

The Michigan Department of Environmental Quality (MDEQ), Environmental Science and Services Division (ESSD) created this manual to provide small and medium-size businesses with usable guidance for developing environmental management systems. This manual provides the necessary information for creating and implementing a Clean Corporate Citizen (C3) EMS.

The manual was written by STS Consultants, Ltd., Lansing, Michigan, in cooperation and consultation with ESSD staff.

STATE OF MICHIGAN



DEPARTMENT OF ENVIRONMENTAL QUALITY



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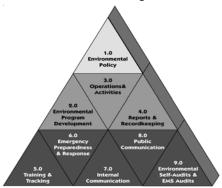
### **How To Use This Manual**

This manual provides a detailed road-map for preparing and implementing an EMS consistent with Michigan's Clean Corporate Citizen (C3) Program. Each Section addresses a different but essential element of an EMS and offers practical guidance and examples for the elements presented. At the end of each section is a worksheet for you to use to develop your EMS and a checklist for Section accomplishments.

The manual is designed as a workbook. You do not need to read the entire manual before beginning. You should start developing your EMS in the first chapter. At the end of each chapter you should have developed the procedures and records needed to begin implementation of that element of the EMS. You can work through the manual at your own pace.

To help you keep track during development of your EMS, each section/element is depicted in one of nine triangles within the EMS pyramid, beginning with the Environmental Policy and ending with Auditing.

The C3 EMS Pyramid



In the left column of each page look for "**Keys** to citations of laws and regulations, and highlights and helpful hints to assist you with establishing and implementing your EMS.





Throughout the manual you also will see a "tool" symbol (see lower left) indicating an appendix that contains information relative to the information on that page. The appendices containing the reference materials (such as laws, a glossary of terms and other documents) are located at the back of the manual.







#### EMS:

- Systematic
- Impact identification
- Impact control
- Monitoring

A successful EMS emphasizes company-wide commitment, communication, and continuous improvement

# What Is An Environmental Management System?

An Environmental Management System (EMS) is a systematic, dynamic program integrating environmental management with facility operations. An EMS calls for the development and implementation of procedures to identify, control and monitor potential environmental impacts. The process consists of:

- Overall environmental policy and management commitment,
- An identification of potential environmental impacts,
- Setting goals to control and/or reduce impacts.
- Development and documentation of procedures to control impacts,
- Monitoring of impacts to determine success of impact control, and
- Ongoing review of procedures and records and correction of problems identified by and within the EMS.

There are a variety of Environmental Management Systems developed by different organizations for general and specific groups of users. For example, the International Organization for Standardization (ISO) offers its 14001 EMS for all types of businesses, the Chemical Manufacturers Association (CMA) created Responsible Care® for its member companies that make, handle or transport chemicals, and the European Union (EU) provided The Eco Management and Audit Scheme (EMAS) for companies in EU member countries.

A successful EMS emphasizes company-wide commitment and communication. Commitment must begin at the top and must include all levels of the company and all staff members. Communication should incorporate that commitment and should include all goals, practices and accomplishments of the EMS.







#### Other Business Benefits from an EMS:

- Improved corporate image,
- Improved company performance,
- Lowered risk for loans and insurance.

## Why Have An Environmental Management System?

An environmental management system (EMS) offers a number of tangible benefits to just about every size and business type. These include:

- Increased employee environmental awareness and ownership,
- Increased efficiency or reduced costs,
- More efficient use of resources,
- Improved and more easily maintained regulatory compliance,
- Reduced liability by improved compliance and decreased environmental impacts,
- Continuous improvement,
- Development of environmental stewardship company wide,
- Market/customer requirement for business standardization in some industries.

#### Why Base Your EMS on C3 Guidance?

The Michigan Department of Environmental Quality (MDEQ) created the Clean Corporate Citizen (C3) EMS to provide guidance for companies to integrate facility operations and environmental compliance. An outline of the framework that makes up the C3 EMS is included in Appendix A for easier understanding of the system.

This EMS Guidance Manual was created as part of Michigan's C3 Program and emphasizes environmental responsibility and performance. The C3 program was initiated in 1996 to promote and recognize the efforts of companies that voluntarily make environmental responsibility and improvement a part of their everyday operations. Companies that are accepted in the C3 Program are recognized by the State as being environmentally responsible and are seeking continual environmental improvement. As a result, C3 Program participants are eligible for certain benefits, such as recognition by their community, elected officials, the media, and the Michigan Department of Environmental Quality (MDEQ). A C3 designee also receives special MDEQ consideration for:

- air permitting,
- wastewater permitting,
- groundwater permitting, and
- special considerations offered for storage tanks...









Clean Corporate Citizen Program Rules [R 324.1501 to R 324.1511].

## **C3 Program Focus**

The C3 Program has three primary requirements:

#### 1) Environmental Management System

An EMS is the part of an overall facility-specific management system addressing environmental concerns through:

- Corporate commitment,
- Allocation of resources,
- Assignment of responsibilities,
- Standardization and documentation of procedures, and
- On-going evaluation of practices, and policies.

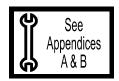
#### 2) Pollution Prevention (P2)

P2 is a combination of practices, methods and corporate philosophies that effectively result in source reduction, reuse or recycling of materials that would otherwise be waste. P2 can minimize pollution, increase worker safety, protect natural resources, and lower energy use. (Appendix B contains a more detailed description of P2.)

#### 3) Environmental Compliance

Past and continued environmental compliance is a prerequisite of C3. Specific requirements for environmental compliance status in C3 include:

- A statement of compliance,
- No criminal conviction in the past 10 years,
- No civil fine or penalty greater than \$10,000 in the past 3 years,
- No substantial endangerment,
- No administrative penalty greater than \$25,000 in the past three years,
- Correction or resolution of any cited violation, and
- Compliance with local government requirements.









It should be noted that if you complete a C3 EMS you will not necessarily be eligible for certification under ISO 14001 EMS. Extra work will be required to meet the requirements of the ISO 14001 Standard.

## **C3 Application Process**

When you have completed your EMS you may decide to apply for the Clean Corporate Citizen Program. To qualify for the program you must also practice P2 and have a good environmental compliance history. Appendix C contains the application form and information describing the application process.

You can use C3 guidelines and this Manual for implementing an EMS even if you do not intend to apply for C3 designation.

During the past few years, more and more companies have implemented an ISO 14001 EMS. This EMS is a very inclusive program, and when a company is certified under the ISO Standard, it meets all the requirements for an environmental management system required for application to the Clean Corporate Citizen Program. The C3 EMS is similar to the ISO 14001 EMS, but may not meet all the requirements for certification under the ISO 14001 Standard.

To compare the requirements of the C3 EMS with those of the ISO 14001 EMS, please review the table in Appendix D.

