



INTEGRATED MANAGEMENT
SYSTEM MANUAL
“IMS”

Based on **ISO 9001:2008** and
ISO 14001:2004 Standards

Approved by Robert Melani

Issue Date 30 December 2009

Issued To Management Representative

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Controlled issues of the IMS Manual may not be copied.



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SECTION I

General and Quality Management System

SECTION /
CLAUSE TITLE

1.0 SCOPE

Flexi-Hinge® Valve Company, Inc. (Flexi-Hinge®) uniquely designs, engineers and supplies cost-effective, high quality, reliable and environmentally safe pipeline components to Original Equipment Manufacturers, fire apparatus companies and general industries worldwide.

4.1 Exclusion: ISO 9001:2008, all clauses of section 7.5-2.2

Justification: Flexi-Hinge® does not provide the service of post-sale servicing of parts.

4.2 GENERAL REQUIREMENTS

- a. Flexi-Hinge's integrated management systems (IMS) has been established, documented, implemented and maintained as a way to continuously improve the performance of our organization. The IMS Manual describes our quality and environmental policies and general company-wide structure and procedures for maintaining an IMS, meeting the requirements of **ISO 9001:2008** and **ISO 14001:2004**.
- b. Flexi-Hinge's IMS is based upon a "process approach" to management, demonstrated by our commitment to:
 - 1. Identify the processes needed for the effective operation of our IMS and their application throughout the organization (see each Management System Procedure [MSP]);
 - 2. Determine the sequence and interaction of our IMS processes;
 - 3. Determine the criteria and methods needed to ensure the effective operation and control of these processes;
 - 4. Ensure the availability of resources and information necessary to support the operation and monitoring of these processes;
 - 5. Monitor, measure and analyze these processes; and



6. Maintain outsourced processes as an integral part of the management system.
- c. Flexi-Hinge® manages these processes in accordance with the requirements of **ISO 9001:2008** and **ISO 14001:2004**. Each MSP Process Map provides a global view of the process linkages described in our IMS.
- d. Flexi-Hinge® maintains control over all **outsourced processes** that affect product conformity, including the type, nature and extent as outlined in each MSP. Special attention is paid to this to ensure that Flexi-Hinge® meets all customer regulatory and statutory requirements.

4.3 DOCUMENTATION REQUIREMENTS

4.3.1 General

- a. Flexi-Hinge® maintains a documented IMS as a means to ensure that processes, products and services conform to specified requirements and to minimize the environmental impacts of our activities.

Level 1: Integrated Management System Manual

The IMS Manual includes Flexi-Hinge's quality and environmental policies, quality and environmental objectives and the general company-wide structure, scope and methods for maintaining the IMS, including application of requirements. The IMS Manual references the related IMS procedures that are followed to meet specified policies and approaches.

Level 2: Management System Procedures (MSP)

Documented procedures are used to specify **who** does **what**, **when** it is performed and **what documentation** is used to verify that the quality or environmental activity was executed as required. Procedures reference related work instructions, records and forms.

Level 3: Work Instructions (MSWI)

Work instructions are used by Flexi-Hinge® to detail **how** particular tasks are to be performed where the absence of such instructions would adversely affect quality or have an impact on the environment.

Level 4: Records and "Forms"

Records are used by Flexi-Hinge® to provide assurance and evidence that the required product or service quality was achieved and that the company's IMS has been implemented correctly.

Level 5: External Documents

Flexi-Hinge® identifies and controls those external documents needed to plan and operate the entire system (MSP 5.5-2).



4.3.2 IMS Manual

- a. The IMS Manual is the cornerstone of Flexi-Hinge's IMS.
- b. The IMS Manual is a controlled document that is reviewed and approved by top management.

4.3.3 Control of Documents

- a. Flexi-Hinge[®] identifies and controls documents and data in any media that relate to the requirements of **ISO 9001:2008** and **ISO 14001:2004**.
 - 1. Approval of documents for adequacy by authorized employees prior to issue.
 - 2. Periodic review and revision of documents, including the processes for re-approval and re-issuing of documents. (Periodic review of documentation is also addressed in **Management Review**.)
 - 3. Identification of changes to and the current revision status of documents, including approval dates and/or dates of revision.
 - 4. Tracking and controlling distribution of applicable documents to ensure that current/relevant versions are available at locations where related activities are performed.
 - 5. Legibility and ability to easily retrieve IMS documents.
 - 6. Identification and control of documents originating externally to Flexi-Hinge[®].
 - 7. Identification and/or destruction of obsolete documents at all points of issue and points of use to prevent their unintended use.
 - 8. Orderly maintenance of documents and retention for a specified period.
 - 9. Establishing and maintaining methods and responsibilities for the creation and modification of various types of documents.
- b. Records are a special type of document and are controlled at Flexi-Hinge[®].



4.3.4 Control of Records

- a. Flexi-Hinge's IMS is documented by the use of quality and environmental records. Records are valuable to Flexi-Hinge® in the following ways:
 1. They provide evidence and assurance that the quality and environmental requirements for the product/service were satisfied and demonstrate conformance of the management system.
 2. They show the degree of implementation and success of our IMS.
 3. They provide a basis for measurement and feedback essential for continual improvement.

- b. Flexi-Hinge® has the following policies regarding records:
 1. Records shall be legible, clearly identified and traceable to either the product or service involved or to the management system activity they document.
 2. Records shall be filed, indexed, and maintained in a manner that provides for ready access or retrievability and prevents loss, damage or deterioration.
 3. Retention times shall be defined for all quality and environmental records.
 4. Records shall be an accurate and truthful representation of actual events, documented in a timely manner.
 5. All quality records are password protected.
 6. Employees involved in collecting data for records will be provided instructions and/or training to the degree necessary to ensure that the records are generated correctly.
 7. Records shall be made available for review by the customer (or the customer's representative) when specified in the contract.



4.4 Planning

4.4.1 Environmental Aspects

The Environmental Aspects Excel Spreadsheet is reviewed at least twice a year as per Environmental Management Review. The Management Representative ensures that it is up-to-date and that aspects with significant impacts are considered in setting environmental objectives and identifying capital projects.

