Northern Micro

## Environmental Management System

By Northern Micro Quality Department

Property of: Northern Micro Inc.

3155 Swansea Crescent

Ottawa, Ontario K1G 3J3

ph: (613) 226-1117

fx: (613) 226-3810





## Contents

| Northern Micro Corporate Environmental Policy and Philosophy       | 1  |
|--|----|
| Northern Micro Environmental Manual Certification of Manual Status | 2  |
| Environmental Manual Review, Amendment and Reissue                 | 3  |
| Distribution   |    |
| Introduction   | 4  |
| Scope  | 4  |
| Reference Documents  |    |
| Definitions  | 5  |
| Environmental Management System                                    | 6  |
| General  | 6  |
| Environmental System Documentation                                 | 8  |
| Management Responsibility  | 10 |
| Responsibility and Authority                                       | 11 |
| Environmental Policy   | 13 |
| Planning   | 14 |
| Management Review  | 15 |
| Resource Management  | 16 |
| Operational Control  | 16 |
| Emergency Preparedness and Response                                | 16 |
| Checking   | 17 |
| Monitoring and Measurement   | 17 |
| Analysis of Data   | 17 |
| Control of Records   | 18 |
|  |    |



## Northern Micro Corporate Environmental Policy and Philosophy

The purpose of this manual is to outline the policies and procedures, which make up the Northern Micro Environmental Management System. This system is implemented by the Department of Corporate Quality, under the direction of the Management representative and has the full support of the company President and the Management Team.

Northern Micro is dedicated to providing computer products and services that meet or exceed the quality, operational performance and life cycle cost requirements of our customers. In an effort to continually improve our system we have implemented our Environmental Management System (EMS), which also meets the requirements of the ISO-14001:2015 Environmental Management System.

At Northern Micro we strive for continuous improvement of our environmental system by incorporating the best possible practices through our waste management and IT products recycling initiatives.

We understand that the achievement of reducing the amount of pollution and waste into our natural environment must rely, to a large extent, on each individual member of the corporate team. All employees, with the full support of management, must personally contribute to the goal of reducing, reusing and recycling our products and the waste we produce.

Northern Micro is committed to continually reducing the amount of Pollution created in its manufacturing plant by offering recycling solutions for IT equipment and by properly reducing, reusing and recycling its packaging material. Northern Micro maintains an Environmental Management system that it is proud of and one that complies with all of its legal and other defined environmental requirements.

By promoting this statement throughout the company, Northern Micro ensures the cooperation of all departments involved throughout the warehousing servicing and manufacturing areas in the company. Documented procedures are used as a guide in maintaining this control.

Herman Yeh President Northern Micro Inc.



# Northern Micro Environmental Manual Certification of Manual Status

As this manual is a controlled document. We hereby certify that this Quality Manual is of most current status. The information contained within both, accurately and completely describes the Environmental Management System in use at the following locations:

Northern Micro Inc. 3155 Swansea Crescent Ottawa, Ontario K1G 3J3

We also certify that these systems are in compliance with the provisions and requirements of International Standards ISO 14001-2015 Environmental Management Systems - Requirements

Richard Perkins Quality Management Representative, Northern Micro 2 May 2016

Herman Yeh President, Northern Micro 2 May 2016



## **Environmental Manual Review, Amendment and Reissue**

Amendments to the Northern Micro Environmental Manual are to be made on an as needed basis. Amendments and re-issues of this Manual may be made only by the Quality Department.

The Master copy of the Environmental Procedures is an on-line version, and is to be referred to in case of discrepancy. The date of the on-line manual is to be considered the correct issue, and all documentation will correspond to the dates indicated on file in the Northern Micro System.

The Northern Micro Environmental Management System is audited on an annual basis to ensure that all amendments have been fully integrated into its Management System. This manual is verified and reissued with a new Certification of Manual Status annually. Changes are maintained as part of Document Control.

Amendments to the manual take the form of revised procedures. The "most current" status of the manual can be verified by comparing archived copies of the manual.

## Distribution

This Environmental System Manual is the primary document defining the Environmental Management System at Northern Micro. The Quality Management Representative controls its distribution and revision. Northern Micro offers information-only copies to interested customers.

## Introduction



This manual describes the Northern Micro Environmental Management System (EMS). The EMS is the first level guide to implementing the corporate Environmental policy and procedures. The System consists of an authorized set of documentation, including Environmental Policy, procedures, and records that document activities that are used for the effective management of the system.

