EMERSON
Process Management

NET SAFETY
MONITORING INC.

QUALITY MANAGEMENT SYSTEM MANUAL

ISO 9001
Certified Company

A. COMPANY BACKGROUND

Net Safety Monitoring Inc. designs, develops and manufactures industrial safety monitoring equipment. Focusing on industrial facilities and personnel, our products provide protection against plant safety hazards. Our safety systems are meticulously designed and manufactured at our state-of-the-art Calgary facility where we distribute these products to both the Canadian and international markets. Net Safety is a part of Rosemount Analytical (RA) business group of Emerson Electric Co. Emerson Corporate office is located in St. Louis, Missouri, USA.

We believe that our products are innovative, and offer excellent performance and reliability at a reasonable cost. We provide three levels of protection against plant safety hazards:

1. Combustible and toxic gas monitors,
2. Smoke and flame monitors,
3. Voice communication and video monitoring capabilities.

This Quality Manual describes the quality system that is in effect at our Calgary location. If you require more information on Net Safety Monitoring Inc., our products or services, please contact us at:

Net Safety Monitoring Inc.
Calgary, Alberta. Canada.
Phone: 403-219-0688
Fax: 403- 219-0694
WWW: http://www.net-safety.com

1.0 SCOPE OF QUALITY MANAGEMENT SYSTEM

The scope of the Net Safety Monitoring quality system is the design and manufacturing of gas and fire monitoring equipment for industrial locations.

2.0 REFERENCES

- CAN/CSA-ISO 9000-00 *Quality Management Systems: Fundamentals and Vocabulary*
- CAN/CSA-ISO 9001-00 (ISO 9001:2008) *Quality Management System - Requirements*
- ISO/IEC 80079-34 Explosive atmospheres (Edition 1.0 2011-04) – Application of quality systems for equipment manufacturer (hereinafter "Ex").

3.0 DEFINITIONS

For the purpose of this document, the definitions given in ISO 9001:2008 and ISO 8402 apply.

4.0 QUALITY MANAGEMENT SYSTEM

4.1 General Requirements

Net Safety Monitoring shall establish, document, implement and maintain a quality system and continually improve its effectiveness in accordance with the standards referenced in section 2.0.

Net Safety Monitoring shall:

1. Determine the processes needed for the quality management system and their application throughout the company.
2. Determine the sequence and interaction of these processes.
3. Determine criteria and methods needed to ensure that both operation and control of these processes are effective.
4. Ensure the availability of resources and information necessary to support the operation and monitoring of these processes.
5. Monitor, measure where applicable, and analyze these processes.
6. Implement actions necessary to achieve planned results and continual processes improvements.
7. Ensure that the product conforms to the Ex certificate and technical documentation.

Net Safety Monitoring shall exercise controls on any processes that are being outsourced to sub-contractors to ensure that the requirements are met, when applicable. The type and extent of control to be applied to these outsourced processes shall be defined within the quality management system.

4.2 Documentation Requirements

4.2.1 General

To ensure that products and processes conform to specified requirements, Net Safety Monitoring has established:

1. documented statements of a quality policy and functional objectives
2. a quality system manual
3. documented procedures and records required by standards listed in section 2.0
4. documents, including records, determined by the organization to be necessary to ensure the effective planning, operation and control of its processes and
5. and ensuring these documents, objectives, plans and standards are current

4.2.2 Quality Manual

Net Safety Monitoring will establish a QMS Manual that will include the:

1. scope of the quality management system and justification for any exclusion.
2. descriptions of the processes of the QMS and their interaction.
3. documented procedures or references to them.

The application, sequence and interaction of the processes that make up our quality management system is shown in the flow diagram on Fig. 1.