4.4.2 Environmental and Other Requirements

Review and evaluation of legislation and other requirements, as appropriate to the activities at the single company site in Millcreek, are handled by means of environmental work instructions where legislation is directly related to an aspect of the process or other activity conducted by Flexi-Hinge[®]. This process or activity will be considered as being significant and so recorded in the environmental Excel Spreadsheet.

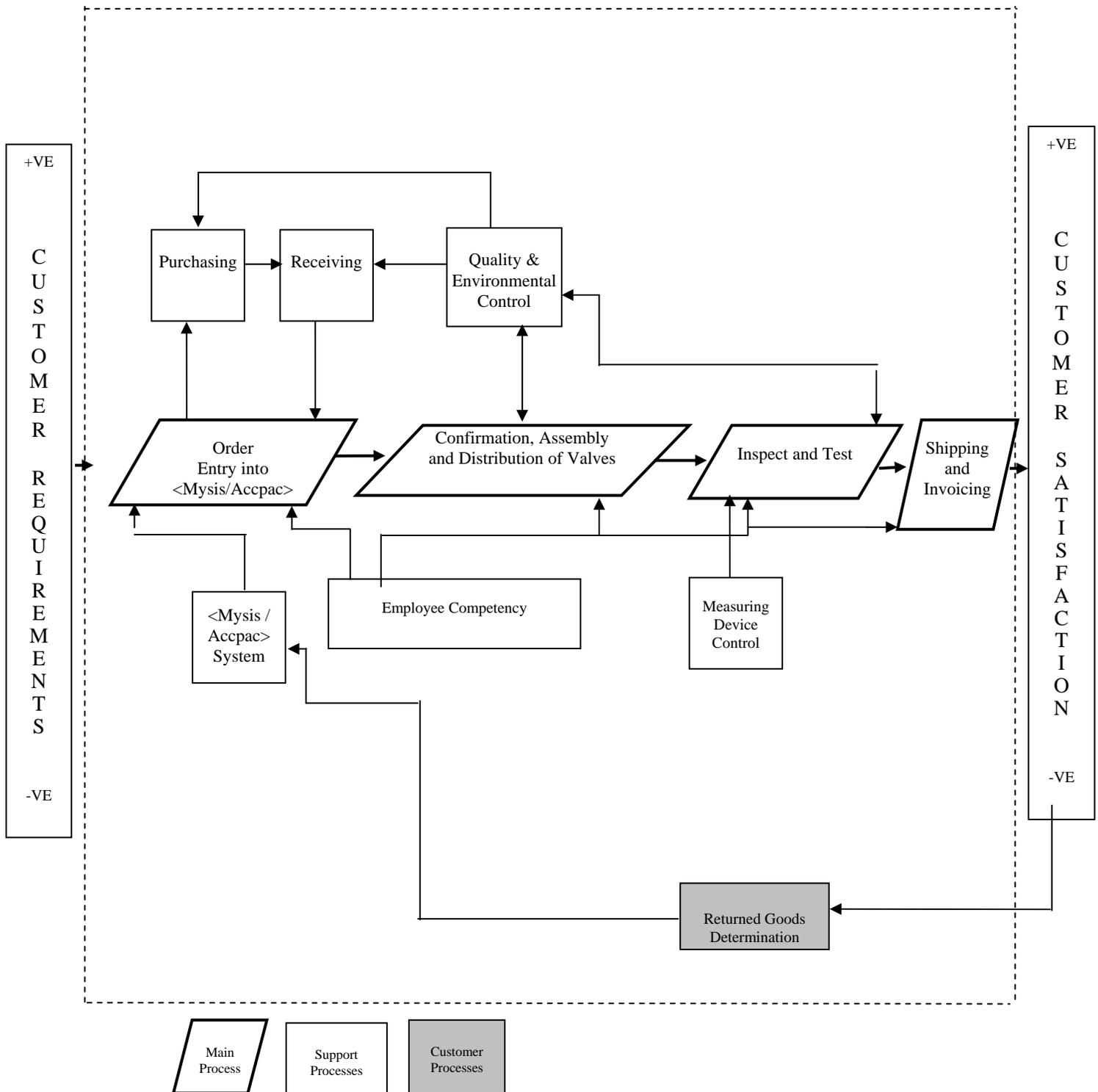
4.4.3 Objectives, Targets and Programs

Company-specific objectives and targets are established following the review of environmental aspects. Objectives and targets must be written for environmental aspects with a significance value of four or five, but they may be written for aspects with lower significance at the discretion of the President of Flexi-Hinge[®].

Personal performance objectives for appropriate employees within the organization also include environmental issues and concerns.



Figure 1 Justification Process Flow Diagram





4.5 Implementation and Operation

The environmental and general management program elements are reviewed annually and changes made as necessary.

4.5.1 Roles, Resources, Responsibilities and Authority

The following roles and responsibilities have been designated for the control of the environmental management system operating under **ISO 14001:2004**. Where appropriate, these responsibilities are detailed in a specific MSP.

Synopsis of Roles

1. The Safety Care Team is responsible for the routine monitoring of environmental performance. Spill incidents and other environmental issues and concerns are reviewed and discussed during meetings. The Team provides input to the Management Representative to ensure that issues and concerns are addressed. The Team consists of representatives from Operations, Facilities and Quality.
2. The Management Representative is responsible for the documentation of the IMS system.
3. The Management Representative and safety team leader are responsible for development and maintenance of the system and carrying out the recommendations of Management; and for integrating environmental considerations with those of health & safety.
4. The Internal Audit Team carries out the internal and environmental audit program, and provides input from audits to Management Representative to ensure maintenance of the program.
5. The Management Representative is responsible for the control of the EMS and its co-ordination with the other management systems operating within Flexi-Hinge[®], including:
 - Setting the audit program;
 - Controlling system documents and records;
 - Preparing audit summary report for EMS section of Management Review;
 - Setting the environmental management program;
 - Aspect identification and preliminary evaluation;
 - Updating legislation record;
 - Coordinating environmental training program;
 - External communication on environmental concerns;
 - Drafting environmental procedures as required;
 - Suggesting objectives & targets based on the aspect evaluations;
 - Providing environmental reports;
 - Providing initial environmental risk assessments;



- Allocating responsibilities for detailed environmental risk assessments;
- Providing support for the Safety Team;
- Monitoring Environmental performance; and
- Responsibility for Documentation of the IMS System.