The Environmental Management System is designed to meet the requirements of the ISO 14001:2015 Environmental management systems-Requirements

## Scope

The Environmental Management System assures that Northern Micro computer products, their manufacturing, their delivery, and their recycling are processed under the control of the system. The System is designed to adhere to ISO 14001:2015 standard. The system assures conformance to legal requirements and the company's environmental policy and provides objective evidence of effective control.

This Environmental Manual includes Northern Micro's Environmental Policy, identifies management responsibilities, and references the procedures of Northern Micro, and supporting Environmental Management System documents and records. The system commits to continual improvement and ensures that interested parties are considered. We provide leadership to manage the system and communicate it throughout our organization. The system complies with all regulatory requirements and is driven by the environmental objectives defined by management. The system is planned, implemented and reviewed while considering the context of our organization and all significant aspects are reviewed. Effectiveness is measured through internal audits, external audits, CAR and management review.

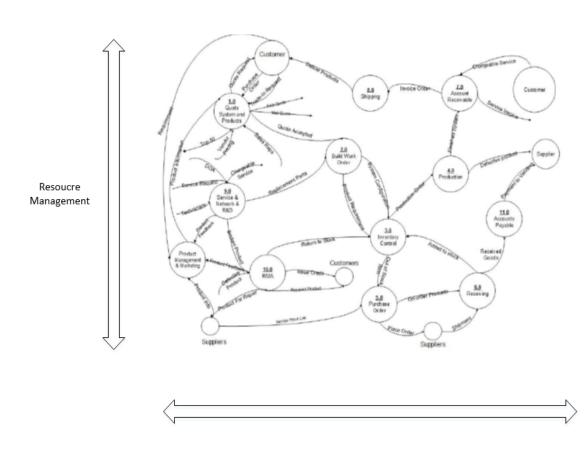
## **Reference Documents**

These documents provide details, definitions, and descriptions of the Environmental Management System procedures, and must be used in the latest version:

- Environmental Objectives
- Environmental Manual (this document)
- Control of Documents Procedure
- Control of Records Procedure



- Internal Audit
- Corrective Action
- Corporate Responsibility Report



Internal Audit, External Audit, Management Review

#### **Business Process**



## Definitions

The acronyms used in this manual are described in this section.

| EMS  | Environmental Management System      |
|------|--------------------------------------|
| ISO  | International Standards Organization |
| NM   | Northern Micro                       |
| NMIS | Northern Micro Intranet System       |
|      |                                      |



## **Environmental Management System**

#### General

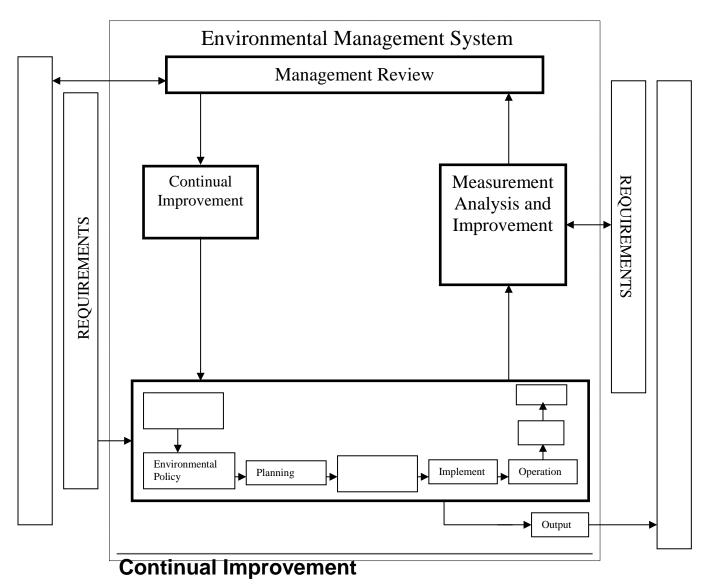
NM has established and maintained a documented Environmental Management System to ensure conformance to requirements. This System is used to minimize the environmental impact of Northern Micro as an organization. It also allows us to minimize the waste that Northern Micro produces and recycles.

The Environmental Management System has been documented and includes a formal documentation structure and document control process to support its operation. The Environmental Manual, combined with the Procedures and Environmental Objectives constitute the Environmental Plan for Northern Micro. Northern Micro fulfills the requirements of ISO 14001:2015 and Northern Micro's Environmental Management System Procedures by following this plan. Northern Micro Environmental Management System is defined in the following documents and the following processes:

- Environmental Manual
- Procedures
- Environmental Objectives
- Corporate Responsibility Report
- Records

Northern Micro currently outsources its processes that affect the proper recycling of computers and IT equipment.