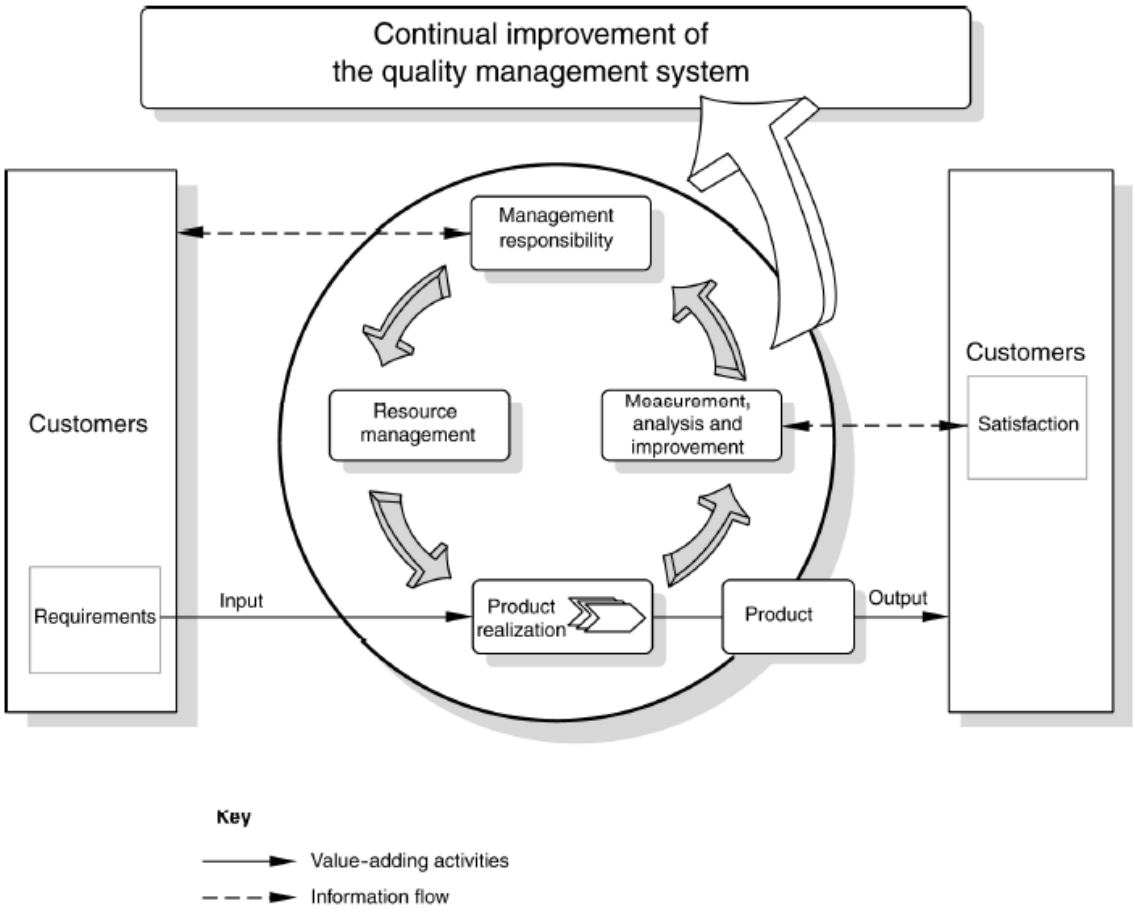

Figure 1 — Model of a process-based quality management system

Net Safety Monitoring documentation is managed and controlled electronically. A four-tier electronic documentation system is used:

Tier	Type of Document	Description
1	QMS Manual	In compliance with standards listed in section 2.0, the Quality Management System Manual contains Net Safety Monitoring policies for quality. It covers the purpose and scope, responsibilities and further descriptions of activities to support the policy, and interaction between processes.
2	Procedures & forms	Supporting the policies for quality, procedures indicate who does what, where, when and why. At Net Safety Monitoring, procedures are in the form of work instructions, flow charts, visual aids or supporting matrices.
3	Work Instructions	Define how work is done. They provide specific details and specifications to complete specific activities.
4	Quality Records	Used to capture information or data.

4.2.3 Control of Documents and Data Control

Net Safety Monitoring controls documents and data that relate to the internal quality system and the requirements of the standards listed in section 2.0 to ensure that revisable data and the most applicable issues of documents that are in use are controlled.

1. All Net Safety Monitoring Personnel are responsible for ensuring that they use only documents that are current and up to date.
2. When a document is required, it is created with input from the departments or functions responsible for the process being documented. Before release, authorized personnel review it for adequacy.
3. Existing documents will go through reviews, updates and re-approval as needed.
4. A master list of Net Safety Monitoring controlled documents will be maintained. Latest revisions of documents will be controlled and be readily available for all personnel to access. Hard copies of engineering documents are not within the list of controlled documents.
5. Documents will be maintained to ensure legibility.
6. Obsolete or invalid documents are promptly removed from manufacturing use when no longer required. Relevant documents are identified and archived for knowledge preservation and retained for legal purposes.
7. Procedures will be established to describe how changes in documents maintained in computerized systems are made and controlled.
8. Equipment documents and organization's documents will be controlled.
9. Documents procedures will ensure that information contained within organization's documents is compatible with equipment documents. The organization will not initially approve of subsequently amended related drawings unless they are in compliance with the schedule drawings.

10. The quality system will ensure that no factor (type, characteristic, position, etc.) defined within the EC type examination certificate and technical documentation (e.g. schedule drawings) is modified.
11. There will be a documented system that refers to all related drawings to the relevant schedule drawings.
12. Where there are common schedule drawings associated with more than one EC type-examination certificate, there will be a documented system to ensure simultaneous supplementary action in the event of an amendment to such drawings.
13. Where an organization also has drawings for products not intended for use in potentially explosive atmospheres then the organization will have a system that enables both the related drawings and scheduled drawings to be clearly identified.
14. The organization will document which notified body is responsible for the quality system notification for each EC type-examination certificate.
15. Where equipment documents or organization's documents are passed to a third party, they will be provided in a way that is not misleading.
16. There will be an annual verification of all Ex related certificates, standards, regulation and other external specification to ensure conformance or validity by Certification Specialist.

Supportive Documents:
WPQ-0000 Procedure Template
WPQ-0001 Document Outline Procedure
WPQ-0002 Control of Document
Master Docs Listing Matrix
WI-0110 Annual Review of Ex Document

4.2.4 Control of Records

Net Safety Monitoring maintains quality records to demonstrate conformance to requirements and to provide evidence of an effective operation of the quality system.

Records will be kept legible, readily retrievable and stored in an environment that prevents damage or deterioration (primarily kept electronically) and in confidence.

Net Safety Monitoring requirements for accessing, filing, storing, protection, retrieval, retention time and the disposition of our identified quality records are documented as per Control of Quality Records procedure.

4.3 Control of Data

When computers or automated equipment are used for the acquisition, processing, recording, reporting, storage or retrieval of quality related documents and records, Net Safety will ensure:

1. Procedures will be established and implemented for protection of data. Such procedures will include, but will not be limited to, integrity and confidentiality of data entry or collection, data storage, data transmission and data processing.
2. Computers and automated equipment will be maintained to ensure proper functioning and are provided with the environmental and operating conditions necessary to maintain the integrity of tests/calibrations.

Supportive Document:
WPQ-0003 Control of Records
WPA-0006 Electronic data backup

5.0 MANAGEMENT RESPONSIBILITY

5.1 Management Commitment

Net Safety Monitoring management strives to achieve the quality and business goals. The company executives show their commitment and support of the quality system as described in this manual and the Strategic Business Plan set by corporate Rosemount Analytical (RA) management.

5.2 Customer Focus

To best serve our customers, Net Safety Monitoring is committed to the standards listed in section 2.0 through our quality management system. Senior management shall ensure that customers are satisfied with the services and products provided, and that the importance of meeting the customers' requirements along with statutory and regulatory requirements is communicated through the company.