Internal/Environmental Audit Team

- Audit of the environmental management system and the quality system according to an agreed program.

Safety Care Team

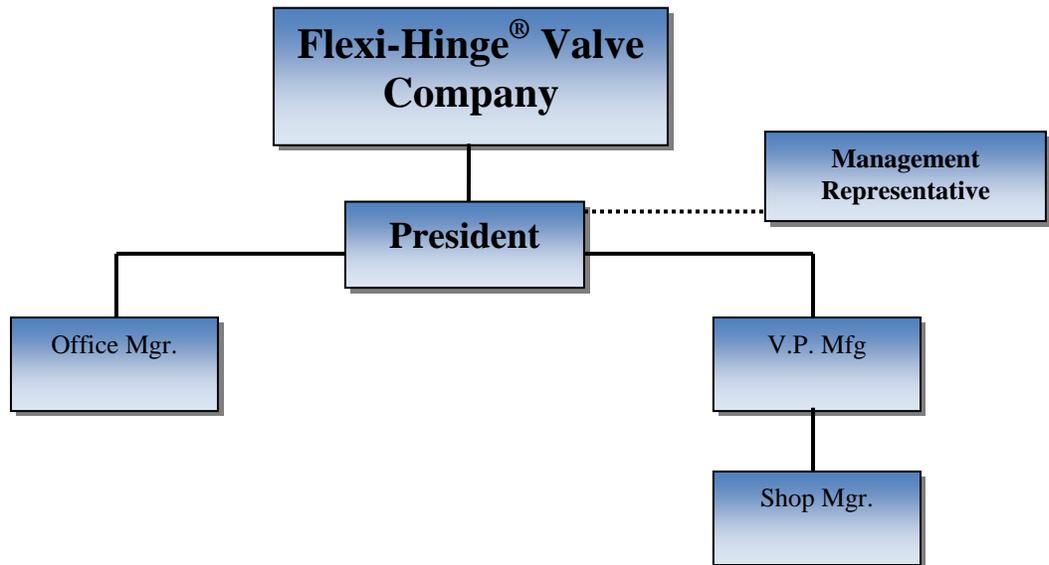
- Monitor **ISO 14001:2004** activities (e.g., audits, aspect identification and evaluation, procedure modification, etc).
- Assist to identify training requirements.
- Review environmental incidents, issues and concerns.
- Review, endorse and assist the implementation of action plans.
- Recommend additional corrective actions.

All Employees

- Follow written procedures (MSP's) and work instructions according to the training provided, using the <Training Matrix>.



Figure 2 Organizational Chart





4.5.2 Training, Awareness and Competence

Environmental and general information and training is provided to new employees during their orientation. Periodic information and training is also provided during routine safety meetings. On the job training ensures that employees perform their job tasks in a safe and environmentally responsible manner. The Management Representative has developed and implemented an employee training matrix. The matrix is used to help establish training topics for initial orientation, as well as the rating of **competency**.

Training records are maintained by the President. They are maintained for an employee's term of service, plus one year.

4.5.3 Communication

Flexi-Hinge[®] has several formal and informal methods of communication for the internal discussion of general, as well as, environmental issues and concerns. Bulletin boards and e-mail are used to inform employees. Flexi-Hinge[®] stresses its "open door" policy for employees to raise issues and concerns informally.

General and Environmental issues and concerns are addressed during the routine meetings of Management Review.

Communications from external sources are directed to the Management Representative. Documentation is maintained by the Management Representative.

The Flexi-Hinge[®] official website is used to communicate externally.

4.5.4 System Documentation

Documentation for the control of the environmental management system is held in electronic format, **paper format is for reference only**. Control copy #001 is the only exception.

Procurement/MSP's relate directly to the requirements of ISO 14001:2004. Work Instructions (MSWI) provide information for carrying out operational tasks. Quality Records are generated from both MSP's and MSWI.

4.5.5 Document Control

Flexi-Hinge[®] maintains documentation control of the IMS.



4.5.6 Operational Control

The operation of the manufacturing and associated processes in Flexi-Hinge® is controlled by work instructions. Environmental concerns may be addressed by including them in these work instructions. Contractors are made aware of environmental consideration through their contractor orientation.

4.5.7 Emergency Preparedness and Response

The facility's Emergency Response Plan is established as part of its Hazardous Materials Plan. It is formally reviewed and updated annually.

4.6 Checking

4.6.1 Monitoring and Measurement

The on-going performance of the company, compliance with environmental legislation, reporting of the environmental aspects of the operations and the monitoring of targets, communications and improvements are monitored.

The Management Representative updates significant activities regularly.

4.6.2 Evaluation of Compliance

Records are maintained of all non-compliance with stated environmental policy and with requirements of the IMS whether caused by accident, faulty material or equipment failure. All incidents are investigated and the necessary corrective action implemented to avoid recurrence of the problem. Documentation is maintained by the Management Representative. The Preventative Maintenance System attempts to minimize the risk of incidents occurring through a regular program of maintenance activities.

4.6.3 Nonconformity, Corrective Action and Preventive Action

The Management Representative will utilize the company nonconformity, corrective action and preventive action databases for:

- a) identifying and correcting nonconformity(ies) and taking action(s) to mitigate their environmental impacts;
- b) investigating nonconformity(ies), determining their cause(s) and taking action(s) in order to avoid their recurrence;
- c) evaluating the need for action(s) to prevent nonconformity(ies) and implementing appropriate actions designed to avoid their occurrence;
- d) recording the results of corrective action(s) and preventive action(s) taken; and
- e) reviewing the effectiveness of corrective action(s) and preventive action(s) taken.



Actions taken shall be appropriate to the magnitude of the problems and the environmental impacts encountered.

The Management Representative will ensure that any necessary changes are made to the IMS after a document change is recorded.

4.6.4 Control of Records

Management Representative is responsible for identifying the environmental management records.

Management Representative also maintains training records. Training records are maintained for an employee's term of service, plus one year.

