.1 Operating Procedures and Criteria</p> <p>Each company shall ensure that documented instructions are prepared covering the environmental criteria necessary to meet legal or policy / target requirements; and the operating systems / controls / devices which are necessary to achieve proper control of potential environmental impacts. Management shall emphasise the importance of these instructions and ensure that they are followed. Procedures shall avoid simple dilution of wastes for the sole purpose of reaching a disposal standard.</p>	<p>3.6.1 (a) Documented procedures have been provided to cover situations where their absence could lead to deviations from specified environmental criteria.</p> <p>(b) Operating specifications and procedures state clearly the desired environmental outcomes and the operating criteria necessary to achieve these outcomes; at least meeting legal requirements.</p> <p>(c) Management provide adequate supervision or team leadership to ensure that required equipment is in operation and that operating procedures are understood and used consistently.</p> <p>(d) Simple dilution solely to achieve a discharge or disposal standard is not permitted.</p> <p>(e) Shutdown and decommissioning, when required, is carried out in accordance with specific procedures</p>

Code Section/ Management Practice	Examples of acceptable implementation of management practice
<p>3.6.2 Maintenance Programs</p> <p>Each company shall ensure that effective maintenance programs are in place to ensure correct operation of environmental protection equipment and particularly of critical control devices. Procedures shall include consideration of performing routine and non-routine maintenance activities without generating unacceptable environmental impact.</p>	<p>3.6.2 (a) Equipment, systems and devices necessary to control the environmental aspects are provided with maintenance programs at least equivalent to those established for critical operating and process safety reasons.</p> <p>(b) Maintenance procedures recognise the potential for generating unacceptable environmental impacts during the carrying out of maintenance jobs. Maintenance personnel are alerted to this risk and perform the work responsibly.</p>
<p>3.6.3 Waste Handling, Treatment and Disposal</p> <p>Each company shall make suitable arrangements or install, operate and maintain waste handling, treatment and disposal facilities for the wastes generated. They shall ensure that design, construction, operation, shutdown and post shutdown care of all facilities takes into account protection of air, surface water, soil and groundwater.</p>	<p>3.6.3 (a) Waste handling and treatment arrangements or facilities are approached in an identical manner to those needed for critical manufacturing operations, as detailed in this management practice.</p> <p>(b) Particular emphasis is placed on regulated wastes.</p>
<p>3.6.4 Selection and Briefing of Suppliers / Contractors</p> <p>Each company shall establish and maintain procedures to define and apply criteria to be used in the selection and use of suppliers / contractors involved in the environmental aspects of the business. They shall ensure that suppliers and contractors are thoroughly briefed on company procedures and requirements. In particular, each company shall require that waste management contractors both inside and outside Australia have appropriate licences and permits. Companies shall obtain confirmation that both exporting and importing countries approve the transfer of waste, prior to shipment, if and when waste is to be exported.</p>	<p>3.6.4 (a) Documented assessment criteria are developed and used before selecting and using suppliers/contractors involved in the environmental aspects of company activities.</p> <p>(b) Information and support is provided to suppliers and contractors to ensure that they conform to company procedures and requirements.</p> <p>(c) Selection and continued use of contractors includes the requirement for them to be aware of regulatory requirements and have the appropriate licences and permits.</p> <p>(d) There are policy and procedures in place to require confirmation that both importing and exporting countries approve the transfer of waste, prior to shipment, if and when waste is to be exported.</p>