The Environmental Management System is periodically assessed via internal and external audits and Management reviews. All employees are responsible for maintaining the EMS and applying continuous improvement. The Management representative is responsible for monitoring and auditing the Environmental Management System.

## **Environmental System Documentation**

Northern Micro personnel are required to understand Environmental Management System documentation, and it must at the same time fulfill the requirements of the ISO 14001:2015 standard. To this end, Northern Micro has developed a structure for the Environmental Management System, based on the specifications of ISO 14001:2015, that is easily understood and that employees can learn easily in training sessions. The Environmental Management System is based on the following documentation:

- Environmental Manual
- Objectives
- Procedures
- Environmental Records
- 1. The Environmental Manual is a high-level address of the elements of ISO 14001:2015 and how Northern Micro meets them. Included are environmental policy, organizational structure, and management responsibilities
- 2. Environmental Objectives outline the goals of the environmental system at Northern Micro. These goals have been communicated to all staff and are based on the environmental policy.
- 3. Environmental Management System procedures are the procedures that are used by the service department and the production departments within the company.
- 4. Environmental Records are the output of the working EMS. They demonstrate the effectiveness of the System and



provide a benchmark against which we can measure continuous improvement.

5. Corporate Responsibility Report is a controlled document which measures NM's carbon footprint and other EMS information.

#### **DOCUMENTATION REQUIREMENTS**

#### General

Northern Micro's Environmental Manual, Environmental Management System Procedures, and any necessary external documentation as required, shall be authorized, controlled and maintained. All documents shall be periodically reviewed for continuing correctness and effectiveness and updated if necessary.

Each employee is responsible for the adherence to the requirements of the Environmental Management System at his/her area, and that the documented procedures conform to the requirements and are used as written.

#### Document and Data Approval and Issue

Northern Micro has established document control procedures for controlling each type of Environmental Management System document that requires control. This procedure addresses the review, approval, control, revision, and archiving of Management System documents.

These procedures are detailed in Control of Documents Procedure.

These procedures assure that anyone in NM can initiate a change in documentation or new documentation. Changes to documentation are approved by the functions issuing the initial document. This is coordinated through the manager who owns the document.

These procedures ensure that the most current version of the documentation is available where the process is performed.

The Management representative and the department Managers coordinate a master list of all Quality Management System documents. This list is located on Northern Micro's Intranet (NMIS). Documents will be reviewed on a yearly basis. More frequent reviews may be scheduled.



#### **Documentation and Data Changes**

Any changes to documents or new documents can be initiated by anyone in Northern Micro. Changes shall be documented by the reviewing functions, and those changes shall be reflected in all concerned documentation.



## **Management Responsibility**

The quality of NM products is established and maintained by implementing quality assurance and quality control activities at all levels of the organization. The Management representative has been assigned, by the President, the task of guiding Northern Micro throughout the process. In addition, the company's management is responsible for:

- 1. Establishing and communicating the Environmental Policy throughout the company
- 2. Defining and documenting the responsibilities relating to the Environmental Management System.
- 3. Conducting formal reviews of the Environmental Management System to share results of audits and to ensure the continuing conformance and effectiveness of the Environmental Management System.
- 4. Continuing to make improvements with respect to the EMS
- 5. Ensuring that appropriate resources are available and qualified to perform activities in accordance with the Environmental Management System.
- 6. Ensuring that Environmental objectives are established
- 7. Ensure that Legal and other requirements are met with the aim of enhancing the Environmental Management System.
- 8. Ensuring that the Corporate Responsibility Report is kept updated.

## **Organizational Structure**

The organizational structure of those functions, which may impact on the EMS, is described in the attached organizational chart. Each major function of the organization is positioned so as to allow the effective implementation of the Quality Management System. The Management representative has the necessary authority to resolve environmental issues and the organizational freedom of reporting directly to the President, so as to alleviate conflicts with other considerations.



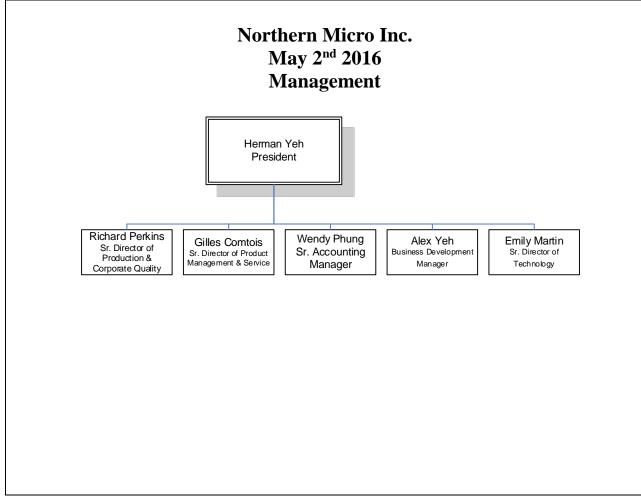


Figure 1 - NM Management Team

#### **Responsibility and Authority**

The environmental system is the responsibility of each employee of Northern Micro. The following are specific quality-related responsibilities of Northern Micro as they relate to the organization chart.

