



**INTERNATIONAL ELECTROTECHNICAL COMMISSION SYSTEM FOR
CERTIFICATION TO STANDARDS RELATING TO EQUIPMENT FOR
USE IN EXPLOSIVE ATMOSPHERES (IECEx SYSTEM)**

TITLE: IECEx Assessment Report for the acceptance of *Intertek Testing Services NA, Inc.* as an IECEx Certification Body (ExCB) within the IECEx System

Circulation to: Members of the IECEx Management Committee, ExMC

INTRODUCTION

This document contains the IECEx Assessment Report for the acceptance of *Intertek Testing Services NA, Inc.* as an IECEx Certification Body (ExCB) within the IECEx System.

This report is hereby submitted for voting.

Please consider this assessment report and return the completed voting form, (a separate document - in Word Format), to the IECEx Secretariat by **100809**.

Your speedy response to the voting process will be very much appreciated.

Chris Agius

IECEx Secretariat

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IECEX ASSESSMENT REPORT FOR INTERTEK TESTING SERVICES NA INC (IECEX Certification Body, ExCB)

Type of Assessment: (please mark)

Initial Assessment for Candidate ExCB X

Re-Assessment of ExCB

Scope Extension of ExCB

1. OBJECT AND FIELD OF APPLICATION

1.1. Country:

USA

1.2. Name of Candidate ExCB

Intertek Testing Services NA, Inc.

1.3. Members of the Assessment Team

Jim Munro (AU) – Lead IECEx Assessor and Team Leader
Heinz Berger (CH) - IECEx Expert Assessor,
Alexander Zalogin (RU) – IECEx Expert Assessor

1.4. Place and Date of Assessment

165 South Main Street
Cortland, New York 13045
USA

and at

3933 US Rt 11
Cortland New York 13045
USA
(location of ExTL)

Dates of the site assessment 4-6 August 2008

1.5. Assessment References

- i) IECEx 02 Third Edition 2006-11 IECEx Scheme rules of procedure
- ii) IECEx OD 003 IECEx Assessment procedures
- iii) IECEx OD 005 V2 Quality System requirements for manufacturers
- iv) IECEx OD 009 Issuing of CoCs, ExTRs and QARs

- v) IECEx Document OD 025 V1 Management of assessment and surveillance programs for manufacturers (includes QAR forms)
- vi) ISO/IEC Guide 65:1996
- vii) IECEx Document OD 17 Drawing and documentation guidance
- viii) ExCB application documents dated 16 August 2007

1.6. Scope of Application

1.6.1. Intertek Testing Services NA Inc is seeking acceptance for the following standards, all of which are covered by SCC accreditation to equivalent CSA standards.

Number	Title
60079-0 Edition 5	Explosive atmospheres - Part 0: Equipment - General requirements
60079-1 Edition 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
60079-2 Edition 5	Explosive atmospheres - Part 2: Equipment protection by pressurized enclosure «p»
60079-5 Edition 3	Explosive atmospheres - Part 5: Equipment protection by powder filling «q»
60079-6 Edition 3	Explosive atmospheres - Part 6: Equipment protection by oil immersion «o»
60079-7 Edition 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
60079-11 Edition 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
60079-15 Edition 4	Electrical apparatus for explosive gas atmospheres - Part 15: Construction, test and marking of type of protection "n" electrical apparatus
60079-18 Edition-3	Electrical apparatus for explosive gas atmospheres - Part 18: Construction, test and marking of type of protection encapsulation "m" electrical apparatus

1.6.2 The following list of Standards were included as part of the assessment with a satisfactory result. However, Intertek Testing Services NA Inc do not wish to include these Standards in the current scope of application but may do so in the future, noting that these standards are not currently covered by SCC accreditation. ITS has been assessed as being capable of certifying to these standards in addition to those listed in 1.6.1.

