APPENDIX A
GUIDELINES FOR THE PRESENTATION OF SCOPES

1. Introduction

1.1 This Appendix provides guidance in the preparation of the Scope of Measurement, Testing, or PT Provider (Scope) to be presented for submission to the Standards Council of Canada (SCC) Program for Accreditation of Laboratories - Canada (PALCAN) with an application for accreditation.

1.2 The Scope becomes an Accreditation Document and is intended to clearly and unambiguously list specific testing or measurement capabilities or parameters for PT providers for which an organisation is accredited. Accreditation is site specific and even when part of a larger organisation the accredited unit must be identified on the Scope.

1.3 The Scope may contain a single test or many test method or calibration capabilities in a range of fields of testing or measurement, or parameters (PT provider).

1.4 When the SCC accredits an organisation, the designation of the Scope becomes Scope of Accreditation.

1.5 The accredited capabilities of the organisation will be identified under each Product/Service Class category for testing and PT providers' scopes or under measurement parameter for calibration scopes. This is further detailed for testing and PT providers' scopes under section 6 of this document.

1.6 Flexible scopes are permitted for laboratories that have PSA TMD and/or PSA Forensics in their Scopes. Other laboratories may be eligible and shall be considered on a case by case basis. This will depend on a number of issues including expertise of the laboratory in the area requested for the flexible scope, assessment team members and time needed to assess such scopes. The exact nature and breadth of the flexible scope and applicable annual fees for flexible scopes will be determined at that time. The applicable fees will be determined by several factors, including the number of team members and time required to assess the proposed scope.

2. Definitions

Non-routine Analysis:

Ad-hoc or one-of-a-kind work that is carried out for a specific purpose and may reflect a degree of innovation and limited notice.

Typically it is used in the context of work on out of the ordinary samples where established methods of analysis are unsuitable. These analyses required either significant adaptation of established methods, new method development or the establishment of innovative approaches.

NOTE: Non-routine test methods may only be accredited under the requirements of the SCC PSA-TMD program (CAN-P-1595).

Routine analysis Conducted Infrequently:

The analytical requirement has been encountered before. However, the testing is not in regular use or has low or very occasional sample requests, e.g. seasonal. A suitable validated accredited test method for solving the issue exists; however, specific quality assurance and quality control measures are required prior to the commencement (re-use) of the testing on customer samples and need to be defined by the laboratory in a documented procedure.

NOTE: To retain the scope listing of an "accredited routine test conducted infrequently" the testing or calibration laboratory shall comply with SCC documents (see CAN-P-1630 section 5.4.1) and the PSA document, if applicable.

3. Purpose and application

3.1 This Appendix will help organisations to prepare their proposed testing scope in application for accreditation and avoid delays caused by revisions to the proposed scope during the accreditation process. The criteria in this Appendix also apply to maintaining accredited scopes.

3.2 The laboratory initially drafts the Scope for which accreditation is sought. Testing scopes for laboratories being serviced by SCC and a Partner will be finalized after review and discussions between SCC, the pertinent Partner and the laboratory. The Scopes for calibration laboratories will be finalised by discussions between NRC/CLAS and the laboratory.

3.3 SCC recognises that it may be impractical, in some cases, to specify precise details for every test for which accreditation is sought. In such cases, the Scope will be adapted to the situation.

3.4 The guiding principle is that the Scope of Accreditation must state capabilities as clearly and unambiguously as possible in order not to be misleading in any way about the accredited capabilities.

3.5 The scope may be revised following an assessment or reassessment visit. This can consist of either a suitable reduction or could, when acceptable with both parties, result in added capabilities. The revision can also be editorial to ensure the criteria in this Appendix, as well as those for Calibration Laboratories under CLAS are met.

4. Restriction for the Content of a Scope

4.1 Only those tests for which a laboratory can demonstrate competence in compliance with the SCC requirements, those of the test method and the requirements of the applicable conformity standard will be listed in the Scope of Accreditation.

4.2 In general, SCC does not accredit activities of a subjective or interpretative nature.

4.3 SCC grants accreditation to a laboratory for those activities that the laboratory itself is competent to carry out. Laboratories are required to be capable of demonstrating that they themselves perform the test or measurement for which accreditation is sought or granted. Accreditation can only be granted for tests or measurements that a laboratory can demonstrate, by objective evidence, that they have conducted themselves.