Code Section/ Management Practice	Examples of acceptable implementation of management practice
<p>3.6.5 Transportation of Wastes / Dangerous Goods</p> <p>Each company shall ensure that the transportation of wastes qualifying as Dangerous Goods conforms, where applicable, to the requirements of the Australian Dangerous Goods Transport Code and any other appropriate regulatory requirements.</p>	<p>3.6.5 (a) Documentation for the transport of wastes at least meets relevant regulatory requirements.</p> <p>(b) Procedures and documentation are properly carried out on an ongoing basis.</p>
<p>3.6.6 Storage of Hazardous Wastes</p> <p>Each company shall ensure that hazardous waste in storage awaiting treatment or disposal is contained in a secure manner and monitored in a way which ensures protection of human health and the environment.</p>	<p>3.6.6 (a) Policy, facilities, procedures and demonstrated actions ensure that storage of wastes awaiting treatment and/or disposal is at least in accordance with legal requirements; and its condition and methods of containment are monitored appropriately.</p>
<p>3.7 Emergency Preparedness and Response</p>	
<p>3.7.1 Emergency Scenarios</p> <p>Each company shall ensure that foreseeable emergency scenarios such as those identified and addressed under the Manufacturing Process Safety Code are also analysed for potential environmental impact. The design and operation of the facility shall make provision for the handling of at least the high risk events.</p>	<p>3.7.1 (a) Identification and analysis of emergency scenarios takes specific account of potential environmental impact. All of the vulnerable areas, including air, water and land, have been considered.</p> <p>(b) Features are included in the design and operation of facilities to prevent or mitigate the potential environmental impact, at least of the high risk events.</p>
<p>3.7.2 Emergency Plans</p> <p>Formal emergency plans and procedures shall place special emphasis on the mitigation of the environmental impact of an accident or emergency situation. Plans shall address specifically at least the high risk events should control systems fail. Emergency Plans and procedures shall be tested regularly where practicable.</p>	<p>3.7.2 (a) Emergency Plans for the facility make specific provisions for mitigation of environmental impact should control systems fail.</p> <p>(b) Plan provisions are specific on actions required for at least the high risk foreseeable scenarios.</p> <p>(c) Plans include establishment of communications with the surrounding community, with emergency services and with appropriate regulatory agencies.</p>

Code Section/ Management Practice	Examples of acceptable implementation of management practice
<p>3.7.3 Emergency Equipment</p> <p>Each facility shall provide or have available appropriate and well maintained emergency equipment, specifically targeted at mitigating the environmental impact, at least for the high risk scenarios.</p> <p>3.7.4 Plan Review and Update</p> <p>A system shall be established for the regular review and update of Emergency Plans and procedures in the light of changes in facilities / processes and taking into account company experience with incidents / practice drills and broader industry experience.</p>	<p>3.7.3 (a) Appropriate emergency equipment is provided or available, at least for the high risk events having potential environmental impact; consistent with the analysis of the emergency scenarios.</p> <p>(b) Emergency equipment for environmental incidents is maintained to at least an equivalent standard to that for critical operating or process safety purposes.</p> <p>(c) Any contractors used apply equivalent standards.</p> <p>3.7.4 (a) Emergency Plans for environmental incidents are regularly reviewed in the light of changes in facilities/processes; and updated as appropriate.</p> <p>(b) Plan updating recognises any change in external factors, such as changes in community expectations or level of concern, changes in regulatory requirements.</p> <p>(c) Plan updates include modifications shown to be necessary following incidents/practice drills or broader industry experience.</p>
<p>4 PERFORMANCE MEASUREMENT AND CORRECTIVE ACTION</p> <p>4.1 Monitoring and Measurement</p> <p>4.1.1 Environmental Aspects</p> <p>Each company shall establish and maintain documented procedures to monitor and measure, on a regular basis, the key environmental aspects of its operations and activities. This shall include the recording of information to track performance and effectiveness of relevant operational controls.</p> <p>4.1.2 Quantitative Inventory of Emissions and Wastes</p> <p>Each company shall maintain proper records and quantitative inventory, updated at least annually, of all emissions and wastes generated and the method and location of waste treatment/disposal.</p>	<p>4.1.1 (a) Key environmental aspects are appropriately monitored and measured; consistent with the analysis of potential impact; and at least in accordance with any licence or other regulatory requirements.</p> <p>(b) Monitoring and measurement is comprehensive and frequent enough to allow subsequent analysis and tracking of performance and of the effectiveness of relevant operational controls.</p> <p>(c) Particular emphasis is placed on the tracking of persistent and/or bio-accumulative materials.</p> <p>4.1.2 (a) Resources and expertise are in place to establish and maintain a quantitative inventory of emissions and wastes; at least in accordance with legal requirements while also enabling the identification of waste minimisation opportunities.</p> <p>(b) The inventory includes accurate recording of the methods and location of any required waste treatment or, if necessary, disposal.</p>