Number	Title
60079-25	Electrical apparatus for explosive gas atmospheres - Part 25: Intrinsically safe systems
60079-26	Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga
60079-27	Electrical apparatus for explosive gas atmospheres - Part 27: Fieldbus intrinsically safe concept (FISCO)

Number	Title
	and Fieldbus non-incendive concept (FNICO)
60079-31	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
61241-0	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
61241-1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"
61241-4	Electrical apparatus for use in the presence of combustible dust - Part 4: Type of protection 'pD'
61241-11	Electrical apparatus for use in the presence of combustible dust – Part 11: Protection by intrinsic safety 'iD'
61241-18	Electrical apparatus for use in the presence of combustible dust Part 18: Protection by encapsulation "mD"
62086-1	Electrical apparatus for explosive gas atmospheres – Electrical resistance trace heating – Part 1: General and testing requirements

1.7. Candidate ExCB Persons Interviewed

Name	Position
William T. Fiske	Senior Director – Technical Affairs
Don Card	Operations Manager
*Craig Davenport	Quality Manager Americas
Klaus Moller Hansen	Hazardous Area Scandinavia
*Michelle J. Lake	Senior Project Engineer
William T. Starr	Director of Certification

*Note: After the assessment both Craig Davenport's and Michelle Lake's positions changed and they are not directly involved with the IEC Ex CB or ExTL now. Hence, they do not appear on the latest organisation charts appended to this report. Mr. John Quigley is the now the Director of Quality and the Regional Quality Manager while Michelle Lake's role in the Certification Group has been filled by Steve Condie, Certification Engineer

1.8. Legal Entity of the Candidate ExCB

Intertek Testing Services NA, Inc. is incorporated under the laws of the State of New York, U.S.A., as a for-profit corporation.

1.9. Associated Testing Laboratory

The Intertek Certification Body located at 165 Main St. Cortland N.Y., U.S.A. works with the Intertek Testing Laboratory located at 3933 US Rt 11 in Cortland N. Y., U.S.A., both operating under Intertek Testing Services NA Inc. wholly owned by Intertek plc, UK.



1.10. Associated Certification Functions

Intertek NA participates in the IECEE CB Scheme as an issuing and recognizing NCB. The IECEE uses ISO/IEC Guide 65 as the basis for acceptance of NCBs. Refer to the Quality Manual, clause SOP 7.16.5.

1.11. National Marks and Certificates

Intertek NA operates a US and CAN national certification program, using ETL-Listed and WHI-Certified marks (WHI: Building products mark). For Ex equipment, the ETL-Listed mark is used. Refer to the QM, clause SOP 7.16.3.

1.12. Financial Support

Intertek NA is self-funded from its operation in testing, inspection and certification.

1.13. History

Intertek Testing Services, NA, Inc. is a wholly owned subsidiary of Intertek plc, a public company traded on the London Stock Exchange.

Electrical Testing Laboratories (ETL) was founded in 1896 through the incorporation of five of the original Edison Illuminating Companies. At that time, the company's vision was to provide assurance to consuming publics, through various products performance and safety test, that products tested to standards were available from Edison's companies and their clients, such as General Electric. More than 100 years later, ETL – now operating under the name Intertek – is still in the business of product performance and safety testing and is among the oldest and continuously operating testing laboratories in the world.

Additional History:

1977 Electrical Testing Laboratories was relocated to Cortland NY

1978 Renamed to ETL Testing Laboratories.

In 1988, ETL Testing Laboratories was purchased by Inchcape, plc, and became part of Inchcape Testing Services.

1.14. Standards Accepted

See clause 1.6 of this report

1.15. National Differences to IEC Standards

U.S.A. National Differences to IEC Ex standards are listed in the latest version of the Ex Bulletin, available through IEC Web Store. Information is available on the [IECEx Web Site](#)

2. ORGANISATION

2.1. Names, Titles and Experience of the Senior Executives

Name	Title	Experience (years)
Gregg Tiemann	Chief Executive	17
Nimer Al-Hafi	Vice President - Operations	15
Richard Adams	Vice President – Group	17

Name	Title	Experience (years)
	Engineering	
Richard John	Vice President - Compliance	3+ year in house General Counsel, 20 years outside General Counsel for Intertek

2.2. Name, Title and Experience of the Quality Management Representative

Name	Title	Experience
Craig Davenport	Quality Manager – Americas	27 yrs
Terence O’Beirne	Regional Quality Manager – Cortland	17 yrs with Intertek in Product Safety Last 8 yrs in Quality
Todd Relyea	Quality Supervisor – Hazardous Locations	15 yrs with Intertek in Product Safety Last 8 yrs in Quality and Haz Loc Engineer