5. Acceptable Scope Content

The scope of accreditation must be detailed as much as possible and give the specific identification of all the testing methods to be accredited. Test methods occasionally refer to other test methods to conduct portions of the test procedure. These are referred to as nested methods. When a laboratory needs to specifically refer to a nested method on a report, or when a laboratory needs to be considered accredited specifically for the nested method, the nested method must also be listed on the scope in addition to the principle method. Refer to **Note 2** on the following page.

A laboratory must refer to the identification of a published method in its scope of accreditation only if it applies it without modification or with minor editorial modifications (i.e. a translation of a published testing method). A laboratory using an in-house designation/title for a method that results in conducting the test according to a published method verbatim, must list the published method designation and title on the scope.

Modified published testing methods are considered in-house methods and are identified differently; validation in support of the modification is required. If the method is an in-house method, largely based on a published method, the in-house designated title shall be used on the scope. The laboratory will be required to produce full validation in support of the modification and will need to use the designation as listed on the scope of accreditation where the method is referenced in the reports.

The accreditation, when granted, will relate solely to tests listed in the approved scope of accreditation. The tests on the scope of accreditation must be performed by the laboratory and the laboratory must possess in-house capabilities (Note 1) to do so. Acceptable tests for accreditation may include any of the following:

a. Test methods contained in standards published nationally or internationally by accredited or recognised standards-development organisations. (Note 2)

b. Manufacturer published documents containing pertinent information on the use of major test equipment, which essentially constitute an element of the test method, such as a set of analytical instrument instructions or an equipment operating manual.

c. Test methods/procedures/supplementary instructions developed internally or derived from other test methods provided they are properly documented, maintained and are supported by validation data.

Note 1: In-House Capabilities is defined as: the applicant or accredited laboratory possesses at the accredited location the equipment, qualified personnel and records of actual tests conducted using that equipment and personnel.

Note 2: Laboratories can only be accredited for tests for which they have "in-house capabilities" and tests that are actually performed at the location of the accredited laboratory. Laboratories listing compendiums or

standards or other published methods containing multiple tests or techniques for which they do not have in-house testing capabilities for all, must specifically either identify chapters, sections, clauses or appendices for which they do not have "in-house capabilities" using either:

a. "Except for:" and listing specific tests within the standard or compendium for which the laboratory does not have capabilities by reference to chapter/section or clause number and complete title; or

b. "Only for:" and listing specifically those tests within the standard or compendium for which the laboratory has capabilities by reference to chapter/section or clause number and complete title.

Where standards, such as product standards, are listed, the laboratory is only considered accredited for the testing elements in those standards for which capabilities reside.

6. Preparation of the Proposed Scope

6.1 List of Test Methods

a. Prepare the list of tests, for which accreditation is sought: list the exact designation/the reference number followed by the exact published title of the method or standard in the language of origin;

b. The year designator for a standard or method is to be included only if a superseded method is still being used for a specific application. All other methods are to be listed without year as it is understood that the laboratory always uses the most recent revision of each listed method unless otherwise specified by date.

c. Review and consider the requirements and specifications in section 4 of this document.

d. For microbiology testing methods which are internal to the laboratory, the name of the organism shall be written in full in the title of the method included in the scope.

6.2 The PALCAN Classification System for the Test Methods

The classification for testing scopes is based on the *Harmonised Commodity Description and Coding System* (H.S.) of the World Customs Organisation (WCO). An ideal system would try to follow as closely as possible the H.S. terminology and codification.

The classification system SCC/PALCAN uses is named the Product and Services by Class (PSC) and is a transitional terminology that lies between the H.S. and the classifications of accrediting bodies from other countries with which SCC attempts to harmonise.

This system enables grouping tests by categories and sub-categories which in turn enables a standard classification for all testing scopes. This system is also used to classify Technical Assessor areas of expertise, thus facilitating matching suitably qualified Technical Assessors with the scope of any specific laboratory. While the PSC system may appear very large at a glance (over 400 categories) most laboratories use only a small segment of the classification system. This section is to introduce the structure and section 6.3 will provide a constructive approach that will facilitate the use

of the classification system. Section 9 of this Appendix contains the complete list of the PSC classification system including all sub-categories.

a. There are fifteen (15) principle categories that classify all tests. These are named Product Service Class (PSC) Codes and they appear in the scope as

UPPER CASE BOLD UNDERLINE

b. Each PSC is in turn divided into sub-categories that are more specific. These are named Major Sub-Headings and they appear as

Title Case Bold Underline

c. The Major Sub-Headings are yet again subdivided into Minor Sub-Headings and they appear as