4.6.5 System Audit

A program of planned and systematic audits is implemented to ensure compliance with all aspects of the IMS and to maintain its continued effectiveness.

Environmental Audit Program

- The frequency of the audit plan is based upon identified environmental aspects and components of the IMS.
- The program covers key aspects of the environmental management system, environmental effects and frequency.

Audit Performance

- Internal auditors examine objectively, the evidence of compliance with the general and environmental systems. This may be with the use of a checklist or by following audit trails.

Audit Report, Distribution and Closure

- The Management Representative prepares and distributes the general and environmental audit reports, and closes all audits.



4.7 Specific Environmental Management Review

- At least twice a year meetings are held. As appropriate, members are responsible for addressing the topics, and for addressing the possible need for changes;
- Previous environmental actions;
- Environmental policy;
- Objectives and targets;
- Waste volume and waste disposal costs;
- Energy usage and conservation efforts;
- Audit results;
- Communications with regulatory agencies;
- Complaints from public or customers with respect to environmental performance;
- Communications with additional external bodies on environmental aspects;
- Training requirements;
- Environmental Aspects;
- Legal;
- CAPA; and
- Compliance Evaluation.



SECTION II

Management Responsibility

5.1 MANAGEMENT COMMITMENT

The commitment to the development, implementation and improvement of the IMS by Flexi-Hinge's top management is reflected in our company's quality and environmental policy and objectives.

Robert D. Melani

Robert D. Melani
President

Flexi-Hinge® Valve Company, Inc.



5.2 CUSTOMER FOCUS

- a. Top management at Flexi-Hinge[®] ensures that customer needs and expectations are determined, converted to requirements, and met with the aim of enhancing customer satisfaction according to the following policies:
 - 1. Planning of Product Realization: Section 7.1
 - 2. Determination of Requirements Related to the Product: Section 7.2.1
 - 3. Review of Requirements Related to the Product: Section 7.2.2
 - 4. Customer Satisfaction: Section 8.2.1
 - 5. Monitoring and Measurement of Product: Section 8.2.4
- b. Flexi-Hinge's Management ensures, through management reviews and communication with employees, that customer satisfaction is a continuous focus.

5.3 QUALITY AND ENVIRONMENTAL POLICY

Flexi-Hinge's quality policy and objectives are displayed openly as a sign of the pride and commitment and as a clear reminder of focus and direction. The quality policy and environmental policy statements for Flexi-Hinge[®] are as follows:

**Flexi-Hinge[®] Valve Co., Inc's
Quality Policy**

We are committed to engineered excellence, timely manufacture and exceptional quality, which we continuously improve.



Flexi-Hinge[®] Valve Co., Inc's Environmental Policy

We are committed to formulating and supplying what we produce with due regard to quality and environmental impacts and in full compliance with relevant environmental regulation and any applicable codes of practice. We will:

- **Evaluate all products for environmental effects and to minimize the potential for pollution.**
- **Dispose of all solid or liquid wastes in accordance with the requirements defined by regulation.**
- **Work with our suppliers and customers in applying full lifecycle responsibility to our products.**
- **Review our environmental performance on a regular basis and develop and implement procedures to ensure continuous improvement.**
- **Develop and implement Risk Control incentives to minimize the potential consequences of accident and emergency situations.**
- **Monitor our energy consumption on a regular basis and implement appropriate energy reduction and efficiency improvement programs.**
- **Establish objectives and targets to secure continual environmental improvements.**
- **Comply with applicable legal requirements, with other requirements to which Flexi-Hinge[®] subscribes and which relate to environmental aspects.**

This policy is designed to ensure compliance with all Corporate environmental Objectives. Copies of this Environmental Policy and all Objectives and Targets are publicly available upon request.

The success of our IMS is essential for our competitiveness and the prevention of pollution. It is vital that the employees of Flexi-Hinge[®] understand and adhere to our quality and environmental policies.



5.4 PLANNING

5.4.1 Quality and Environmental Objectives and Targets

It is the responsibility of Management to ensure that these quality and environmental objectives and targets are established at the relevant functions and levels and that they are consistent with Flexi-Hinge's quality and environmental policies, including the commitment to the prevention of pollution.

An Environmental Aspects Excel Spreadsheet (See 4.4.1 Environmental Planning) is used to record objectives, targets and results achieved.

5.5 RESPONSIBILITY, AUTHORITY AND COMMUNICATION

5.5.1 Responsibility and Authority

- a. The organizational structure shown in Figure 2, on Page 12, illustrates the responsibilities and authorities of employees who manage, perform, and verify work affecting the environment and/or the quality of products and services at Flexi-Hinge[®]. The roles, responsibilities and authorities of employees with regard to both quality and environmental issues are defined, documented and communicated to facilitate the implementation and maintenance of the IMS.
- b. The **PRESIDENT** is the leader of the quality and environmental efforts at Flexi-Hinge[®] and is responsible for the delegation of the various responsibilities for quality and environmental issues and for the efficient operation of Flexi-Hinge[®].

The **VP Mfg** is responsible for the operation of functions. These responsibilities include both daily operations and strategic and tactical planning. He must ensure that Flexi-Hinge's quality and environmental policies are effectively operating in his areas of responsibility.

The **DEPARTMENT LEADERS AND SUPERVISORS** are responsible for ensuring that Flexi-Hinge's quality and environmental policies are being carried out on a daily basis. Department and supervisors may delegate the authority for implementation of the quality and environmental functions within their departments, but shall retain the responsibility for each function. It is policy that such delegation be formally defined and documented.



Quality and the environment are the responsibility of each Flexi-Hinge[®] **EMPLOYEE**. Their responsibilities for activities affecting quality and the environment are specified further and explicitly in Flexi-Hinge's IMS manual, procedures and work instructions.

- c. The responsibility and authority for the IMS is communicated to all employees during quality and environmental awareness orientation training.

5.5.2 Management Representative

- a. The Management Representative, in addition to other duties, has the authority and responsibility for ensuring that the IMS is effectively established, implemented and maintained at Flexi-Hinge[®] in accordance with **ISO 9001:2008** and **ISO14001:2004**, and for reporting to Management on the performance of the IMS, including necessary improvements at the time of the management review. For quality and/or environmental related issues involving external parties, the Management Representative will act as the liaison.
- b. The Management Representative is also responsible for promoting an awareness of customer's requirements and Flexi-Hinge's environmental aspects and IMS.
- c. The Management Representative is responsible for ensuring that quality and environmental objectives and targets are established, documented and maintained at all relevant levels within Flexi-Hinge[®].
- d. Human resources is responsible for training and the retention of such training quality records.