2.3. Name and Title of Nominated Principal Contact

Name	Title	Comments
William Fiske	Director of Technical Affairs	bill.fiske@intertek.com
Donald Card	Operations Manager Hazardous Location Group	don.card@intertek.com

2.4. Name and Title of Signatories for Certification

Name	Title	Comments
William Fiske	Director of Technical Affairs	bill.fiske@intertek.com
Donald Card	Operations Manager Hazardous Locations Group	don.card@intertek.com

2.5. Other Employees in ExCB activity

Name	Title/Comments	Responsibility	Experience in Ex
John Quigley	Director of Quality	IECEE and IECEx Schemes coordination	20 Years with Intertek 12 Years IECEE Schemes 5 Years IECEE Assessor
William Starr	Director ETL Certification	Acceptance of ETL Certification based on IECEx documents	25 Years in ETL Certification
Steve Condie	Associate Engineer	IECEx document coordination	5 Years ETL Certification & Standards Library
Jeremy Neagle	Assistant Chief Engineer	QAR, Technical Lead, ExCB	13 years Ex

Name	Title/Comments	Responsibility	Experience in Ex
		Signatory	
Lisa-Marie Martin	Located in Intertek Dallas, Texas	QAR	6 years Ex
Todd Relyea	Sr. Project Engineer – Cortland	QAR	8 years Ex
Richard Smith	Located in Intertek Testing and Certification Ltd – Chester	QAR	14 years Ex
Klaus Hansen	Located in Intertek Testing and Certification Ltd – Denmark	QAR	14 years Ex
Andy Austin	Located in Intertek Testing and Certification Ltd – Leatherhead	QAR	29 years Ex
Vijay Varma	Located in Intertek Testing and Certification Ltd – Leatherhead	QAR	26 years Ex
Adrian Smart	Located in Intertek Testing and Certification Ltd – Leatherhead	QAR	17 years Ex
Peter Lauritzen	Located in Intertek Testing and Certification Ltd - Denmark	QAR	10 years Ex
Paul Moss	Located in Intertek Testing and Certification Ltd - Chester	QAR	7 years Ex

2.6. Organizational Structure

Organizational Structure is shown in Annexes 1 and 2. Annex 1 is the overall organization chart of the Cortland location with Annex 2 indicating Ex function of ExCB and ExTL

2.7. Administration (including Indemnity Insurance)

Certification administration is organized in order to handle all documentation and correspondence with view to certification activities.

2.7.1 Indemnity Insurance

Intertek NA presented an insurance certificate issued by the Jardine Lloyd Thompson Corporate Risk Insurance Company, carrying the number LB0810949 with validity from May 1st 2008 to April 30th, 2009. Prior to issue of this report evidence was provided that they continue to hold indemnity insurance.



3. RESOURCES

A total of 16 employees are involved in Ex certification activities which includes administration, certificate release, manufacturer auditing, general handling, customer service, accreditations, trainings.

4. COMMITTEES / Governing Board / Appeals / Advisory Board

At the time of the assessment there was no committee appointed with duties related to the certification. However, Intertek subsequently instigated an Independence and Impartiality Committee of representative parties. At this time of issue of this report the committee members had been finalized and a date for the first meeting was being investigated.

5. CERTIFICATION OPERATIONS

5.1. National Approval/Certification Methods

National approval using IECEx documentation is described in QM # LOP COR-OE-HAZ-00X "Application of IECEx Scheme", clause 11.

5.2. Certification Policy

The certification policy is described in QM # LOP COR-OE-HAZ-00X "Application of IECEx Scheme" and found to cover the requirements of the IECEx System.

5.3. Application for Certification

The application for certification is described in QM # LOP COR-OE-HAZ-00X "Application of IECEx Scheme", clause 4. Intertek NA uses a combined application form covering IECEx, ETL and ATEX.

5.4. Certification Decision

SOP 7.16.9 Certification of Equipment in the IEC Ex System and SD 16.9.1 Operations Overview clearly define the IECEx process including how the certification decision is taken. It is stated that the person taking the decision shall not participate directly in the evaluation, testing or auditing process leading to the IEC Ex Certification. The process for each project is documented, including the use of a Certification Review Checklist.