#### President

Oversees all company operations. Co-ordinates Management staff to attain company goals. Oversees the reviews of Corrective and Preventive actions with the Management Representative at



Management meetings to ensure effective actions and follow-up are completed. Acts as the ultimate authority in the event of dispute in Environmental issues. Ensures that appropriate resources are available to all departments to complete corporate functions, including the ability of departments to hire or train personnel for all activities, including performance of work, verification of activities, and internal quality audits.

#### Senior Accounting Manager

Oversees financial operations at Northern Micro. Co-ordinates financial staff to close company books accurately. Provides accurate and timely financial information to assist the President in making corporate decisions.

#### **Management Representative**

Oversees Quality and Environmental Management Systems. Verifies the implementation and follow-up of solutions. Schedules internal audits and provides reporting and follow-up to the management team as a basis for improvement of the Quality and Environmental Management System. Top management is accountable for all aspects of Northern Micro's ISO 14001:2015 certification.

#### Senior Director Production & Corporate Quality

Handles daily Production operations in accordance with ISO 9001:2015 and ISO 14001:2015 guidelines and Northern Micro Management System Procedures. Verifies the implementation and follow-up of solutions.

#### **Senior Director Product Management**

Co-ordinates Marketing, oversees Purchasing activities. Ensures purchases are made in accordance with ISO 14001:2015 guidelines and Northern Micro Environmental Management System Procedures, and that suppliers are evaluated. Co-ordinates marketing activities to ensure NM has a broad range of available promotions



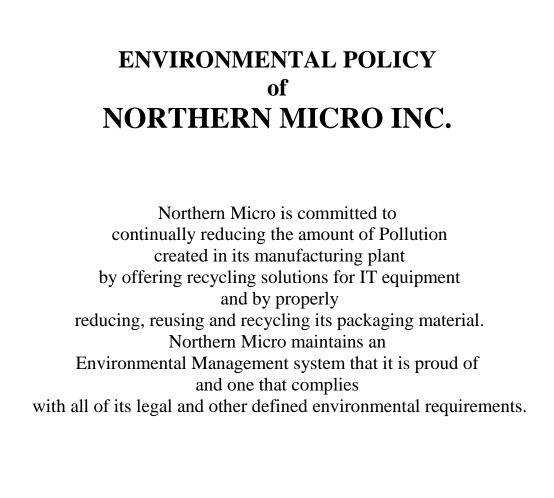
Handles service operations in accordance with ISO 14001:2015 guidelines and Northern Micro Quality and Environmental Management System Procedures. Oversees activities of the Customer Support Group. Develops and authorizes procedures for Technical Services and Support.

Northern Micro Management is responsible for promoting the Environmental Policy and for ensuring that our environmental requirements and obligations are met. Explanation on how Northern Micro does this is covered in its Environmental Aspects and its Legal and other Requirements procedures.

## **Environmental Policy**

Northern Micro's Environmental Policy has been issued by the President of Northern Micro. It has been communicated to all employees, has been posted in various strategic locations throughout Northern Micro, and is available for viewing on the NMIS. Northern Micro's Management team reviews the policy at Management reviews to ensure continued suitability.





President

2 May 2016

## Planning

Northern Micro has an Environmental Plan that consists of the Objectives, an Environmental Manual and procedures. By following the Environmental Manual and the procedures, and by striving to meet



the Environmental Objectives, Northern Micro is able to comply with the requirements of the ISO 14001:2015 specifications. If it becomes necessary to implement any procedures or policies that are not currently in Northern Micro's Environmental Plan, then a Plan using the guidelines for planning as per the ISO 14001:2015 guidelines shall be used.

#### Management Representative

The President has appointed Director, Production as the Management Representative for the Environmental Management System. All Management has defined authority and responsibility for ensuring that the Northern Micro Environmental Management System complies with the requirements of ISO 14001:2015, and that the Environmental Management System is maintained, effective and continually improved.