5.3 Quality Policy

Management, in accordance with our organizational goals and the needs of our customers, has defined the policies and objectives for quality at Net Safety Monitoring. All personnel at Net Safety Monitoring are committed to the quality of its processes, products and services.

Rosemount Quality Policy
Total customer satisfaction is our primary goal.
Quality is everyone's responsibility.
We apply continuous improvement to all that we do

The Quality Policy statement is reviewed for continuing suitability and to ensure that it is appropriate to our business. Top management is committed to continually improve the effectiveness of our Quality Management System (QMS) by establishing and reviewing Quality Objectives in our Quality Management Review (QMR) meeting. These objectives are communicated and understood throughout the organization by employee meetings, corporate communication boards, emails, etc.

All personnel, through the use of orientation and training activities, practice the policies for quality. Net Safety Monitoring Quality Policy has been endorsed by the VP/General Manager of Net Safety Monitoring and is posted in the facility.

5.4 Planning

5.4.1 Quality Objectives

At the Strategy Planning and Review meetings held by RA's executive management, senior management will establish measurable objectives for the company and consistent with the quality policy. These Corporate Quality Objectives will then carry out into Business Strategic Plans and then subsequently roll out into departmental objectives and goals for the fiscal year.

5.4.2 Quality System Planning

Net Safety Monitoring management shall ensure that the planning of the Quality system is carried out, as well as the quality objectives, and integrity of the quality system is maintained when changes to the system are planned and implemented.

The organization will demonstrate it has established an agreement with its suppliers that the notified body may audit aspects of the suppliers operations that affect the type of protection.

5.5 Responsibility, Authority and Communication

5.5.1 Responsibility and Authority

The responsibility, authority and interrelationship of personnel who manage, perform and verify work affecting quality, will be documented on the Net Safety Monitoring Organization Chart, in the Job Description and Training records and database.

Through orientation, training and defined, documented job descriptions, employees at Net Safety Monitoring are aware of their responsibilities and the level of authority assigned to their job function.

All Employees

All employees are part of the quality system. The level of involvement is determined by the impact of applicable policies and *processes*.

All *functional areas* share the responsibility for attainment of established quality levels. Each individual employee is responsible for performing assigned functions or task-assignments in accordance with established *process descriptions* and *other detailed work documents* such that the defined standards of quality are achieved.

Process Improvement Teams

Improvement Teams are utilized throughout the organization to implement process improvements.

5.5.2 Management Representative

The VP/General Manager of Net Safety Monitoring appoints the Quality Engineer who, irrespective of other duties, is responsible for the functioning of the overall quality system.
The Quality Engineer has the ultimate responsibility over the quality system and reviews it as a basis for improvement.

The Quality Engineer or delegate has the authority and freedom to:

1. ensure that the procedures or processes that affect the quality of the product are documented and maintained.
2. report to the Director of Ops & Supply Chain (and/or senior management- Director of Global Quality) on the performance of the quality system.
3. ensure the promotion of awareness of customer requirements throughout the company.
4. liaise with external parties on matters relating to Net Safety Monitoring quality system and products quality certification.
5. monitor special processes, identify training requirements for technicians and ensure qualified operators carry out special process activities.

The Certification Specialist is the Authorized Person responsible for:

1. coordination of activities with regards to hazardous area products
   - The Certification Specialist may act as an authorized person with the Director of Engineering having ultimate approvals authority
   - Ex certification shall be reviewed annually to verify appropriate standards
2. the need to liaison with certification agencies (i.e. a Notified Body) with respect to any proposed changes to design affecting the product certification and the assessment of the quality system
3. authorization of initial approval and changes to related drawings
4. authorization of concessions (non-conforming product)
5. informing customers of safe use conditions

5.5.3 Internal Communication

Net Safety Monitoring ensures that appropriate communication processes are established and that the effectiveness of the Quality Management System is suitably communicated.

5.6 Management Review

5.6.1 General

In order to facilitate confidence in the quality of product and process, Net Safety Monitoring management reviews the entire quality system for suitability, adequacy, effectiveness and continuous improvement opportunities. This also includes the review of the effectiveness of the QMS with respect to products intended for use in explosive atmosphere. Top management will ensure the integrity of the management system is maintained when changes to the management system are planned and implemented.

The Quality Engineer shall conduct periodic yearly reviews within 12 month intervals, not exceeding 14 months. Minutes of Quality Management System Reviews are maintained as quality records.

The Quality Engineer shall chair the review meetings. The persons responsible for the activities as described in 5.5.2 will participate in the review.

5.6.2 Review Input

The input to management review shall include information on, but not limited to:

1. suitability of policies and procedures.
2. reports from managerial and supervisory personnel.
3. results of internal audit reports.
4. customer complaints & feedback.

5. process performance and product conformity.
6. corrective and preventive actions.
7. trend analysis or changes that could affect the quality management system with respect to product intended for use in potentially explosive atmospheres.
8. follow-up actions from previous management reviews.
9. recommendations or suggestions for improvement.

5.6.3 Review Output

The output from the review will include actions to improve the Quality Management System, processes, products and resources requirements. Status and closure of identified improvement actions are tracked and maintained by the Quality department.

6.0 RESOURCE MANAGEMENT

6.1 Provision of Resources

Net Safety Monitoring shall determine and provide the resources needed:

1. to implement and improve the processes of the quality management and continually improve its effectiveness.
2. to enhance customer satisfaction by meeting customer requirements.

6.2 Human Resources

6.2.1 General

Net Safety Monitoring reviews the education, training, skills, experience of personnel and/or demonstrated skill to ensure competency and qualification for the position being hired.