5.5. Suspension and Cancellation of Certificates

National approval using IECEx documentation is described in QM # LOP COR-OE-HAZ-00X "Application of IECEx Scheme", clause 13.

The document QM # LOP COR-OE-HAZ-00X "Application of IECEx Scheme" was checked and found appropriate.

6. STATISTICS

6.1. Certificates Issued

Number of certificates issued under the ETL certification system using US/CAN national standards:

Standards	Title	Number of issued certificates 2005-2008
60079-0	Explosive atmospheres - Part 0: Equipment - General requirements	2
60079-1	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"	3
60079-2	Explosive atmospheres - Part 2: Equipment protection by pressurized enclosure «p»	1
60079-7	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"	1
60079-11	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"	10
60079-15	Electrical apparatus for explosive gas atmospheres - Part 15: Construction, test and marking of type of protection "n" electrical apparatus	8
60079-18	Electrical apparatus for explosive gas atmospheres - Part 18: Construction, test and marking of type of protection encapsulation "m" electrical apparatus	2

The above table lists those IEC Standards for which Intertek NA have issued certificates.

In addition to the numbers above Intertek NA has issued over 200 certificates for Ex equipment using traditional CSA and UL standards for Ex protection concepts based on divisions (rather than zones).

7. DOCUMENTATION

7.1. Quality Manual

Quality Policy Manual (QPM) of Intertek describes company's quality system structure. Documentation used in this quality system is communicated to, understood by and available via Intranet to the appropriate staff.



Intertek conducts its operations in accordance with the Intertek Standard Operating Procedures (SOP), and Local Operating Procedures (LOP, or work instructions), which are maintained locally by an assigned quality supervisor.

All policies and procedures are based on, and compliant with ISO/IEC Guide 65, ISO/IEC Standard 17025 and ISO/IEC Standard 17020.

Intertek have established, implemented and maintain a quality system appropriate to the scope of its activities, including the type, range and volume of activities it undertakes. Intertek does not provide services other than those covered by the requirements defined in its quality manual. Intertek does not provide services, which may place the company in a position where a conflict of interest may occur.

7.2. Procedures

Standard Operating Procedures are contained in Section 7.0 of the Quality Policy Manual. All testing, inspection and certification projects are conducted in accordance with Standard Operating Procedures (SOP's), work instructions, and other forms of controlled documentation. Reference QPM clauses QPM 1.1, QPM 2.1, QPM 4.1.3a

7.3. Work Instructions

Work instructions (LOPs) are maintained locally and controlled via the Regional Quality Manager and Department Quality Supervisor.

7.4. Records

Company policy stated in QPM clause 4.3.
SOP 7.4.1, Documentation Control applies to all testing, certification and inspection services records and documents.

The main documents covered by this SOP include Quality Manual, SOPs, Supporting Documents, external standards used for testing and certification.

7.5. Document Change Control

Document Control policy can be found in QPM 7.4

The documents were checked and found appropriate, in meeting the requirements of the IECEx System.

8. CONFIDENTIALITY

The confidentiality issue is described in the QM, clause SOP 7.4.3. Each employee must sign a confidentiality and innovation agreement carrying the number SD 4.3.1 (mandatory). The assessment team confirmed the availability of signed agreements.

9. PUBLICATIONS

Intertek NA advises its services on the Internet under the URL www.etl-semko.com. A press release is planned.

10. NATIONAL ACCREDITATION

Intertek NA holds an accreditation of the American National Standards Institute (ANSI), see **Annex 3** and the Standards Council of Canada (SCC), see **Annex 4** as a Certification Body in accordance with the requirements of ISO/IEC Guide 65. Furthermore, Intertek NA is recognized by the US Occupational Safety and Health Administration (OSHA) as an NRTL (Nationally Recognized Testing Laboratory, a combination of testing and certification).