5.5.3 Communication

- a. **Internal Communications** and **External Communications** have been established to direct the receipt and documentation of, and response to, communications regarding Flexi-Hinge's IMS and environmental aspects (as determined through **Environmental Planning**). Such communications may include, but are not limited to:
 - 1. Statements regarding Flexi-Hinge's policies for and commitment to quality and the environment.
 - 2. Employee, customer or other external party concerns and questions.



3. Reports on Flexi-Hinge's performance with regard to quality and environmental objectives and targets as determined during audits and management reviews.

5.6 MANAGEMENT REVIEW

5.6.1 General

Management conducts bi-annual reviews of the IMS ("Management Review") at a minimum interval of 6 months. The review is a documented activity with the purpose of:

- Assessing the suitability, adequacy, and effectiveness of the IMS in achieving the quality and environmental policies and objectives, in meeting customer needs, in satisfying the requirements of **ISO 9001:2008** and **ISO14001:2004**, and in complying with relevant legislation and regulations.
- Evaluating the need for changes to the IMS, including the quality and environmental policies and objectives, in light of audit results, changing circumstances and the commitment to continual improvement.

5.6.2 Review Input

The Management Representative is responsible for ensuring that the necessary information is gathered to facilitate the Management Review. Inputs to the Management Review process include, but are not limited to, current performance data and potential improvement opportunities related to:

1. audit results;
2. customer feedback (including customer satisfaction measurement data and customer complaints);
3. process performance and product conformity;
4. status of corrective and preventive actions;
5. follow-up actions from previous management reviews;
6. changes that could affect the IMS; and
7. recommendations for improvement.



5.6.3 Review Output

- a. The Management Representative creates written meeting minutes summarizing the Management Review activities, the conclusions reached and action items identified. These minutes are used to guide and improve our IMS at Flexi-Hinge[®] by documenting:
 1. Decisions made and actions planned to improve continuously the effectiveness of the IMS and related processes
 2. Decisions made and actions planned to continually improve our products to maintain a high level of customer satisfaction and consistently meet customer requirements
 3. Decisions made and actions planned for additional resources necessary for the effective operation of our IMS, including human resource, infrastructure and work environment needs
 4. Changes to Flexi-Hinge's quality and environmental policies, objectives and targets (including those defined for product).



SECTION III

Resource Management

6.1 PROVISION OF RESOURCES

- a. The resource requirements for the implementation, management, control and continual improvement of the IMS and activities necessary to enhance customer satisfaction are explicitly defined in our procedures, work instructions and the following sections of our IMS Manual:
 - 1. Planning – Section 5.4
 - 2. Management Review – Section 5.6
 - 3. Human Resources – Section 6.2
 - 4. Infrastructure – Section 6.3
 - 5. Work Environment – Section 6.4
 - 6. Planning of Product Realization – Section 7.1
 - 7. Determination of Requirements Related to the Product – Section 7.2.1.
- b. Resources at Flexi-Hinge[®] include human resources and specialized skills, infrastructure, technology, work environment and financial resources.

6.2 HUMAN RESOURCES

6.2.1 General

Employees involved in the management, performance, and/or verification of work affecting quality and/or impacting the environment are qualified on the basis of competency, education, training, skills and/or experience.

6.2.2 Competence, Awareness and Training

- a. It is the policy of Flexi-Hinge[®] to identify competence and training needs and provide for the training of employees performing activities affecting quality or impacting the environment.
- b. Since any process task, as outline in the MRP Process Maps, could



influence, directly or indirectly, the product quality, the competence of **all** employees must be assured.

6.3 INFRASTRUCTURE

- a. Critical infrastructure is identified and maintained for the following purposes:
 - 1. To create conforming product;
 - 2. To comply with relevant legislation and regulations;
 - 3. To prevent pollution; and
 - 4. To provide an information system (Mysis Accpac) that adequately improves quality.

- b. Each Department Leader periodically assesses the infrastructure in their area(s) of responsibility. Each infrastructure assessment determines the following:
 - 1. Infrastructure needs, including buildings, workspace and associated utilities, equipment, hardware, software, technology and supporting services.
 - 2. The ability of infrastructure to meet the requirements in Section 6.3a.
 - 3. Necessary infrastructure improvements.
 - 4. Improving working conditions including, but not restricted to physical and environmental conditions, as well as things like noise, temperature, humidity and lighting.

6.4 WORK ENVIRONMENT

- a. It is the responsibility of each employee to identify and manage both the human and physical factors of the work environment that are necessary to achieve conforming product, comply with relevant legislation and regulations and prevent pollution according to The **Pollution Prevention and Control and Waste Minimization Policy**.



SECTION IV

Product Realization

7.1 PLANNING OF PRODUCT REALIZATION

- a. The Management Representative is responsible for performing product quality and environmental planning (7.2.1 and 7.5.1). This planning includes:
 - 1. Identification of the environmental aspects of Flexi-Hinge's activities, products and services that can be controlled and over which Flexi-Hinge® can be expected to have an influence in order to determine those that have or can have significant impacts on the environment and keeping this information up to date.
 - 2. Consideration of these environmental aspects in the definition, monitoring and updating of quality and environmental objectives and targets and requirements for products, projects or contracts.
 - 3. Determination and provision of the necessary processes, documents, resources, infrastructure and work environment to produce conforming product, comply with relevant legislation and regulations and prevent pollution.
 - 4. Identification of the appropriate verification, validation, monitoring, inspection and test activities, operating criteria and the criteria for the determination of acceptable product.
 - 5. Identification of the records needed to provide evidence that the processes and resulting product conform to customer, legislative and regulatory requirements.
- b. Quality plans, contract-related work instructions, and other documentation resulting from the product quality and environmental planning processes are provided in a form suitable for the organization's method of operations.
- c. The goal of the product quality planning and environmental planning processes at Flexi-Hinge® is to ensure that the integrity of the IMS is upheld. That customer, legislative and regulatory requirements are met and continual improvement occurs.
- d. Where appropriate, the requirements for design and development (Section 7.3) are



applied to the development of product realization processes, and in 2009 to mistake proofing; now a quality objective.