Title Case Bold

d. Where any Major or Minor heading does not suit, the laboratory may create a Miscellaneous Heading that should appear in brackets as

(Title Case Bold)

6.3 Instruction for Building the Scope

a. Use the list of tests developed in section 6.1 as the working document that will be used to produce the Proposed Scope.

b. Review the list in Section 9 of this document. For convenience, the principle or PSC Headings have been shaded. The best result will be achieved by becoming familiar with the list in section 9 and identifying the PSCs from this list that apply to the tests of the proposed scope. When a minor heading is selected, it is important to consider the PSC and Major Heading that are associated; since some minor headings appear under more than one PSC and consequently have different interpretations.

c. There are two (2) ways of proceeding from this point: either move the Tests from the list under the correct Headings or import the appropriate PSC under which the tests will be listed. It is suggested to import the PSC and move the tests under the correct headings:

d. Step 1: copy paste the first applicable PSC with all its headings (Majors and Minors) onto the document where the tests are listed.

e. Step 2: eliminate the Minors that will not be used.

f. Step 3: retain the Majors that have minors remaining and retain any stand alone Majors that are useful.

g. Step 4: move the tests that apply to that PSC under the appropriate remaining headings.

h. Step 5: repeat for the next and subsequent applicable PSCs until all the tests are classified and consider the additional information in section 6.4 below.

6.4 Other things to consider

a. As a general rule, tests are listed under the appropriate Minor Sub-Headings. When all or most of the Minor Sub-Headings apply, the tests should be listed under the Major Heading, without bothering to use the minor subheadings.

b. A Minor heading must be listed with its corresponding Major and PSC: this is a cascading system. Minor sub-headings are specific and cannot be exchanged between Major sub-headings or PSCs. The same applies for Major sub-headings.

c. Each of the PSC, Major or Minor sub-headings may have an optional description added immediately below. This is a free form text that the laboratory may use to characterize/describe that section. The only restriction is that it cannot be misleading with regards to the actual testing capabilities associated with the heading nor constitute publicity in any manner. PALCAN reserves the right to edit these descriptions as deemed appropriate. This type of format is ideal when multiple Minor or Major sub-headings apply to a group of tests.

d. A test may not be listed more than once even if multiple categories apply. For these cases the test is to be listed under the most common heading. The other applicable/related headings are then listed with a reference to the heading where the test is listed.

7. PALCAN Fields of Testing and Description

A *Field of Testing* is defined as a recognised sphere of science, engineering or technology that describes a general area of related testing activities for classification purposes. These are different from the PSCs and are a more general classification. There are ten (10) Fields of Testing and these are as follows:

Acoustics and Vibration: Measurement of noise, sound and vibratory motions; tests on acoustic and vibration measuring equipment; measurement of acoustic and vibration effects on, and properties of, materials, assemblies and structures; testing of insulating materials, and devices intended to protect against noise and vibrations.

Biological: Biological, microbiological and biochemical testing and measurement for the examination of foods, drugs and pharmaceutical products, including testing for environmental, medical and veterinary purposes.

Chemical/Physical: All methods of chemical analysis and detection, including instrumental and automated tests, associated physical tests such as viscosity and surface tension determinations, and calibration of the testing equipment involved by means of standard reference materials.

Electrical/Electronic: Measurement of electrical quantities and parameters, including tests on all types of electronic equipment and components, electrical machinery, appliances and devices such as luminaries.

Forensic: Specialised investigation services for objective examination of evidence gathered to determine compliance with or contravention of laws, or otherwise to be presented in court when necessary, and always conducted under enhanced levels of security and with demonstrable and unequivocal continuity of sample handling.

Ionizing Radiation: Detection and measurement of all types of ionizing radiation and radioactivity, including X-rays, gamma rays, other products of nuclear fission and fusion, and all related dosimetry testing.

Mechanical/Physical: Measurement of strength of materials and assemblies and related properties such as surface hardness, pressure and metallographic parameters, and including determination of aerodynamic, hydraulic and pneumatic parameters.

Non-Destructive Examination: Direct examination of materials, components, assemblies and structures by such specialised techniques as radiography, ultrasonics, penetrants, magnetic particles and eddy currents, to detect and locate discontinuities without affecting the fitness for use of the examined article.

Optics & Optical Radiation: Testing of optical and photometric properties and parameters; measurements made with and on optical and photometric equipment and instruments; measurement of colour and surface smoothness (reflectance, gloss); measurements involving visible (light) and near-visible (infrared, ultra violet) wavelengths of radiation.