11. RECOGNITION AND AGREEMENTS

There are presently no bilateral agreements for mutual recognition of Ex certificates. However Intertek Services participates in other Schemes such as the IECEE

12. INTERNAL AUDIT AND PERIODIC MANAGEMENT REVIEW

Intertek NA procedures require annual audits (QM SOP 7.5.2) of all activities and an annual Management Review (QM SOP 7.5.1), typically scheduled in Jan/Feb. The last Management Review report is dated February 7th, 2008. The processes with its records were checked and found to meet the requirements of the IECEx System

13. SUBCONTRACTING, USE OF OTHER LABS AND USE OF OTHER LOCATIONS

Intertek NA operates subcontracting according to the QM, SOP 7.8.6. for IEC 60079-0, clause 26.10.3 and IEC 61241-0, clause 23.4.6.5.1. Those tests are outsourced to Intertek Plastics Technology Laboratories, Pittsfield, MA, U.S.A. which holds appropriate accreditation.

14. TRAINING

Intertek NA procedures require annual training plans (SOP 7.2.1). Records of training activities are maintained locally at each laboratory / department within Intertek NA.

15. ASSESSMENT OF MANUFACTURERS AND ISSUE OF QARS

The assessment of manufactures is described in the QM in procedure COR-OE-HAZ-00X. Intertek maintains a team of local auditors in order to satisfy the needs of a global market.

The following QAR (ATEX related) were checked and found appropriate:
ETS 2938/A/1, a manufacturer in Denmark, protection techniques "ia" and "e"
ETS 2521/A/1, a manufacturer in Italy, protection techniques "ia", "d" and "e"
ETS 2741/A/1, a manufacturer in China, protection techniques "m"
ETS 2742/A/1, a manufacturer in Denmark, protection techniques "d", "m" and "n"
ETS 2748/A/1, a manufacturer in Sweden, protection techniques "ia", "d", "e" and "m"

16. COMPLAINTS AND APPEALS (Including appeals to IECEx)

The complaints procedure is described in the QM, clause SOP 7.14.1, the appeal procedure in 7.14.3. which deals with the IECEx Appeals Process. After the



assessment visit, Intertek NA also established an Independence and Impartiality Committee that has a role to deal with unresolved complaints.

17. SPECIAL FACTS TO BE NOTED

17.1. *Supporting Documentation*

Copies of additional supporting information for this assessment have been provided to the applicant and the IECEx Secretariat. These include:

- Details of issues raised and how these have been resolved
- Checklist for ISO/IEC Guide 65
- List of subcontractors and other laboratories used for IECEx Activities
- IECEx competence matrix (ExCB and ExTL combined)

18. COMMENTS (Including issues found during assessment)

As noted earlier, the time of the assessment there was no committee appointed with duties related to the certification but this was subsequently rectified to the satisfaction of the assessment team.

19. RECOMMENDATION

Based on the initial assessment performed on 4-6 August 2008 Intertek Testing Services NA, Inc. is recommended for acceptance in the IECEx scheme as an IECEx Certification Body (ExCB) according to the scope of the standards listed 1.6.1 of this document.