7.2 CUSTOMER RELATED PROCESSES

7.2.1 Determination of Requirements Related to the Product

- a. Customer service is responsible for ensuring that the following customer requirements are identified and incorporated into the processes of the IMS:
 - specified customer requirements, including requirements for availability, delivery, and support (post-delivery activities);
 - requirements not specified by the customer but necessary for specified or intended use, where known; and
 - as indicated by the management representative, statutory and regulatory requirements applicable to the product.

- b. The Management Representative is responsible for identifying statutory, regulatory, legal and other requirements that Flexi-Hinge[®] subscribes and which are applicable to the environmental aspects of our processes, products or services.

- c. Flexi-Hinge[®] uses the following methods to identify customer requirements and additional requirements related to Flexi-Hinge's processes, products and services:
 - Direct Conversations
 - Surveys
 - Focus Groups
 - Conferences
 - Members of Product Development Teams
 - Quality Function Deployment (QFD)
 - Advanced Product Quality Planning (APQP)
 - Customer Satisfaction Data
 - Design Reviews
 - Contract Negotiations
 - Market Research
 - Benchmarking (product, service, and/or competitor)
 - Monitoring Regulations



7.2.2 Review of Requirements Related to the Product

- a. Reviews of requirements related to the product are conducted, documented and coordinated with the customer.
- b. Customer Service has the primary responsibility for coordinating reviews of quotations, tenders, and customer orders for products and services prior to their issuance or acceptance and assigning responsibilities for their execution.
- c. Customer Service is responsible for coordinating, notifying and documenting order/contract amendments with the customer and the affected departments.

7.2.3 Customer Communication

- a. Customer Service has the primary responsibility for ensuring that communication with the customers of Flexi-Hinge[®] is established and effectively maintained.

7.3 DESIGN AND DEVELOPMENT

Flexi-Hinge[®] maintains documented procedures and documentation appropriate to control product design and development activities and to verify that the resulting design meets specified requirements. Design and development is viewed at Flexi-Hinge[®] as a creative activity involving conceptual elements. It is not viewed as encompassing minor modifications to standard products, or the specification of details from standard data tables or equivalent.

7.4 PURCHASING

7.4.1 Purchasing Process

Purchasing is responsible for ensuring that purchasing processes are controlled such that purchased products and subcontracted services that have a significant impact on the environment or the quality of Flexi-Hinge's products conform to specified requirements. These control activities are conducted according to **Supplier Selection and Evaluation (MSP 7.4-1)**.

7.4.2 Purchasing Information

Purchasing is responsible for ensuring that purchase documents are reviewed and approved for adequacy of specified requirements prior to release.



7.4.3 Verification of Purchased Product

- a. Verification through inspection is performed.
- b. Purchasing is responsible for ensuring that verification arrangements and the methods for product release are clearly defined in the purchasing documents in situations where verification is to be performed by Flexi-Hinge[®] or the customer at the supplier's premises.

7.5 PRODUCTION PROVISION

7.5.1 Control of Production Provision

Supervisors of departments involved in processes that directly affect quality of intermediate and end products, and/or operations and activities that are associated with the environmental aspects identified during **Environmental Planning** are responsible for ensuring that these processes are identified, planned, executed and maintained under controlled conditions. Controlled conditions are defined to include the following requirements:

1. Availability of information describing product characteristics - identified in Section 7.2.2 (Review of Requirements Related to the Product) and 7.3.6 (Design and Development Validation) of **ISO 9001:2008** standard.
2. Establishment and maintenance of the necessary procedures and/or work instructions where their absence could adversely affect quality or could lead to deviations from the quality and environmental policies, objectives and targets.
3. Availability of operating criteria that are defined in documented procedures and/or work instructions.
4. Establishment and maintenance of documented procedures and/or work instructions and requirements for the significant environmental aspects of products and services used by Flexi-Hinge[®], as well as communicating these procedures and requirements to suppliers and contractors.
5. Use and maintenance of suitable equipment for production operations.
6. Availability and use of monitoring and measuring devices.
7. Implementation of monitoring and measurement activities.
8. Implementation of defined processes for release, delivery and applicable post-delivery activities.



7.5.2 Validation of Processes for Production and Service Provision

- a. Process validation is performed to demonstrate the ability of the process to meet or exceed the planned results of form, fit and function fundamentals. Processes requiring validation at Flexi-Hinge[®] are subject to the following rules and safeguards, as applicable.
1. Criteria for review and approval of the processes are established, and processes are pre-qualified in terms of their capability and comply with the requirements described in Section 7.5.1.
 2. The requirements and compliance of qualified processes, equipment and employees are maintained and documented in a manner to ensure product quality, safety and a minimized impact on the environment.
 3. Processes are performed and monitored by qualified employees using written work instructions or documented guidelines, where applicable (see Section 7.5.1).
 4. Additional records required to ensure conformity of product are developed and maintained.
 5. Processes are re-validated, as necessary.

7.5.3 Identification and Traceability

Flexi-Hinge[®] maintains identification and traceability using drawings, purchase orders and serial numbers. Special customer requests will be evaluated per order.

7.5.4 Customer Property

- a. The President has the primary responsibility for ensuring that Flexi-Hinge[®] exercises care with customer property and that the property is identified, verified against specified requirements, protected and safeguarded until required for use or incorporated into our products. Customer property may also include intellectual property.
- b. Flexi-Hinge[®] maintains a documented procedure for ensuring that component parts, subassemblies, test materials and intellectual property supplied by our customers are properly controlled.