Thermal & Fire Resistance: Measurement and detection of heat energy, temperature, thermal conductivity/resistivity and heat capacity of materials and objects; flammability, fire resistance and burn rate testing of materials and assemblies; testing of heat actuated devices and thermally protective products including fire prevention, fire protection, fire fighting equipment and clothing, and the specific materials used.

8. PALCAN Program Specialty Areas (PSA)

Program Specialty Areas (PSAs) are specific technical fields of measurement or testing or disciplines within which a number of fields of testing combine to allow the articulation of requirements specific to that PSA for the accreditation of laboratories seeking recognition of competence within the PSA. To be considered a PSA within the PALCAN program, a need must be identified by a stakeholder group for specific technical interpretations of the requirements to CAN-P-4 (ISO//IEC 17025).

Checklists or rating guides to be used in the assessment of laboratories may also be developed in separate CAN-P documents.

The majority of secondary CAN-P documents (CAN-P-1500/1600 series) are available without charge on the SCC Laboratories web page as http://www.scc.ca/en/edocs/criteria-and-procedures/laboratory-accreditation by selecting the individual PSA from the quick links on the right hand side.

The following PSAs currently form part of the PALCAN program. They are briefly described and for more specific detail please refer to the CAN-P documents, or contact us at info.palcan@scc.ca.

Agriculture Inputs, Food, Animal Health and Plant Protection (AFAP)

This PSA is intended for laboratories that perform testing of agriculture inputs such as seeds, feed and fertilizer, food, animals and plants for:

a. Chemical analysis ranging from percent levels to trace levels, and
b. Qualitative and quantitative microbiological analysis.
c. Federally regulated animal diseases
d. Federally regulated plant quarantine pests
e. Seed testing for regulatory purposes

Accreditation under this PSA is the formal recognition by the Standards Council of Canada of the competence of a food, feed, fertilizer, animal health and plant pest -testing laboratory to perform and control this type of testing.

The Canadian Food Inspection Agency (CFIA) requires accreditation to CAN-P-4E by a CFIA recognized accreditation body such as SCC for all laboratories performing food testing to support specific regulatory requirements under the *CFIA Act* and these are identified in the AFAP Requirements named below.

CAN-P-1587 *Requirements Accreditation of Agriculture Inputs, Food, Animal Health and Plant Protection Testing Laboratories*

Calibration (in partnership with NRC/CLAS)

This PSA is for laboratories offering calibration services in specific measurement parameters. Laboratories accredited under this PSA may list their best measurement capabilities - the smallest uncertainties of measurement for which the laboratory is accredited. The total uncertainty of each accredited capability has a confidence level of at least 95% and includes the NRC Institute for National Measurement Standards (INMS) or other national metrology institute uncertainty. This best measurement capability also includes uncertainties associated with the measurements made by the accredited laboratory. Laboratories seeking accreditation under this PSA are to apply for such accreditation through NRC/CLAS. The CLAS contact is the Group Leader - CLAS: Ms. Georgette Macdonald, Tel.: (613) 991-4059, Fax: (613) 952-1394, Email: clas@nrc-cnrc.gc.ca.

Calibration measurement capabilities for accredited laboratories are listed on the Canadian Calibration Network web pages at the NRC/INMS:
http://infoex.nrc-cnrc.gc.ca/inms/search_clas_e.html

The guidelines and requirements for calibration laboratories are found at:
http://www.nrc-cnrc.gc.ca/eng/services/inms/calibration-laboratory/requirement-documents.html

NOTE: Calibration measurement capabilities for the calibration laboratories that are part of the program specialty area for the accreditation of National Metrology Institutes (NMI) are listed only the SCC website.

Environmental Testing (ET)

Accreditation under this PSA provides assurance that a laboratory is competent to carry out environmental analysis testing. The program is designed to ensure testing laboratories meet minimum quality and reliability standards and to ensure a demonstrated uniform level of proficiency among these testing laboratories. This includes, but is not limited to, the measurement of biological, chemical, physical, or toxicological characteristics of either the receiving environment or discharges to the receiving environment, and includes as appropriate, biological, chemical and physical fields of testing on the environmental surroundings (air, water, soil, flora and fauna) and waste (gaseous, liquid and solid) samples. Laboratories must successfully participate in the proficiency testing programs identified in the PSA document. This PSA program also enables Canada to better meet its obligations under international environmental and trade agreements that rely on environmental assessment and monitoring.