Code Section/ Management Practice	Examples of acceptable implementation of management practice
<p>4.1.3 Monitoring Equipment</p> <p>Each company shall provide or have available appropriate and well maintained / calibrated monitoring equipment for key environmental aspects. Appropriate records of equipment maintenance and calibration shall be retained in accordance with company procedures.</p>	<p>4.1.3 (a) Environmental monitoring equipment/instrument systems are installed, operated and maintained to a standard equivalent to critical process safety systems.</p> <p>(b) Maintenance programs include records of equipment calibration and maintenance, generally equivalent to the standards required for Quality Assurance Systems.</p> <p>(c) Any contractors used apply equivalent standards.</p>
<p>4.1.4 Incident Reporting</p> <p>Guidelines for company procedures on incident reporting shall specifically encourage the reporting of incidents resulting in environmental impact, including near misses; even if no illness, injury or equipment damage is involved.</p>	<p>4.1.4 (a) Company Incident Reporting systems and procedures make specific reference to those incidents or near misses with potential environmental impact.</p> <p>(b) Management and team leaders encourage a commitment to environmental reporting, with a culture of “no blame”; by appropriate written and face to face communications.</p>
<p>4.1.5 Licences and other Legal Requirements</p> <p>Each company shall establish and maintain a documented procedure for periodically evaluating compliance with licence conditions, relevant environmental legislation and regulations.</p>	<p>4.1.5 (a) Responsible individuals/teams follow established and documented procedures to ensure the monitoring and periodic evaluation of compliance with all regulatory licence provisions or other legal requirements.</p>
<p>4.1.6 Contractor Assessments</p> <p>Each company shall conduct periodic assessments of the services and facilities provided by contractors to check compliance with legal and company requirements.</p>	<p>4.1.6 (a) Periodic assessments are carried out and documented on the compliance of contractor services and facilities with legal and company policy requirements.</p>
<p>4.1.7 Progress on Environmental Plans</p> <p>Each company shall review and report regularly on progress towards achieving the goals of environmental management and improvement plans.</p>	<p>4.1.7 (a) Individuals and/or teams periodically (at least annually) review and report on progress towards their goals for EM and EP.</p> <p>(b) These reports are available to senior management and other interested stakeholders.</p>

Code Section/ Management Practice	Examples of acceptable implementation of management practice
<p>4.2 Non-Conformance and Corrective Action</p> <p>4.2.1 Environmental Aspects</p> <p>Each company shall establish and maintain procedures for defining responsibility and authority for reviewing conformance of environmental aspects and for handling and investigating non-conformance.</p> <p>4.2.2 Incident Investigation</p> <p>All incident reports involving environmental impact or concerns shall be investigated by appropriately qualified people, preferably including the person / team making the report. A team approach is preferred with the emphasis on determining “root cause” and contributing factors; without assigning blame. The team should recommend corrective and/or preventative action</p> <p>4.2.3 Corrective/Preventative Action</p> <p>Procedures shall provide for corrective and/or preventative action to eliminate the causes of non-conformance or incidents; with appropriate follow-up. This shall include not only actual but also potential non-conformance and near misses</p> <p>4.3 Records</p> <p>4.3.1 Environmental Records</p> <p>Each company shall establish and maintain procedures for the identification, maintenance and disposition of environmental records; including at least maintenance / calibration of monitoring equipment, training and the results of audits and reviews. Records shall be retained in good order and accessible to those requiring the information.</p>	<p>4.2.1 (a) Appropriate individuals and/or teams are clearly assigned the responsibility and authority, according to documented procedures, for reviewing the conformance of environmental aspects with legal and company standards and for initiating investigation of non-conformance.</p> <p>(b) Investigation of environmental non-conformance is carried out by the responsible line function, with appropriate support from environmental specialists or equivalent.</p> <p>4.2.2 (a) Environmental incidents or near misses are investigated similarly to those impacting on employee health and safety or process safety; following documented procedures.</p> <p>(b) Investigation teams for environmental incidents include the person making the report plus other concerned stakeholders and, if appropriate, representatives from the relevant regulatory authority.</p> <p>(c) The investigation team does not aim to assign “blame”, but rather to determine “root causes” and recommend corrective action.</p> <p>4.2.3 (a) Prompt decisions are made, according to documented procedures, on the recommended corrective/preventative action on non-conformance of environmental aspects or incidents and near misses.</p> <p>(b) Individuals/teams responsible for the planned action carry it out in a timely manner, follow up regularly on progress and report status to management and concerned stakeholders, at least including all those involved in the investigation of the incident or reporting of the non-conformance.</p> <p>4.3.1 (a) Teams/individuals responsible for environmental management plans and programs have considered what records are necessary to enable the implementation of this Code and to meet legal requirements</p> <p>(b) Records are established and maintained in good order, at least in accordance with legal requirements.</p>