6.2.2 Competence, Awareness and Training

Departmental managers have the responsibility for defining and ensuring the competence required for each functional position within their department. In addition, they shall ensure that their employees are aware of the relevance and importance of their activities and how they contribute to the achievement of the quality objectives. These will be part of annual employee performance review process.

Training program(s) will be relevant to the present and anticipated tasks. As needed, Net Safety Monitoring shall ensure that all personnel having an impact on Ex compliance receive appropriate training. The effectiveness of the training actions taken will be evaluated. The maintenance of records covering education, training, skills and experience is the responsibility of the Human Resources Department.

6.3 Infrastructure

Net Safety Monitoring determines and provides an annual budget for each department with the input from department managers as to their requirements to maintain the infrastructure needed to achieve conformity to product requirements. Infrastructure includes, as applicable:

1. Buildings, workspace, and associated utilities (lighting, telephones, computers, etc.).
2. Equipment for manufacturing, inspection and testing use.
3. Supporting services (Net Safety Monitoring web site, IT, courier, etc.).

6.4 Work Environment

Net Safety Monitoring establishes and maintains the appropriate work environment needed to achieve conformity to product requirements, and complies with the Workers' Compensation Board – Alberta (WCB) guidelines and the Manufacturer's Health & Safety Association (MHSA) for the health & safety program.

7.0 PRODUCT REALIZATION

7.1 Planning of Product Realization

Net Safety Monitoring will plan and develop the processes and documents needed for product realization. Planning of product realization shall be consistent with the requirements of the other processes of the quality management system.

Net Safety Monitoring has given consideration to the following activities, as appropriate, in meeting the specific requirements for products, projects or contracts:

1. The preparation of quality plans.
2. The identification and acquisition of any controls, processes, equipment (including inspection and test equipment), fixtures, resources and skills that may be needed to achieve the required quality.
3. Ensuring the compatibility of the design, the production process, installation, servicing, inspection and test procedures and the applicable documentation.
4. The updating, as necessary, quality control, inspection and testing techniques and procedures, including the development of new instrumentation.
5. The identification of any measurement requirement involving capability that exceeds the known state of the art in sufficient time for the needed capability to be developed.
6. The identification of suitable verification, at appropriate stages, in the realization of product.
7. The clarification of standards of acceptability for features and requirements, including those which contain a subjective element.
8. The identification and preparation of quality records.

The New Product Development (NPD) procedure provides detailed activities as mentioned above for managing product development project. The NPD procedure is a gated process (Gates 1-7) in which deliverables are controlled and signed off at each gate as shown below.

7.2 Customer-related Processes

7.2.1 Determination of Requirements Related to the Product

When a request for quote (RFQ) or an order is received from the customer, Net Safety's Customer Service Center (CSC) representative determines:

1. the requirements specified by the customer, including the requirements for delivery and post-delivery activities.
2. requirements not stated by the customer but necessary for specified or intended use, where known.
3. statutory and regulatory requirement applicable to the product.
4. any additional requirements such as product options, accessories, etc. .

7.2.2 Review of Requirements Related to the Product

Net Safety Monitoring reviews, thoroughly understands, and confirms requirements for Representative Agreements and Representative orders, prior to acceptance and ensure:

1. product requirements are defined.
2. contract or order requirements differing from those previously expressed are resolved.
3. the organization has the ability to meet the defined requirements.

Records of technical specifications, bids, Representative purchase orders and order confirmations are

maintained in the Customer Service Center (CSC) department.

Where product requirements are changed, Net Safety Monitoring ensures that relevant documents are amended and personnel are advised of the changes. This is required to ensure conformance to the customer requirements and compatibility with the Certification Body's directives or standards.

The review shall ensure that any stated customer requirement is compatible with the EC type. The review will include documented evidence to demonstrate that the customer's requirements are compatible with the EC Type Examination Certificate (e.g. ambient temp range, type of protection, equipment group, etc).

The amended Sales orders or request for quotes (RFQ) are emailed or faxed back to the customer, confirming the latest changes to the requirements.

Verbal Orders

If no written statement of requirement is available for an order received by verbal means, Rosemount will ensure that order requirements are agreed to before their acceptance.

7.2.3 Customer Communication

The Customer Service Center (CSC) personnel or designated personnel communicates and interfaces with the customers in relation to:

1. product information (e.g. brochures, specs sheet, CD, web site).
2. enquiries, contract or order handling, including amendments.
3. eliciting and documenting customer feedback, including customer complaints.

7.3 Design and Development

7.3.1 Design and Development Planning

Net Safety Monitoring is dedicated to research and development activities in order to expand and refine its product line. The Engineering department prepares plans for the design and development activities. These plans:

1. describe the design and/or development activities.
2. define responsibilities for their implementation.
3. ensure that activities are assigned to qualified personnel with adequate resources to complete the job.
4. are updated as the design and/or development evolves.

The interfaces between different groups involved in design and development are managed to ensure effective communication and clear assignment of responsibility.

The planning output is updated, as appropriate, as the design and development progresses.

The Engineering Department uses the New Product Development (NPD) process as shown section 7.1 to plan and control the design and development of products.

7.3.2 Design and Development Input

Inputs are identified for each design or development project. Inputs include:

1. contract review activities.
2. statutory requirements.
3. regulatory and legal requirements.
4. customer needs.
5. applicable information from previous similar designs.
6. any other requirements essentials for design and/or development.

Inputs are reviewed for adequacy. Incomplete, ambiguous or conflicting requirements are resolved and signed-off by the Director of Engineering and/or Project Manager before proceeding.

Inputs relating to the product requirements are entered and maintained.

7.3.3 Design and Development Output

In order to ensure that results meet intended requirements, design and development outputs will be documented to show that the design outputs:

1. meet design input requirements.
2. are documented in terms that can be verified and validated against input requirements.
3. contain or make reference to acceptance criteria.
4. identify characteristics of the design those are crucial to the safe and proper function of our safety monitoring equipment.