7.5.5 Preservation of Product

a. Employees responsible for identification, handling, packaging, storage, protection and delivery of materials and products are also responsible for establishing, documenting and maintaining methods appropriate to preserve conformity of product and constituent parts during internal processing and delivery; and to minimize their potential environmental impacts. Flexi-Hinge[®] ensures the preservation of product in the following ways:

1. **Identification:** Specific details on the identification of product at Flexi-Hinge[®] are described in Section 7.5.3 (Identification and Traceability).
2. **Handling:** Flexi-Hinge's policy is to use methods and means appropriate for the handling and transporting of product in a manner that prevents loss of product value, ensures employee safety, and minimizes potential environmental impacts.
3. **Packaging:** Products are appropriately packed and identified on the packaging in a manner that allows for ready identification through the stages of processing, prevents the loss of product value and minimizes potential environmental impacts.
4. **Storage:** Flexi-Hinge[®] maintains facilities, equipment and designated areas to store material in a manner that prevents loss of product value and minimizes potential environmental impacts (see Section 6.3 - Infrastructure).

Methods and means appropriate for ensuring proper receipt of material, and proper dispatch to and from the pertinent areas are required and used. Supervisors having jurisdiction over departments where product is stored are responsible for assessing the condition of those materials at intervals sufficient to guarantee the prevention of their damage or deterioration.

5. **Protection:** Products are protected during internal processing and delivery to maintain product quality and value when the product is under the company's control.
6. **Delivery:** The quality of the final product is protected after final inspection and test. Where contractually specified, Flexi-Hinge[®] is responsible for packaging and preservation during transit, including delivery to destination.



7.6 CONTROL OF MONITORING AND MEASURING DEVICES

- a. The Management Representative is responsible for ensuring that necessary monitoring and measurement activities are identified, and that the necessary monitoring and measuring devices are available to assure conformity of product and/or conformance of processes to quality and environmental requirements, objectives or targets.
- b. The Management Representative is also responsible for ensuring that the required monitoring and measuring can be carried out and is done in a manner that is consistent with the monitoring and measurement requirements.
 1. Measurement system evaluations are conducted for key families of monitoring and measuring devices.

SECTION V

Measurement, Analysis and Improvement

8.1 GENERAL

- a. The Management Representative is responsible for ensuring that each department manager at Flexi-Hinge[®] defines, plans and implements monitoring, measurement and analysis activities that are necessary to assure conformity of the product and the IMS and to achieve improvement. Flexi-Hinge[®] plans and implements monitoring, measurement, analysis and improvement.
- b. Flexi-Hinge[®] periodically evaluates compliance with relevant environmental legislation and regulations according to **Environmental Planning MSP 7.1-2.**



8.2 MONITORING AND MEASUREMENT

8.2.1 Customer Satisfaction (“Perception”)

Customer Service is responsible for ensuring that customer communication is maintained and that customer satisfaction data is collected, analyzed and used. Flexi-Hinge® makes use of customer satisfaction and opinion surveys.

8.2.2 Internal Quality Audits

- a. Flexi-Hinge® plans and conducts internal quality audits at planned intervals for the following purposes:
 1. To verify whether quality and environmental activities and related results comply with planned arrangements, ISO 9001, ISO 14001, IMS requirements established by Flexi-Hinge® and relevant environmental legislation and regulations.
 2. To determine the overall effectiveness of the IMS as implemented and maintained.
 3. To provide information on the results of audits to management for review.

8.2.3 Monitoring and Measurement of Processes

- a. Monitoring and where applicable, measurement activities are performed on:
 1. Processes necessary to meet customer requirements.
 2. Key characteristics of processes that can have a significant impact on the environment.
 3. Processes necessary to track performance and conformance with quality and environmental objectives and targets.
 4. Additional processes where the potential benefit is identified.
- b. The responsibility to identify and apply suitable methods for monitoring and measurement of processes is assumed by department leaders.



8.2.4 Monitoring and Measurement of Product, where applicable

Flexi-Hinge[®] establishes and maintains documented procedures, work instructions, and/or quality plans that define the required monitoring and measurement activities and related records used to verify that product characteristics and requirements are met prior to product distribution, processing, or use. Records must indicate who releases product for delivery to the customer.

8.3 NONCONFORMANCE CONTROL

8.3.1 Control of Product Nonconformance

- a. The Management Representative is responsible for implementing and maintaining **Control of Nonconforming Product**.
- c. The Management Representative is also responsible for compiling data from the Non-Conforming reports.

8.3.2 Control of System-Level Nonconformance

The Management Representative is responsible for implementing and maintaining **Control of System-Level Nonconformance**, if required.

8.3.3 Control of Emergency Situations

- a. The Management Representative is responsible for ensuring that procedures and practices are established for preventing and responding to accidents and emergency situations where there may be a significant impact on the environment, and for preventing and mitigating the environmental impacts associated with them. **Emergency Preparedness and Response** and related documents address the following:
 - 1. Identification of potential and actual accidents and emergency situations.
 - 2. Proper response to emergencies and prevention or mitigation of serious environmental impacts.
 - 3. Provisions for periodic reviews and revisions of the procedures. Such reviews are always initiated after the occurrence of such events.
 - 4. Periodic drills to test the effectiveness of **Emergency Preparedness and Response**.



- b. Flexi-Hinge[®] uses the company web page to address communications and procedures for responding to accidents and emergency situations and for preventing and mitigating the environmental impacts of accidents and emergency situations.

8.4 ANALYSIS OF DATA

1. Each department leader is responsible for ensuring that collection and analysis of data occur in their specific department. The data collected determines, in part, the suitability and effectiveness of the IMS, identifies areas for improvement and demonstrates conformance with objectives and targets performance improvement projects.

8.5 IMPROVEMENT

8.5.1 Continual Improvement

- a. It is the overall responsibility of top management at Flexi-Hinge[®] to improve continually the effectiveness of the IMS according to **Measurement, Analysis and Improvement**. Each department manager is responsible for the continual improvement of the IMS in his or her respective areas. Effectiveness of continual improvement activity is assessed during the Management Review Process.
- b. Continual improvement of the IMS at Flexi-Hinge[®] is facilitated through the use of:
 1. Quality and Environmental Policy - Section 5.3
 2. Quality and Environmental Objectives and Targets - Section 5.4.1 and Section 7.1
 3. Audit Results - Section 8.2.2
 4. Analysis of Data - Section 8.4
 5. Corrective Action - Section 8.5.2
 6. Preventive Action - Section 8.5.3
 7. Management Review - Section 5.6.