Accreditation under the PSA-ET specific requirements is the formal recognition by SCC of the competence of an environmental testing laboratory to manage and perform this type of activity.

CAN-P-1585 *Requirements for the Accreditation of Environmental Testing Laboratories*

Fasteners

This PSA is to allow formal recognition of the competence of laboratories that conduct testing of fasteners and include those fasteners covered by the US Fastener Quality Act.

Laboratories seeking accreditation under this PSA must first arrange for the implementation of contractual obligations with Collaborative Testing Services, Herndon, Virginia, USA, as prescribed by the US Fastener Quality Act. Applicant and accredited laboratories will require successful participation in twice-yearly proficiency testing activities in whichever of the following areas appear on their scope of testing: - Axial tensile; - Wedge tensile; - Rockwell Hardness; - Chemical analysis.

Guidelines: CAN-P-1581, *Requirements for the Assessment of testing laboratories to meet the requirements of the US Fastener Quality Act*

Forensic

This PSA allows for the accreditation of laboratories that provide analytical results of documented quality to the Canadian Courts of Law in both criminal and civil proceedings. Accredited laboratories demonstrate adherence to recognised practices and standards in the forensic sciences. Accreditation under this PSA program is the formal recognition by the Standards Council of Canada of the competence of a forensic testing laboratory to manage and perform the following types (disciplines) of forensic testing:

a. Counterfeits;
b. Firearms / Toolmarks;
c. Forensic Biology / DNA;
d. Forensic Chemistry / Trace Evidence;
e. Forensic Drug Chemistry;
f. Forensic Equine Drug Testing
g. Forensic Toxicology;
h. Questioned Documents Examination.

CAN-P-1578 *Requirements for the Accreditation of Forensic Testing Laboratories;*

Note: laboratories that are performing relationship testing should apply under the PSA Forensic.

Information Technology Security Evaluation and Testing (ITSET)

This PSA defines the additional requirements for accreditation of laboratories seeking recognition for testing in the areas of

a. Common Criteria product and system evaluations;
b. ITS product reviews;
c. Secure electronic commerce application evaluations;
d. Biometric device testing;
e. Vulnerability and tiger team testing; and
f. Specialized commercial security device testing.

This PSA is structured into specific ITS Approval Domains, each recognized by an ITS Competent Authority, such as the Communications Security Establishment (CSE) of the Government of Canada.

Guidelines: CAN-P-1591, *Requirements for the Accreditation of Information Technology Security Evaluation and Testing Facilities*

This PSA also includes those testing facilities seeking accreditation for conformity testing of cryptographic modules against FIPS PUB 140-2 Security Requirements for Cryptographic Modules. This document is a specific guideline that amplifies CAN-P-1591.

CAN-P-1621, *Requirements for the Accreditation of Cryptographic Module and Algorithm Testing Facilities*

Mineral Analysis

This PSA provides formal recognition of competence by the SCC of laboratories conducting mineral and mineral assay analysis in support of the mining and mining exploration industries. Applicant laboratories must successfully pass two rounds of proficiency testing provided by Natural Resources Canada's CANMET PTP-MAL

Proficiency Testing program prior to being assessed, and must successfully pass three proficiency test cycles before accreditation is granted.

CAN-P-1579, *Requirements for the Accreditation of Mineral Analysis Testing Laboratories*

Test Method Development & Evaluation and Non-routine Testing

Laboratories that conduct test method development, evaluation or non-routine testing may seek formal recognition of competence in the specific disciplines involved in this type of work from the SCC under this PSA. Applicant laboratories will normally be those involved in the planning, performance, management, and conduct of non-routine measurements in science, and test method development and evaluation. Accreditation will be restricted to those specific testing disciplines within which test methods are developed or evaluated or, within which non-routine testing is conducted.

Guidelines: CAN-P-1595, *Requirements for the Accreditation of Laboratories Engaged*
In Test Method Development & Evaluation and Non - Routine Testing

Proficiency Testing (PT)

Proficiency Testing Providers that serve laboratories and groups of laboratories may seek formal accreditation of their competence in the provision of these services. Such formal recognition of competence from the SCC is provided under this PSA. Applicant organisations will normally be involved in the development and delivery of PT samples, and/or the analysis of PT results from these client laboratories. Accreditation will include examination of the competence of the organisations involved in sample production. Accreditation requirements are contained in CAN-P-43.

Checklist: F0413, Checklist for the Assessment of Proficiency Testing Providers.