Code Section/ Management Practice	Examples of acceptable implementation of management practice
<p>4.3.2 Historical Practices</p> <p>Each company shall retain existing records of previous waste disposal actions and ensure that current and future disposal actions are recorded and records kept.</p>	<p>4.3.2 (a) The company has researched and brought together all existing records of previous waste disposal actions and archived them appropriately.</p> <p>(b) Current and future disposal actions are documented and properly recorded and retained.</p> <p>(c) Records are used for review to achieve continuous improvement.</p>
<p>4.4 System Audit</p> <p>Each company shall establish and maintain procedures for the regular audit of the operation and effectiveness of the systems and procedures for environmental protection; and to provide appropriate reporting to Management and to other stakeholders.</p>	<p>4.4 (a) A regular audit (at least every two years) takes place on the implementation and effectiveness of the agreed systems and procedures for Environment Protection, in accordance with this Code.</p> <p>(b) Audits may be internal and/or external, as appropriate.</p> <p>(c) The results of these audits are reported to the appropriate level of senior management.</p>
<p>5 MANAGEMENT REVIEW</p>	
<p>5.1 Review of Code Requirements</p> <p>The CEO (or equivalent) of each company or major business unit shall become familiar with and review the requirements of this Code with appropriate members of senior management.</p>	<p>5.1 (a) There is direct involvement by the CEO (or equivalent) in reviewing the requirements of this Code, at least with the overall Code Co-ordinator, but preferably with the implementation team.</p> <p>(b) Evidence exists that this process is repeated at least whenever new personnel become involved.</p>
<p>5.2 Review of Progress on Code Implementation</p> <p>At least every two years, the CEO (or equivalent) shall demonstrate commitment by actions including:</p> <ul style="list-style-type: none"> • Initiating a self- assessment on implementation of the Code. • Reviewing feedback from the assessment with senior management. • Initiating and approving agreed plans • Reviewing the results from implementation of the agreed plans. 	<p>5.2 (a) There is direct involvement by the CEO (or equivalent) in all of the activities listed in management practice 5.2.</p> <p>(b) The self- assessment covers at least all the items in these self- assessment criteria for the Code, preferably in the format to be used for reporting to PACIA in accordance with the agreed program</p> <p>(c) The agreed plans are endorsed formally by the CEO (or equivalent) and communicated widely.</p>

5.3 Program Review and Up-Grade

The overall Environment Protection program and compliance with this Code shall be reviewed and the program up-graded at least once every two years.

5.4 Industry Performance Profiles

It is important that the industry compile and report on overall HSE performance, including code compliance. To this end, the CEO shall ensure that the results of the Self-Assessment are reported to PACIA in accordance with the agreed format and timetable. The CEO shall also ensure that the company responds to PACIA surveys on other performance indicators, as decided by the PACIA Board. The CEO shall confirm agreement for the company data to be included in PACIA public reporting.

- 5.3 (a) A system is in place for formal assessment of system audit findings and appropriate corrective action
- (b) In addition to the regular systems reviews, evidence exists of a periodic overview of the plans and Code compliance with regard to strategic direction and policy consideration, specifically targeted at upgrade of the plans and for input to PACIA on improvements to the Code.
- 5.4 (a) Self-assessments on the Environment Protection Code are completed and forwarded to PACIA within the agreed time frame.
- (b) Company response to all other PACIA surveys on Process Safety related performance indicators is completed within the agreed time frame.
- (c) Formal CEO agreement for inclusion of company data in public reporting of industry performance is given.