8.5.2 Corrective Action

Corrective action at Flexi-Hinge® is directed at revising the company's IMS, policies, procedures and work instructions in order to eliminate the root cause(s) of quality and environmental problems and nonconformities and prevent their recurrence.

8.5.3 Preventive Action

Preventive action is directed at improving Flexi-Hinge's systems, procedures and policies. **Preventive Action** is used in the following situations:

1. to expose potential nonconformities found during either internal or external (customer) audits;
2. to revise the systems, work processes, procedures or work instructions to improve the quality or environmental performance of a process, product or service; and
3. to resolve potential problems found during the Management Review Process.



SECTION VI

Appendix A: IMS Cross Reference

SECTION / ISO 9001:2008 CLAUSE	RELATED ISO 14001:2004 CLAUSE(S)	TITLE	REVISION
1.1	1	General	I
1.2	1	Scope	I
4.1	4.1	General Requirements	I
4.1	4.1.1, 4.4.4	Process Maps	I
4.2	4.4.5, 4.4.6, 4.5.4 * General	Documentation Requirements	I
		* IMS Manual	
		* Control of Documents	
		* Control of Records	
		* Operational Control	
		* System Documentation	I
--	4.3.1	Environmental Aspects	I
--	4.3.2	Environmental and Other Requirements	I
5.1	--	Management Commitment	I
5.2	--	Customer Focus	I
5.3	4.2	Quality and Environmental Policy	I
5.4	4.3, 4.3.3, 4.3.4, 4.4, 4.4.3	Planning	I
		* 5.4.1 Quality and Environmental Objectives, Targets, and Programs	
		* Implementation and Operations	
		* Communications	I
--	4.4.6, 4.4.7	Operational Control, Emergency Preparedness and Response	I



SECTION / ISO 9001:2008 CLAUSE	RELATED ISO 14001:2004 CLAUSE(S)	TITLE	REVISION
5.5	4.4.1, 4.4.3	Roles, Resources, Responsibility, Authority and Communication * 5.5.1 Responsibility and Authority * 5.5.2 Management Representative * 5.5.3 Internal Communication	I
5.6	4.6	Management Review * 5.6.1 General * 5.6.2 Review Input * 5.6.3 Review Output	I
6.1	--	Provision of Resources	I
6.2	4.4.2 G	Human Resources * 6.2.1 General * 6.2.2 Competence, Awareness and Training	
6.3	4.4.1	Infrastructure	I
6.4	--	Work Environment	I
7.1	4.4.6	Planning of Product Realization	I
7.2	4.3.2, 4.4.6	Customer-related Processes * 7.2.1 Determination of Requirements Related to the Product * 7.2.2 Review of Requirements Related to the Product * 7.2.3 Customer Communication	I
7.3	4.4.6 Draft	Design and Development * 7.3.1 Design and Development Planning * 7.3.2 Design and Development Inputs * 7.3.3 Design and Development Outputs * 7.3.4 Design and Development Review * 7.3.5 Design and Development Verification * 7.3.6 Design and Development Validation * 7.3.7 Control of Design and Development Changes	



SECTION / ISO 9001:2008 CLAUSE	RELATED ISO 14001:2004 CLAUSE(S)	TITLE	REVISION
7.4	4.4.6	Purchasing * 7.4.1 Purchasing Process * 7.4.2 Purchasing Information * 7.4.3 Verification of Purchased Product	I
7.5 Draft	4.4.6	Production and Service Provision * 7.5.1 Control of Production and Service Provision * 7.5.2 Validation of Processes for Production and Service Provision * 7.5.3 Identification and Traceability * 7.5.4 Customer Property * 7.5.5 Preservation of Product	
7.6	4.5.1	Control of Monitoring and Measuring Devices	I
8.1	4.5.1	General	I
8.2	4.5, 4.5.1, 4.5.2, 4.5.4, 4.5.5	Monitoring and Measurement * 8.2.1 Customer Satisfaction * 8.2.2 Internal Audit * 8.2.3 Monitoring and Measurement of Processes * 8.2.4 Monitoring and Measurement of Product	I
8.3	4.5.3	Nonconformance Control * 8.3.1 Control of Product Nonconformance * 8.3.2 Control of System-Level Nonconformance * 8.3.3 Control of Emergency Situations	I
8.4	4.5.1	Analysis of Data	I
8.5	4.5.2	Improvement * 8.5.1 Continual Improvement * 8.5.2 Corrective Action * 8.5.3 Preventive Action	I

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SECTION VI

Appendix B: List of Quality System Procedures

Section 4

- MSP 4.2-2 Document Control
- MSP 4.2-3 Management System Record Maintenance

Section 5

- MSP 5.5-1 Internal Communications
- MSP 5.5-2 External Communications
- MSP 5.6-1 Management Review

Section 6

- MSP 6.2-1 Training Assessment, Delivery and Evaluation
- MSP 6.3-1 Preventive Maintenance
- MSP 6.4-1 Pollution Prevention And Waste Minimization

Section 7

- MSP 7.1-2 Environmental Planning
- MSP 7.2-1 Order / Contract Review
- MSP 7.2-2 Customer Communication and Satisfaction
- MSP 7.3-1 New Product Design and Development Control
- MSP 7.3-2 Engineering Change Request and Notice
- MSP 7.4-1 Supplier Selection and Assessment
- MSP 7.4-2 Purchase Order Generation and Issue
- MSP 7.4-3 Receiving Inspection and Testing
- MSP 7.5-1 Issue and Control of Process Monitoring and Operating Instructions
- MSP 7.5-3 Product Identification and Traceability
- MSP 7.5-4 Verification and Control of Customer Property
- MSP 7.5-5 Product Preservation Control
- MSP 7.6-1 Control of Monitoring and Measuring Devices

Section 8

- MSP 8.1-1 Measurement, Analysis and Improvement
- MSP 8.2-1 Internal Audits
- MSP 8.2-2 In-Process Inspection and Testing
- MSP 8.2-3 Final Inspection and Testing
- MSP 8.3-1 Control of Nonconforming Product
- MSP 8.3-3 Emergency Preparedness and Response
- MSP 8.5-1 Corrective Action
- MSP 8.5-3 Preventive Action