9. List of Products and Services by Class (PSC) Codes

ANIMAL AND PLANTS (AGRICULTURE)

Agricultural products: (except food and chemicals)
Cotton
Linen
Tobacco

Animal and Fishery Products: (except food)
Feathers
Furs
Leathers

Foods and Edible Products: (Human and Animal Consumption)
Animal or Vegetable Fats and Oils and Their Cleavage Products; prepared edible fats; animal or vegetable waxes
Beverages, Spirits and Vinegar
Cereals and Products of the Milling Industry
Coffee, Tea, Maté, and Spices
Dairy Products
Edible Fruits and Nuts
Edible Vegetables and Certain Roots and Tubers
Eggs and Fish
Feeds
Meat and Edible Meat Offal
Nutrition Labelling
Preparation of Vegetables, Fruits, Nuts and Parts of Plants
Preparation of Cereals, Flour, Starch; Pastry Cook's Products
Sugars and Sugar Confectionery

Unprocessed Milk:
Chemical Tests
Microbiological Tests

Forestry Products:

Seeds:

Soils:
Constituents and Nutrients
Physical Parameters

Other (Specify):
Veterinary

CHEMICALS and CHEMICAL PRODUCTS

Chemical Compounds: (not elsewhere specified)
Inorganic

Liquid
Organic

Chemicals for Agricultural Industry:
Biocides
Fertilizers
Herbicides
Insecticides
Pesticides

Chemicals for Food Industry:
Additives
Minerals
Preservatives
Vitamins

Cleaning Agents:
Disinfectants
Floor Polish
Soaps & Detergents
Wax Remover
Water Treatments

Explosives:
Ammunition
Blasting
Fireworks
Powders

Petrochemical Products: **(not elsewhere specified)**
Liquids

Pharmaceuticals and Cosmetics:
Capsule
Cream
Drugs
Injection
Liquid
Sterile Dressings
Tablet

Polymers: **(not elsewhere specified)**

Other (Specify):

CONSTRUCTION

Building Constructions and Prefabricated Buildings:
Airports
Buildings
Commercial

Dwellings
Industrial Buildings

Construction Materials: (Excluding textile products)
Caulking, Sealing and Glazing Compounds
Ceiling Coverings
Fasteners and Hardware (See also METALLIC and TEXTILES Sections)
Fire Resistant
Flammability
Floor Coverings (See also WOOD Section)
Insulating Materials
Miscellaneous Construction Materials
Panels (See also ELECTRICAL Section)
Plumbing Products
Roof Coverings
Vapour Barriers, Water Proofing Membranes
Wall Coverings
Windows and Doors

Pipelines:

Prefabricated Assemblies and Kitchen, Office Sections:
Cabinets
Counters
Frames
Metallic Structures
Trusses
Ventilation Equipment

Road and Railway & Civil Constructions:
Bridges
Crossing
Dams
Embankments
Pavement
Overpasses/Trestles
Rails
Subways/Tunnels

Other (Specify):

ELASTOMERS AND PROTECTIVE AND COATINGS

Adhesives (Organic Resins) and Glues:
Adhesives
Binders
Cement
Glues
Miscellaneous Materials
Putty

Sealant

Paints; Varnishes; Inks; Coatings; and Allied Products:
Inks
Lacquers
Miscellaneous Products
Paints and Protective Coatings
Application and Working Properties
Applied Coatings Performance
Colour and Appearance
Constituents
Printing inks
Turpentine
Varnishes

Plastics; Resins and Rubbers:
Plastics
Resins and Rubbers

Other (Specify):

ELECTRICAL PRODUCTS AND ELECTRONIC PRODUCTS

Communications Equipment and Systems:
Broadcasting
Components and Assemblies
Power and Signal Distribution Equipment
Radio Telecommunication
Radio, Television and Electronic Apparatus
Telecommunications Equipment
Wiring and Related Products

Components and Assemblies:
Circuit Breakers and Fuses
Conductors
Insulators
Rectifiers
Switches and Controls
Transformers
Wiring and Related Products

Electrical Appliances:
Cooking and Liquid Heating
Heating, Refrigerating and Air Conditioning
Lighting and Fixtures
Miscellaneous Electrical Appliances (Specify)
Motor Operated Electrical Appliances
Washing Equipment

Equipment, Miscellaneous:

Automotive Components
Conductors
Enclosures
Grounding
Hazardous Location Equipment
Insulators
Panels
Shielded Rooms
Welding