Design outputs are in electronic or hard copy and are reviewed by the Director of Engineering and/or Project Manager of the project before release and maintained as quality records.

7.3.4 Design and Development Review

In various stages of the project, the Director of Engineering and/or Project Manager, along with representatives of the functions concerned with the design, review the design results:

1. to evaluate that the design result are still valid to meet the requirements.
2. To identify any problems encountered during the design process and to make necessary changes or take actions.

The results of the review and subsequent follow-up actions are documented and maintained.

7.3.5 Design and Development Verification

As the design evolves and at the end of the design process, the Director of Engineering and/or Project Manager of the project ensures that verifications are conducted against the input requirements. The results of the verifications and subsequent follow-up actions are reviewed, recorded and maintained as quality records.

7.3.6 Design and Development Validation

Validation of the final product is performed to ensure that it meets the customers' needs and requirements. Wherever applicable, the Director of Engineering and/or Project Manager validates the project and the design before delivery or implementation of the product. If the product has different intended uses, multiple validations are performed. The results of the validation and subsequent follow-up actions are recorded and maintained as quality records.

7.3.7 Control of Design and Development Changes

During the design and development process, changes due to customer input, the market, design review, validation or verification activities, are reviewed, approved and recorded. If changes are required to release documents, the document change and control procedures are used to ensure only current documentation is used.

The changes are verified and approved before implementation. The results of the review of changes and subsequent follow-up actions are documented as quality records.

7.4 Purchasing

7.4.1 Purchasing Process

Net Safety Monitoring controls purchasing activities to ensure that that products and services purchased for use in the design and manufacture of our products meet stated requirements per section 2.0. The type and extent of control applied to the supplier and the purchased product shall be dependent upon the effect of the purchased product on subsequent product realization or the final product.

Net Safety Monitoring will evaluate and select suppliers based on their ability to supply product in accordance with the organization's requirements. Criteria for selection, evaluation and re-evaluation shall be established. Records of the results of evaluations and any necessary actions arising from the evaluation shall be maintained as quality records.

1. The responsibility for an EC type examination certificate shall not be subcontracted, while manufacturing, test and final inspection may be subcontracted.
2. Suppliers providing a product, process or service that can affect the products compliance with the mandatory statements identified on the EC type examination certificate will only be selected after an evaluation has demonstrated that they have the capability of ensuring compliance with all specified requirements.
    a. The evaluation will be made by one or more of the following methods:
        - The supplier has third party QMS certification to the appropriate standard and scope issued by an accredited body which can demonstrate that it operates in compliance with ISO/IEC 17021.
        - An evaluation by Net Safety Monitoring by means of a Supplier Quality Audit that the supplier can provide product process or service that is fit for purpose and to ensure that all relevant controls are available, documented, understood and effective.
    b. Suppliers providing calibration service will be evaluated on their ability to meet stated requirements.
    c. Where the fit, form or functions affecting compliance as specified in the mandatory standards identified on an EC type examination certificate cannot be verified at a later stage, then the evaluation will include initial and periodic site assessments at the supplier's premises to ensure relevant controls are available, documented, understood and effective.
3. Suppliers not used for a period exceeding one year will be re-evaluated prior to the placing of a contract as per 7.4.1 (2.)
4. Requirements for 2. & 3. are not mandatory for products, process or service where verification for conformance is followed as per 7.4.3.
5. When required, Net Safety shall make arrangement whereby the Ex quality system certification body may verify any supplier's operation to ensure conformance to the Ex type protection.

7.4.2 Purchasing Information

Net Safety Monitoring ensures that specified purchase requirements are adequate prior to being communicated to the supplier. They shall describe the product to be purchased and include:

1. requirements for approval of products, procedures, processes and equipment.
2. requirements for qualification of personnel.
3. Quality Management System requirements.
4. the purchasing documents that clearly describe the specific requirements pertaining to subcontracted product set out in the EC type examination certificate and the equipment documents (e.g. for process control, test or inspection)
5. specific quality procedures, resources and sequence of activities relevant to the particular item for items where conformance cannot be verified after manufacture (e.g. encapsulated intrinsically safe circuits).
6. definition of the method by which documents (e.g. technical specifications) stated in a particular purchase order remain traceable to the order.

7.4.3 Verification of Purchased Product

Net Safety Monitoring ensures that purchased products meet mandatory and other requirements through the use of inspection and other relevant activities. When or if it is required to verify at a supplier's premises, Net Safety Monitoring will document the verification arrangements and method of product release in the purchasing information.

1. For purchasing products that can compromise the type of protection as specified by mandatory requirements on EC type examination certificates, the organization will determine and implement a verification process. This is to ensure the products are in compliance with the relevant requirements.
2. Where the supplier has been evaluated and documented objective evidence has been obtained to demonstrate that the supplier is fully capable of producing and verifying that product or service, no further verification of the product or service is required, if a declaration of conformity according to ISO/IEC 17050-1 is supplied with each batch or product.
3. Where the EC type examination certificate specifies a routine test or inspection these will be carried out on each and every product. They may be carried out by either the supplier or Net Safety personnel. When carried out by the supplier, they will be specified on the purchasing documents and confirmed by the supplier by means of a declaration of conformity according to ISO/IEC 17050-1.
4. Where verification of a product cannot be carried out after the manufacture (e.g. the internal parts of an encapsulated intrinsically safe circuit) then the product will only be accepted if supplied with a declaration of conformity according to ISO/IEC 17050-1. Those will specifically state compliance to the purchase document conformity of the entire batch.
5. Where sample inspections or tests are permitted the product shall be assembled into identifiable lots, sub lots or batches. Each lot or batch shall, as far as practicable, consist of units of products of a single type, grade, class, size and composition, manufactured under essentially the same conditions and essentially the same time. The sampling plan shall provide for inspecting the samples from lots or batches by attributes or variables measurement, or for continuous sampling by attributes measurements. In cases where destructive tests or where product screening is not feasible or desirable, then the sampling plan to be used will be specified in the contract of product specifications.
6. Where either the supplier or Net Safety requires training or specialist knowledge to carry out verification, they will be demonstrated and training records maintained.
7. Where Net Safety chooses not to carry out inspections and tests at its own premises, then inspections and tests will be performed on the supplier premises under the responsibility of Net Safety.
8. Where a supplier provides product with evidence of conformity to the specific protection method applicable for use in a potentially explosive atmosphere, then further verification is not required unless Net Safety considers it necessary.