These responsibilities are carried out through periodic Management System audits, and by completing the appropriate corrective actions. Additional responsibilities include:

- Ensuring the efficiency of the Environmental Management System is continuously improved
- Training Northern Micro personnel in regard to the EMS.
- Maintaining registration to ISO through internal and external audits, and monitoring corrective actions resulting from those audits to ensure they are eventually closed out and effective.
- •

#### Internal and External Communication

Northern Micro Management ensures that there is a communication process in place regarding the effectiveness of the environmental management system. This is done in many ways. Through the Northern Micro Intranet, email, departmental meetings and verbally to name a few. Northern Micro does not communicate externally about its environmental aspects. Any questions, documentation or responses to external parties will be the responsibility of the management representative.



## **Management Review**

Each Process of the Environmental Management System shall be reviewed annually, as a minimum, to assess and demonstrate the effectiveness of the system.

If necessary, additional reviews may be held. The Management representatives schedules and conducts reviews of the Environmental Management System with the NM management team in attendance. The following topics are available for address during these review meetings to help ensure compliance with the ISO 14001:2015 standard:

- Environmental policy
- Objectives (measured quarterly)
- Results from internal and external audits, and the effectiveness of their corrective and preventive actions
- Improvements to the Environmental Management System
- Follow up of previous environmental reviews.
- Changes that could affect the environmental management system.
- Communications from external interested parties, including complaints
- Corporate Responsibility Report

The Management representative is responsible for maintaining the meeting notes from Management reviews, and any decisions or agreed-upon actions captured during reviews.

The management reviews will produce decisions and actions related to:

- Improvements of the effectiveness of the Environmental Management System and its processes
- Possible changes in the environmental policy or objectives



#### **Resource Management**

Northern Micro Management is committed to having a trained and effective team in order to implement and maintain the environmental management system and continually improve its effectiveness. Managers are responsible for determining training needs of their personnel, based on their qualifications, education, and the qualification requirements of individual employment positions as Management determines them for future needs fulfillment

## **Operational Control**

Northern Micro plans those operations that are associated with the identified environmental aspects consistent with its environmental policy, objectives and targets. The details of this plan are documented in the Operational Control Procedure.

## **Emergency Preparedness and Response**

Northern Micro does not produce a product where the product itself or any byproduct is harmful or poses any risk to any employees or the environment. There is a documented Emergency preparedness and response procedure.



## Checking

## **Monitoring and Measurement**

The Management Representative or his delegate shall audit the environmental management system processes to verify the effectiveness of the Environmental Management System. Audits shall be conducted by trained auditors independent of the procedures and processes to ensure requirements are defined precisely, accurately, and are appropriate to achieve the required results.

Identified non-conformance shall be brought to the attention of NM management and corrective actions completed in accordance with the *Corrective and Preventive Action Procedure*.

Audits shall be planned, prioritized, scheduled, performed and recorded and followed up in accordance to *Internal Audit Procedure*, or with applicable legal requirements.

The audit results shall be reviewed at the top management level, and maintained as part of the Environmental Records. These records shall be made available to any personnel, and to the customer, if required by contract.

In addition to performing internal audits on the EMS, Northern Micro Management ensures that it evaluates compliance with other requirements to which it subscribes.

## Analysis of Data

Northern Micro collects and analyses appropriate data to demonstrate the suitability and effectiveness of the Environmental Management System and to evaluate where continual improvement can be made.

## **Continual Improvement**

Northern Micro is committed to continually improving the effectiveness of the environmental management system through the use of the environmental policy and environmental objectives, analysis of data, audit results, corrective and preventive actions and the management review.

## **Corrective Action and Preventive Action**

Corrective and preventive actions are initiated as a result of:

• Detecting nonconformity(ies) and taking action to mitigate their environmental impacts



- Non-conformance identified during audits of the Environmental Management System
- Analysis of work processes, environmental records as part of the preventive action mechanism

The Director, Corporate Quality shall provide follow-up to ensure that the necessary corrective or preventive actions have been taken and that they are effective.

The corrective and preventive action process is described in the Corrective and Preventive Action Procedures respectively.

## **Control of Records**

A quality record is a legible document that is created as a result of a Management System procedure or process. Quality records are stored in an environment to protect from deterioration, damage or loss. Hard copy records are stored in a clean and dry environment. Electronic records are backed-up regularly and stored appropriately. Records are retained in accordance with generally accepted accounting procedures and legal requirements. These records are available for customer viewing upon request.

*Control of Records Procedure* details the identification, storage of records, disposition of and retention times for records.

## Legal and other Requirements

Northern Micro EMS system complies with all legal and other requirements.

## **Evaluation of Compliance**

Northern Micro's EMS is evaluated annually or as required.