Information Processing and Business Equipment:
Computers
Data Processing Equipment
Office Machines
Photocopying and Related Equipment
Power Supplies
Typewriter

Medical Devices:
Breathing Apparatus and Equipment
Diagnostic Instruments
Health Care and Health Hazard Technologies
Limbs (Prostheses)
Pacemakers
Resuscitators
Surgical Instruments (See MEDICAL Section)
Treatment Equipment

Materials:
Plastics
Motors, Generators, and Machines:
Complete Unit

Scientific Instruments: (For biological, chemical electrical, mechanical optical and physical examination)
Circuit Breakers and Fuses
Components and Assemblies
Laboratory Equipment
Recorders
Rectifiers
Switches and Controls
Timers
Transformers

Other (Specify):

ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY

Air Quality: (Outdoor Stack Emission)

Biological Materials Quality:

Environmental:
Air
Air (Occupational Health)
Air Cartridge
Air Emission Filter/RC
Air Filter
Air Impingers
Air-Tedlar Bag
Ambient Air
Animal Tissue
Ash, Sludge and Soil/Sediment
Biological
Biological Oils
Biological Tissues
Biologicals
Biomaterials
Biosolids
Biota
Charcoal Tube
Compost
Diesel Particulate Matter
Dustfall
Effluent
Effluent/Liquids
Environmental Products
Fish
Fish Feed/Fish Meal/Fish Tissue
Fish Feed/Fish Meal/Fish Tissue/Fish Oil
Fish Tissue
Fluoride Candles
Food Stuffs
Hydrocarbon
Industrial Waste
Leachate
Leachates
Liquid
Liquid Waste
Liquids
Manure
Oil
Paint
Particulates
Petroleum Products
Plant Tissue
PSD
Pulp
Pulp and Paper
Radio Chemistry
Rainwater

Raw Sewage
Seawater
Sediment (Toxicology)
Sediment/Sludge
Sewage
Sewage/Effluent
Sewage/Effluent/Soil
Slides/wedge
Sludge
Sludges
Soil
Soil (Radiochemistry)
Soil (Toxicology)
Soil/Sediment
Soil/Sediment (Toxicology)
Soil/Sludge
Soil/Sludge/Compost/Sediment
Soil/Sludge/Sediment
Soil/Solid
Soil/Solid Industrial Waste
Solids/Waste
Soils/Sludge/Compost/Sediment
Solid Waste
Solids
Solids/Sludge
Solids/Sludge/Sediment
Surface Water
Tailings & Waste Rock
Tailings, Waste Rock, Soil & Ore
Tissue
Vegetation
Vehicle Exhaust
Waste
Wastewater
Wastewater (Microbiology)
Water (Inorganic)
Water (Microbiology)
Water (Organic)
Water (Radiochemistry)
Water (Toxicology)
Water/Effluents
Water/Effluents/Sewage
Water/Wastes
Water/Wastewater

Environmental Conditioning:
Temperature
Vibration and Shock

Environmental Conditions and Systems:
Marine Conditions

Meteorological Conditions

Liquid Wastes:

Occupational Health and Safety:
Air Monitoring
Asbestos
Building Components
Biohazard Cabinets
Clean Air Devices
Clothing
Detection Instruments
Diving
Emitting Equipment
Fire Protection
Health Hazard Technologies
Noise
Personal Protection
Security Equipment
Warning Devices

Sediments, Soils:

Solid Waste; Nuclear:

Water Quality:
Drinking Waters
Ground Waters
Industrial Chemicals and Wastes
Industrial Effluent
Precipitation
Process Waters
Recycled Waters
Saline Waters
Surface Waters

Other (Specify):

FORENSICS

Counterfeits
Firearms / Tool Marks
Forensic Biology / DNA
Forensic Chemistry / Trace Analysis
Forensic Drug Chemistry
Forensic Equine Drug Testing
Forensic Toxicology
Questioned Documents Examination
Other (Specify):

MACHINERY

Boilers, Pressure Vessels and Piping:
Portable Utility Engines
Pumps and Related Equipment

Munitions and Arms: (Ballistics)
Bombs
Cartridge
Civilian Small Arms
Grenades
Military Heavy Arms
Military Small Arms
Military Warheads
Shotgun

Stationary Equipment:
Engines
Hoists
Turbines
Winches

Transportation, Agricultural and Construction Vehicles and Components:
Automobiles, Light Trucks, Vans & Trailers
Boats and Ships
Recreational, All-Terrain
Trucks, Heavy Duty, Commercial, Buses & Trailers