Jim Munro

Heinz Berger

Alexander Zalogin

Team Leader

Expert Assessor

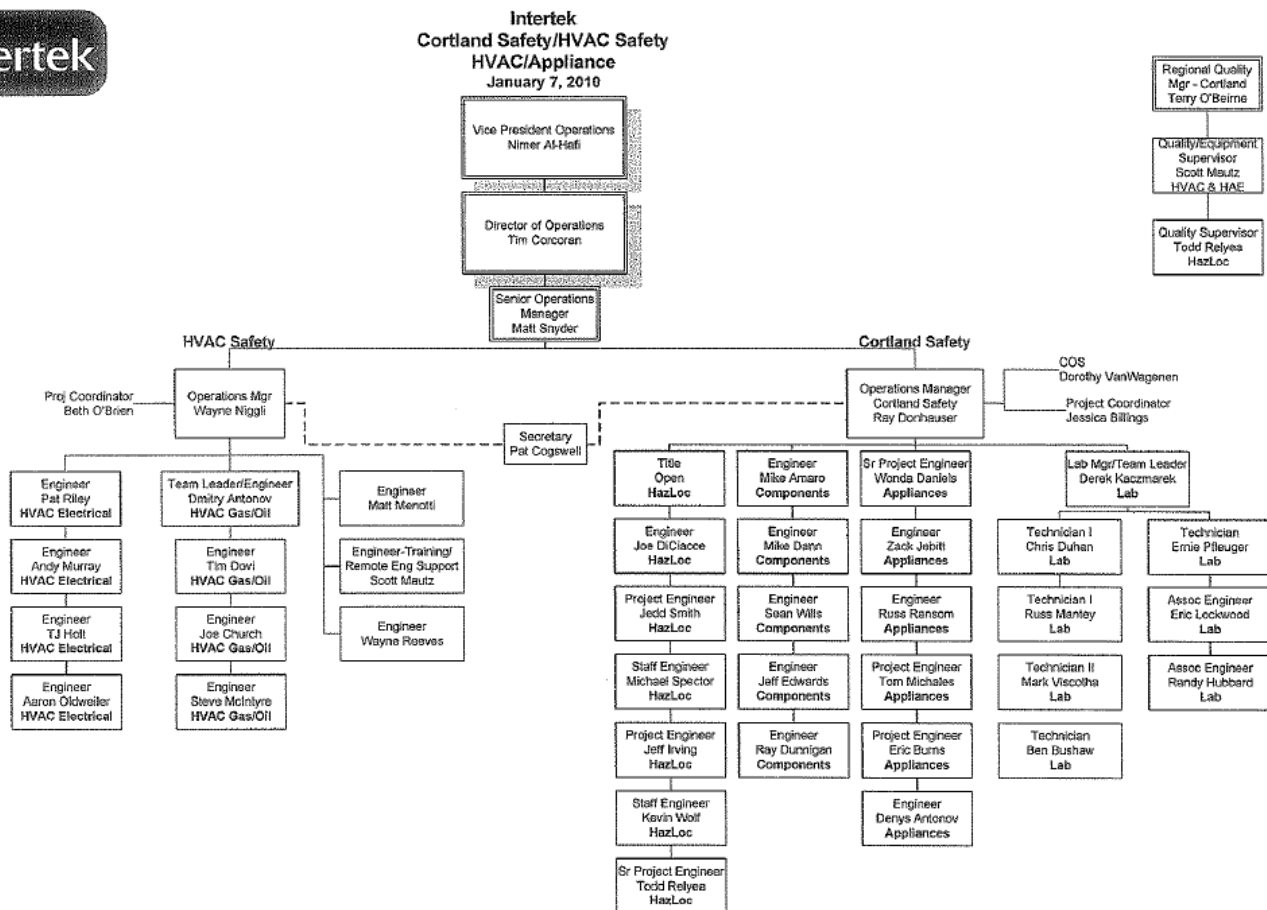
Expert Assessor

Date: 11 March 2010

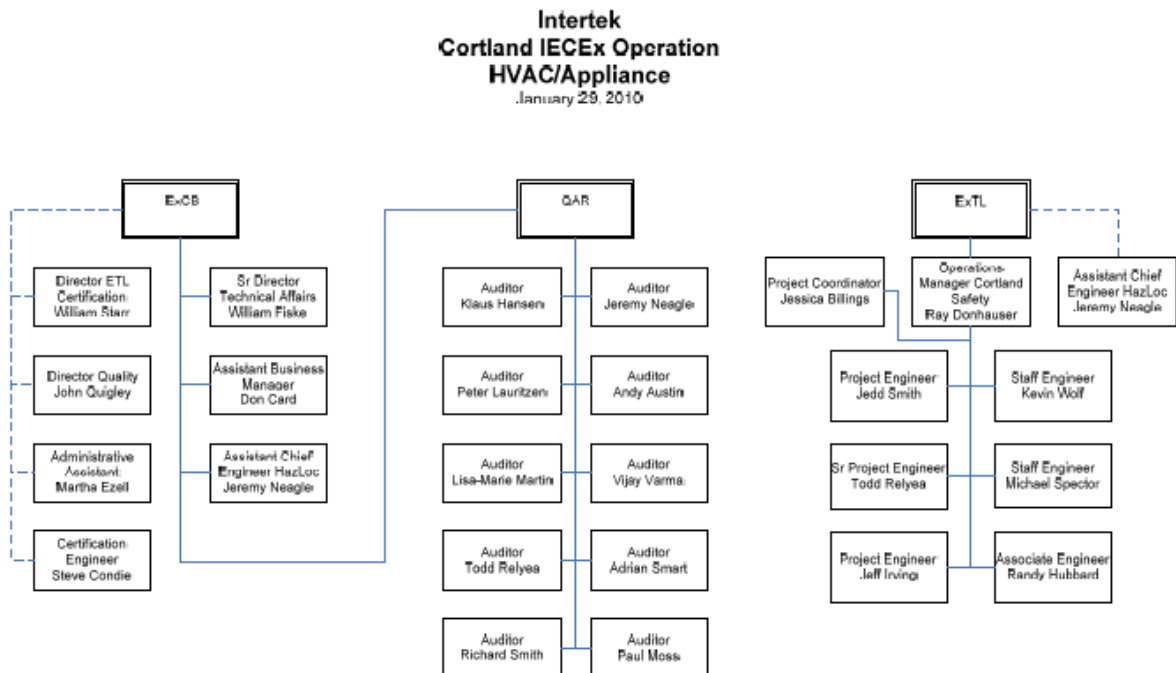
List of Annexes:

1. Cortland Organization Chart
2. Organization Chart of IECEx Operation
3. Accreditation Certificate for ISO/IEC Guide 65 ANSI (American National Standards Institute)
4. Accreditation Certificate for ISO/IEC Guide 65 SCC (Standards Council of Canada)

Annex 1 Cortland Organization Chart




Annex 2 Organization Chart of IECEx Operation





Annex 3
Accreditation Certificate for Guide 65 ANSI (American National Standards Institute)

CERTIFICATE OF ACCREDITATION PRODUCT CERTIFICATION PROGRAM	
The American National Standards Institute hereby affirms that	
INTERTEK TESTING SERVICES, NA INC. 3933 U.S. ROUTE 11 CORTLAND, NY 13045	
Accreditation ID #0204	
meets the ANSI accreditation program requirements and those set forth in	
ISO/IEC GUIDE 65:1996 GENERAL REQUIREMENTS FOR BODIES OPERATING PRODUCT CERTIFICATION SYSTEMS	
for programs within the following	
SCOPE OF ACCREDITATION	
Electrical Products <ul style="list-style-type: none">• Electrical / Electrical products• Medical Devices• Laboratory Equipment• Ventilating and Conditioning Equipment for Buildings• Hazardous Location Equipment• Luminaries• Appliances• Information Technology/Telecom	Sanitation Products <ul style="list-style-type: none">• Food Service Equipment• Pool and Spa Equipment
Gas and Oil Products <ul style="list-style-type: none">• Heating Appliances• Cooking Equipment	Building Products <ul style="list-style-type: none">• Fire Resistant Rated Assemblies• Prefabricated Construction Materials• Windows and Doors• Classified Roof Coverings• Plumbing Products• Manufactured Wood Products• Pressure Treated Wood Products
(Please refer to ANSI website www.ansi.org for site listings for each scope)	
ANSI Accredited Since 2000	
May 31, 2010 Valid Through <i>Sam Hallenbeck</i> ANSI Vice President, Accreditation Services	 ANSI Accredited Program PRODUCT CERTIFICATION
June 1, 2008 Date	

Annex 4



Accreditation Certificate for Guide 65 SCC (Standards Council of Canada)



Standards Council of Canada
Conseil canadien des normes

CERTIFICATION BODY ACCREDITATION PROGRAM

Accredited Legal Entity:

INTERTEK TESTING SERVICES NA INC.

165 Main Street, Cortland, NY 13045-2995 U.S.A.
Telephone: (607) 753-6711 Telefax: (607) 756-6699
Email: paul.moliski@intertek.com
Web: <http://www.etlsemko.com>

Any additional critical/key locations included in the scope of accreditation are appended to this listing.

Accreditation Standards:

CAN-P-3G (ISO/IEC Guide 65:1996)
CAN-P-1500M
IAF GD 5:2006

Certification Mark:



Product Certification System Type:

The product certification system operated by this organization most closely resembles that described by ISO/IEC Guide 67, *Conformity assessment — Fundamentals of product certification*, System 3. The program includes the evaluation of samples requested by the certification body, determination of characteristics by testing or assessment, initial assessment of the production process or the quality system, as applicable, evaluation of the test and assessment reports, license, on-going surveillance by testing or inspection of samples from the factory as well as on-going surveillance of the production process.

Subject Areas of Accreditation:

The scope of accreditation for the above-mentioned legal entity limits the use of the certification mark shown, to products that meet standards classified by the following international classification coding:

Canada