7.5 Production and Service Operations

7.5.1 Control of Production and Service Provision

Processes that directly affect quality of Net Safety Monitoring products are identified, planned and carried out under controlled conditions.
Controlled conditions at Net Safety Monitoring include the following:

1. Documented procedures that define the manner of production, inspection and test.
2. Net Safety Monitoring uses suitable production and test equipment to build and test the product.
3. Product is designed, manufactured and tested in compliance with CSA, NRTL/C, IECEx, ATEX or FM standards and in accordance with documented plans and procedures.
4. Process parameters are monitored and controlled according to product characteristics.
5. The availability and use of measuring and monitoring equipment.
6. The implementation of monitoring activities.
7. Manufacturing equipment is maintained to ensure continuing process capability.

All Net Safety Monitoring manufacturing personnel are responsible for following documented manufacturing procedures and carrying out these procedures under controlled conditions.

7.5.2 Validation of Processes for Production and Service Provision

Net Safety Monitoring validates processes for production and service provision where the resulting output cannot be verified by subsequent monitoring or measurement. And, as a consequence, deficiencies become apparent only after the product is in use or the service has been delivered. Therefore, where required, those specific processes shall be measured or monitored and maintained documented evidence as defined in Annex A of ISO/IEC 800-79-34.

Validation will demonstrate the ability of these processes to achieve planned results. As applicable, the arrangements for these processes will include:

1. Defined criteria for review and approval of the processes
2. Approval of equipment and qualification of personnel
3. The use of specific methods and procedures
4. Requirements for records
5. Re-validation

7.5.3 Identification and Traceability

Where appropriate, Net Safety Monitoring establishes, implements and maintains procedures to identify the product throughout product realization.

Where monitoring and measurement are requirements, the product status shall be identified with respect to these requirements throughout product realization.

Where traceability is a requirement, the product is uniquely identified (and any significant parts)

using serial number, batch or date code methods and the identification recorded.

7.5.4 Customer Property

To ensure that the product is cared for while in our possession, all returns or defective units are identified, verified, protected and maintained as per Return Material Authorization (RMA) procedure.

It is Net Safety Monitoring's responsibility to verify the compatibility of the returned product with the requirements of the Certification Bodies and directives, and verify the compatibility of customer supplied product with the requirements of the EC type examination certificate.

Net Safety Monitoring records and reports to the customer any products lost, damaged or otherwise found unsuitable for use while they are in our possession.

NOTE: Customer Property can include intellectual property and personal data.

7.5.5 Preservation of Product

Net Safety Monitoring establishes, implements and maintains procedures to preserve the conformity of product during internal processing and delivery to the intended destination. Instruction manuals shall be provided to the customers with relevant standards and regulatory requirements. This preservation includes identification, handling, packaging, storage and protection. It also applies to constituent parts of any product.

Material and product is identified, preserved, and segregated from the time of receipt until transfer of ownership. Limited shelf-life material is specifically identified, stored, issued, and controlled according to established procedures for that material.

7.6 Control of Inspection, Measuring, and Test Equipment

Net Safety Monitoring determines monitoring and measurement requirements and establishes, implements and maintains procedures to select, control, calibrate and maintain monitoring and measuring equipment used to demonstrate conformance of product to the specified requirements.

Processes are established to ensure that monitoring and measurement can be, and is, carried out in a manner that is consistent with the requirements.

Where necessary to ensure valid results, measuring equipment shall be:

1. calibrated or verified, or both, at specified intervals, or prior to use, against measurement standards traceable to national or international measurement standards. Where no such standard exists, the basis used for calibration or verification shall be recorded.
2. adjusted or re-adjusted as necessary.
3. identified to enable the calibration status to be determined.
4. uniquely identified.

5. safeguarded from adjustments that would invalidate the measurement result.
6. protected from damage and deterioration during handling, maintenance and storage.

Procedures are established to assess and record the validity of previous measurements when the equipment is found not to conform to requirements (i.e. overloading or mishandling). Appropriate action is taken on the equipment and any product affected. The results of calibration and verification activities are maintained as quality records.

Where a calibration certificate does not bear the accreditation logo of a national accreditation authority, each calibration certificate will include at least one of the following pieces of information:

1. An unambiguous ID of the item calibrated
2. Evidence that the measurement is traceable to international or national measurement standards
3. The method of calibration
4. A statement of compliance with any relevant specification
5. The calibration results
6. The uncertainty of measurement, when necessary
7. The environmental conditions, where relevant
8. The date of calibration
9. The signature of the person under whose authority the certificate was issued
10. The name and address of the entity issuing the calibration certificate
11. A unique id of the calibration certificate

Where a calibration certificate does not bear the accreditation logo of a national accreditation authority or does not contain the info listed in clause 7.6(a) of ISO 9001 standard. Net Safety will demonstrate a valid relationship to international or national measurement standards by other means (e.g. documented site assessment).

When computer software is used in the monitoring and measurement of specified requirements, its ability to satisfy the intended application is confirmed (i.e. its verification and configuration management) prior to use and reconfirmed as necessary.