Other (Specify):
MARKETPLACE PRODUCTS-CONSUMER AND BUSINESS

Books:
Educational Materials
Magazines and Journals
Newspapers

Equipment, Miscellaneous:
Burglary Protection Equipment
Mechanical Equipment
Motors, Generators and Machines

Furniture and Consumer Articles:
Furniture
Hazardous Products
Household Products
Musical Instruments
Sports Equipment
Tools
Toys

Marine Products:
Flotation Aids, Components

Lighting Fixtures, Marine Products

Trade and Commercial Goods:
Business Materials
Containers and Packaging

Other (Specify):

MEDICAL

Medical Products:
Devices (Non Electrical)
Limbs
Surgical Instruments
Sterile Dressings (See also CHEM Pharmaceuticals)
Treatment Equipment

Medical Testing:
Anatomical Pathology
BiochemistryCytology
Genetics
Haematology
Immunophenotyping
Maternal Serum Screening
Microbiology
Molecular Diagnostics
Virology

Other (Specify):

Veterinary:

METALLIC ORES AND PRODUCTS

Articles of Metal:
All Forms, Articles of Metal
Welded
Components, Articles of Metal
Cast, Forged, Welded or Pressed Metal Components

Basic Metal Products: **(Ingots, pigs, bar, sheets)**

Concentrates, Metallic Liquors and Other Process Products:

Metallic Ores:
Formulations
Metal Powders
Precious Metals
Rocks and Ores

Sediments

Mineral Analysis Testing
Assay, Umpire Assay Work
Contract Settlement Assaying
Geotechnical Testing
Mineral Assaying

Semi-Fabricated Products: (Extrusion, rolled sections)

Tools, Fasteners and Hardware:

Other (Specify):

NONDESTRUCTIVE EXAMINATION

Acoustic Emission:
Eddy Current:
Industrial Ultrasonics:
Industrial Radiography:
Infra-Red Thermography:
Leak Testing:
Liquid Penetrant:
Magnetic Particle:
Ultrasonic:
Vibration Analysis:
Visual, Welding:
Other (Specify):

NON-METALLIC MINERALS AND PRODUCTS

Bituminous and Other Organic Materials, Coal and Tar:
Bitumen

Cement and Cement Based Products:
Accessories
Composites and Types (Concrete, Mortar, etc.)
Gypsum
Lime
Products (Blocks, etc.)

Ceramics; Clay and Clay Products:
Bricks and Structural Tile
Ceramics
Clays
Porcelain Enamels
Refractory and Firebrick

Energy Equipment: (Appliances)
Handling of Liquid Fuels
Kerosine Fired Appliances

Miscellaneous, Energy Equipment
Natural Gas Fired Appliances
Oil Fired Appliances
Propane Fired Appliances
Safety Devices and Supplies
Solid Fuel Fired Appliances
Venting Equipment for Products of Combustion

Glass and Glass Products:
Constituents and Formulations
Glassware

Oil Shale and Tar Sands:

Petroleum Crudes and Natural Gas:

Petroleum Refinery Products: (Including asphalt materials; petrochemicals; fuels and lubricants)
Asphalt
Fuels and Lubricants
Petrochemicals
Solvents
Soil; Aggregates; Stone; Sand:
- **Aggregates (See Geotechnical Surveys, this section**
- **Geotechnical Surveys**
- **Constituents**
- **Hydrogeology**
- **Methods**
- **Soils**
- **Stone**
- **Sand**

Solid Fuels and By-Products:
Coke
Peat

Other (Specify):

TEXTILES AND FIBROUS MATERIALS

Apparel and Other Finished Textile Products:
Carpets
Clothing
Flags and Decorations
Furniture Coverings
Mattresses
Tents
Window Coverings

Textile Mill Products: (Including synthetic and natural fibres)
Aircraft Materials
Fabrics

Fibres
Yarns

Other (Specify):

WOOD PRODUCTS

Construction Materials: (Including for Furniture
Finished Wood
Floor covering
Logs
Lumber
Panel Products (Except Plywood)
Plywood
Poles
Prefabricated Components
Timers
Wood Preservatives
Wood Products, General
Fasteners and Hardware: (See Construction)
Paper and Allied Articles
Containers and Packaging (See Marketplace Products
Packaging Components and Materials
Paper and Paperboard
Paper Products
Pulp

Physical Properties of Wood Products
Density, Wood Products
Moisture Content, Wood Products

Structures and Components of Wood Products

Other (Specify)