8.0 MEASUREMENT, ANALYSIS and IMPROVEMENT

8.1 General

Net Safety Monitoring shall plan and implement the monitoring, measurement, analysis and improvement processes needed to:

1. Demonstrate products conformance to the customer's requirements
2. Ensure conformity to the quality management system
3. Continuously improve the quality management system effectiveness

Net Safety Monitoring shall identify the need for statistical techniques required for establishing, controlling and verifying products' characteristics and process capability at appropriate stages.

8.2 Monitoring and Measurement

8.2.1 Customer Satisfaction

Net Safety Monitoring conducts customer satisfaction as a means to measure the performance of the quality management system and to assure that customers' requirements are met.

Surveys

Customer surveys are conducted by third-party organizations. Survey results are used for several purposes, including measuring areas of customer loyalty and customer satisfaction to determine and improve areas of customer dissatisfaction.

Customer Feedback

Essential communications with customers are tracked. Significant feedback is captured, addressed, and if necessary transferred into the Quality Corrective Action System.

The data or information gathered shall be presented to our senior management for review and to initiate corrective or preventive actions as necessary to enhance customer satisfaction.

8.2.2 Internal Audit

In order to verify *Quality Activities* and to determine the effectiveness of the quality system, Net Safety Monitoring will conduct periodic internal audits. The maximum period between audits should be 12 months and shall not exceed 14 months.

The audit team shall conduct audits of NSM's Quality Management System against the ISO 9001:2008 (Quality Management System) and ISO/IEC80079-34 (Application of Quality Systems to manufacture Ex equipment) standards. All processes shall be audited at least once a year.

The responsibility and requirements for planning and conducting internal audits will be defined in the Internal Audit procedure. The audit program will be planned to include audit criteria, scope, frequency and methods. Auditors will not audit their own work. Records of the audits and their results shall be maintained (see 4.2.4).

The management responsible for the area being audited shall ensure that any necessary corrective actions are taken without undue delay to eliminate detected nonconformities and their causes.

Follow-up activities shall be conducted to ensure corrective actions have been completed have been verified as effective (see 8.5.2).

Supportive Documents:
WPQ-0004 Internal Audit
WI-0029 Internal Audit Instructions

8.2.3 Monitoring and Measurement Processes

Net Safety products are inspected and tested using documented inspection and test procedures to verify that they meet requirements. The required inspection or test and the records to be established are detailed in the quality plan or documented procedure.

All Net Safety Monitoring personnel in inspection and testing functions are responsible to verify and document product conformance according to documented procedures.

All Net Safety Monitoring personnel are responsible to employ corrective action procedures for non-conformances found in receiving, in-process and final inspections and tests.

Where a process can affect the integrity of a type of protection, and where the resulting integrity cannot be verified after manufacture, that specific process will be measured or monitored and documentary evidence will be maintained to demonstrate compliance with required parameters.

8.2.4 Monitoring and Measurement of Products

All applicable personnel document and comply with the requirements for inspection and testing activities to provide assurance that inspection and test activities are controlled and completed according to documented procedures so that our products meet customer requirements.

For ATEX/IECEx certification, where the EC type-examination certificate and the equipment document require routine tests, then those tests shall be performed as specified with no sampling techniques being permitted. Where practicable, product labeling will not be affixed until final tests and inspection have been completed as per requirements.

Product release and service delivery will not proceed until the planned arrangements have been satisfactorily completed, unless otherwise approved by a relevant authority and, where applicable, by the customer.

8.3 Control of Nonconforming Product

Where applicable, Net Safety Monitoring has put controls in place to ensure that any products that do not meet our quality requirements are identified, segregated and dispositioned as per documented procedure(s).

All Net Safety Monitoring personnel are responsible for identifying a nonconforming product throughout the manufacturing cycle. A nonconformance may be:

1. Products failing or not performing properly
2. Defined processes that are not working
3. Supplier nonconformance
4. Customer complaint or suggestion

Nonconforming product will be identified and controlled as per documented procedures listed below. A defective material report (DMR) is used to document the nonconforming products and procedures at various stages of manufacturing.
The dispositions of the nonconforming product may be:

1. reworked or replaced to meet specified requirements.
2. accepted with or without repair by concession.
3. regraded for alternative applications.
4. rejected or scrapped.

Repaired or reworked product is re-inspected in accordance with documented procedures.

If, in the contract, the proposed use or repair of the product that does not conform to the specified requirements is reported for concession to the customer, the nonconformity that is accepted by the customer is recorded to denote the actual condition of the product.

For ATEX/IECEx certified products, Net Safety Monitoring shall inform the customer and the Notified Body in writing of an unsafe non-conforming product. A notice will be issued to the customer with recommended action to be taken where unsafe product are not possible to trace. Net-Safety Monitoring shall maintain non-conforming product record as per the Control of Records procedure. Concessions are not permitted if the product is taken outside of the design as defined in the Ex certificate and technical documentation.

Supportive Documents:
WPM-0006: Defective Material Report (DMR)
WPM-0007: In-Process Scrap Procedure
WPP-0005: Control of nonconforming product
WP-0104: Repair, refurbishment and reclamation of certified equipment
WPQ-0008: Product Recall Process
WPQ-0013: Temporary deviation notice (TDN)

8.4 Analysis of Data

Net Safety Monitoring is continuously determine, collect and analyze appropriate data to demonstrate the effectiveness of the quality management system and to evaluate where we can improve our quality management system, customer services, processes and products. The data collected provide information relating to, but not limited to the following:

1. Customer satisfaction
2. Products conformance
3. Processes and products trends
4. Opportunities for improvements and preventive actions
5. Suppliers performances

8.5 Improvement

8.5.1 Continual Improvement

Net Safety Monitoring is continually improving the effectiveness of our quality management system through the use of:

1. Quality policy
2. Quality objectives
3. Audit results
4. Analysis of data
5. Corrective and preventive actions
6. Management review meeting reports

8.5.2 Corrective Action and 8.5.3 Preventive Action

Net Safety Monitoring ensures that a method exists to control and prevent non-conformance or make enhancements in our products, documents, processes, and services through the use of Corrective Action Form (CAR) . An effective preventive/corrective (CAPA) action system is used to investigate, analyze, and eliminate non-conformance or enhance current processes to a higher degree of efficiency.

The Action Request Process (CAPA) can be used by anyone to report and/or document requests or problems to facilitate a resolution, which may engage the corrective, preventive, and/or non-conformance processes.

The personnel are also responsible for delegating the tasks with permission from the appropriate supervisory personnel as outlined in the relevant documents.

If required, members from various departments at Net Safety Monitoring work with the reporting personnel to:

1. Investigate the cause(s) of the problem or nonconformance and record the results.
2. Create new documents, processes, or enhancements as required.
3. Determine the corrective action required to eliminate the cause of the problem or non-conformance.
4. Apply controls to ensure that corrective action is implemented and is effective.
5. Conduct management reviews of actions to be taken and approve the process to be undertaken.

Additional audits may be needed where identification of nonconformities or departures casts doubts on the compliance with standards listed in section 2.0. Where appropriate, Internal Audits (section 8.2.2) will be conducted to follow-up. Records of the Action Request Form (CAPA) are controlled and maintained electronically.

Supportive Documents:
WPQ-0005: Corrective and preventive action

9.0 Revision History

Revision	Changes made	Originator / Date	Approval / Date
4.0	*All*	Tuan Tran 11/01/02	Marlene Coffey; Kevin Falenda 01/13/03
5.0	Added reference procedures number in section 4.2.3, 4.2.4, 8.2.2, 8.3, 8.5.2 as per ISO requirement, added interaction between processes flow chart in section 4.2.2, title changes, move NSM logo to the left and ISO logo to the right on the title page.	Tuan Tran 05/21/03	Marlene Coffey 05/26/03
6.0	Changed QA/QC Coordinator title to Manager, Quality & Certification. Enlarged the Quality Management System processes interaction diagram for clarity as per ARF# 05-0003.	Tuan Tran 02/28/05	Marlene Coffey 03/01/05
7.0	Updated manual to satisfy ATEX requirements EN13982	Tuan Tran 07/11/05	Marlene Coffey 07/19/05
7.1	Changed quality policy statement and minor updates	Tuan Tran 02/02/06	Bruce Curlock 03/01/06
8.0	- Revised manual name from Quality Manual to Quality Management System Manual. - Removal of numerous specifics (placed into Procedures and taken out of Manual) to simplify this QMS Manual. - Added Engineering Manager and 'delegate' reference to other specific titles. - Added updates to satisfy AS ISO/IEC 17025-2005 standards which added Section 7.7 and other subsections identified with `[Lab-only]'.	Tom Magdziarz 07/10/06	Kevin Algar 8/1/06
8.1	- Organization restructuring; From President to General Manager. - Quality Manager role is now Organizational Excellence Manager. - Certain Quality roles now under Organizational Excellence (Org-X for short). - Misc enhancements to address Internal Audits (2006 period) findings and current-practice adjustments.	Tom Magdziarz 22/11/06	Kevin Falenda Kevin Algar 27/11/06
8.2	- Title changes: General Manager is now Chief *Operating Officer (COO)*. Manager of Organizational Excellence is now *Director of Organizational Excellence*. - ATEX/Certification representative is now the Product Manager.	Tom Magdziarz 12/14/08	Kevin Falenda Kevin Algar 12/23/2008
8.3	- Upgrade to the ISO 9001:2008 standard, as per ISO 9001:2008 Annex B. - Updated Quality Policy per Q3 QMS Management Review meeting.	Tom Magdziarz 8/5/09	Kevin Falenda Kevin Algar 8/5/09
8.4	- Title Changes: Director of Organizational Excellence is now Organizational Excellence Manager, same responsibilities as before regarding the Quality Management System. - Removed: All sections with the designator [lab-only] which were supporting the AS ISO/IEC 17025-2005 standards. This standard has not been implemented at NSM and per an Internal ISO Audit (2010-02) its now being removed. - Added date-code format to the Top Header.	Tom Magdziarz 12/1/09	Kevin Falenda Kevin Algar 12/2/09
8.5	- Responsibility/Title Changes: VP, Manufacturing & Supply Chain changed to Organizational Excellence Manager. - Title Change: Manager of Engineering changed to Director of Product Development	Kevin Falenda 01/27/2011	Kevin Algar 02/07/2011
8.6	- Updated titles and added requirements of ISO/IECE 80079-34 as result of ATEX audit on Oct13, 2011 - Corrected formatting, logic and references, contact information - 7.4.3 consistent with ISO and IEC 17050-1. Sampling plan for verification of purchased product	Alastair Muir 04/18/2012	Kevin Algar 04/24/2012

Revision	**Changes made**	**Originator / Date**	**Approval / Date**
09	Updated section 1.0 to match scope on ISO certificate and added reference to relevant QMS procedures as per 2013 external audit (AoC#1). Added reference of NPD to section 7.0, updated audit frequency to section 8.2.2 and various manual updates throughout to reflect current policies. Updated revision scheme to current format Rev 09 instead of 9.0). Changes highlighted in blue.	Tuan Tran 06/05/2013	Lara Kauchak Alastair Muir 06/24/2013
10	Updated personnel titles	Tuan Tran 05/30/2014	Ricardo Console 06/09/2014
11	Updated new quality policy and objectives section 5.3.	Tuan Tran 11/01/2014	Ricardo Console 11/01/2014