

Electrical Program

➤ Program Overview Manual



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Electrical Program

Introduction

As the number of commercial, industrial, and housing starts and renovations have increased in British Columbia, so too will the number of electrical installation activities. Licensed electrical contractors will be kept busy; however, homeowners may do some of the electrical work on their own. Whoever performs the work, it must be done in accordance with the code and regulatory requirements.

The Electrical Program provides safety services to the people of British Columbia to oversee the safety of electrical wiring and equipment installations and that installations are maintained in safe and proper working condition. Standards are applied consistently by enforcing the *Safety Standards Act*, the *Safety Standards General Regulation*, the *Electrical Safety Regulation*, and applicable codes.



As far as standards go, British Columbia adopts the *Canadian Electrical Code – Part 1* for the safe installation and maintenance of electrical wiring and equipment. The Canadian Standards Association publishes this code, which is under continuous review to address issues and new technology within the industry. New editions of the code will be published every three years starting in 2006.

In 1910, the *Electrical Energy Inspection Act* became the first legislation in British Columbia to deal with electrical installations, but it focused mainly on industry rather than residential areas. Since then, inspection services changed hands throughout different government branches until the advent of the BC Safety Authority in 2004. At that point, the Electrical Program was established to oversee industrial, commercial, and residential installations under the Electrical Safety Regulation.

The program oversees electrical safety throughout British Columbia, with the exception of the following local governments:

- City of Vancouver
- City of Burnaby
- City of Surrey
- City of Victoria
- City of North Vancouver
- District of North Vancouver
- Municipality of West Vancouver
- Corporation of the District of Maple Ridge

These local governments are responsible for issuing permits and providing electrical inspection services within their jurisdictions.



The aim of the Electrical Program is to prevent incidents. With respect to all of the program's activities, any decisions made by a Safety Officer can be reviewed by a Safety Manager upon the request of the client. The client must make this request within 30 days of when the Safety Officer made the decision. If the client is not satisfied with the review, the client has the right to appeal the decision to the Safety Standards Appeal Board, which is independent of the BC Safety Authority. Some decisions, however, cannot be appealed.

Services

Some of the services the Electrical Program provides include issuing permits and contractor's licences, certifying individuals as Field Safety Representatives, providing technical expertise, conducting inspections, and developing education programs for industry and the public. Roles and responsibilities within the program center on providing safety services to industry and the public by administering the *Safety Standards Act*, applicable codes, and regulations. The purpose of the program is to oversee the safety of electrical installations and prevent accidents from occurring.

Safety Manager

The BC Safety Authority appoints the Safety Manager to develop and maintain the Electrical Program. Under the *Safety Standards Act*, the Safety Manager is granted the powers to fulfill the following duties:

- Provide correct interpretation of the *Safety Standards Act* and regulations;
- Certify Field Safety Representatives;
- Issue, suspend, or revoke a Certificate of Qualification or a contractor's licence as necessary;
- Issue directives, discipline orders, monetary penalties, and safety orders; and
- Review a Safety Officer's decision upon a client's request.

Senior Safety Officer

The Senior Safety Officer reports directly to the Safety manager and has the following responsibilities:

- Provide technical support to Safety Officers;
- Help with consistent, best in class training for Safety Officers;
- Answer inquiries from clients and stakeholders;
- Prepare files with Safety Officers for high risk cases; and
- Advise Safety Officers on issuing corrective actions.



Safety Officers

Safety Officers are at the forefront when dealing with clients and provide a variety of technical and customer service related activities. These include the following:

- Promote public safety awareness;
- Conduct safety inspections and risk assessments;
- Educate industry and the public on changing technology, codes, and standards;
- Review and grant requests for variances ;
- Provide recommendations to the Safety Manager;
- Conduct compliance monitoring and audits; and
- Assess the need for changes to the regulation.
- Monitor the performance of licensed contractors and individuals

In addition, Safety Officers investigate fires, accidents, and incidents. This is to assist other agencies wherever it is suspected that failure of electrical equipment or its installation may have been the contributing cause.



Certificates of Qualification as Field Safety Representatives

The Electrical Program certifies individuals as Field Safety Representatives. These individuals are responsible for ensuring the electrical work is performed in a manner that is consistent with the code and regulatory requirements. They are accountable for any non-compliance, which is any work or equipment that does not meet the code and regulatory requirements. They must submit a legal declaration of compliance to the regulatory authority. Please refer to the *Safety Standards General Regulation – Section 26 – Duties of a Field Safety Representative* for information.

For specific information on the variety of Classes of Field Safety Representatives outlined below, please contact the local BC Safety Authority office.

To obtain a Class A, B, or C Certificate of Qualification as a Field Safety Representative, the individual must have the following prerequisites:

- Hold appropriate industry training credential in the trade of electrician (a trade certificate must be held for two years for Class A and one year for Class B or C);
- Complete a course in the application of electrical codes and standards; and
- Successfully pass an examination.



Class A qualification also requires the trade electrician to document work experience for at least three high voltage installations after obtaining an electrician trade certificate.

An applicant for a Restricted Electrical Field Safety Representative Certificate of Qualification with trade certification must provide documentation to verify relevant training and electrical work experience. Proof of industry training credential will meet this requirement.

An applicant for a Restricted Electrical Field Safety Representative Certificate of Qualification without trade certification must provide documentation in the form of letters of relevant training and electrical work experience. Specific requirements vary for each class of certificate. The following details facilitate the requirements:

- Job classification and length;
- Duties and scope of work performed;
- Type of project experience obtained;
- Type of equipment or systems worked with during employment;
- Installations and services performed;
- Start and finish dates of full-time or part-time employment; and
- Total number of hours of relevant electrical work experience.



Where letters from the Field Safety Representative of an electrical contractor are not available to document training and work experience, the verification may be provided, for review, in the form of a sworn affidavit or statutory declaration. This must be notarized by a notary public or lawyer. For submission of training and work experience, please follow the bulleted list above.

Other professionals can apply for Field Safety Representative certification as well.

An Electrical Technologist who is a member with the Association of Technologists and Technicians of British Columbia (ASTTBC) can obtain certification as Field Safety Representative if they have the following prerequisites:

- Hold a diploma of technology in electrical (power) engineering;
- Be registered as an applied science technologist under the *Applied Science Technologists and Technicians Act*;
- Complete a course in the application of electrical codes and standards;
- Provide evidence of acceptable relevant work experience, with emphasis towards on-site relevant practical electrical work experience; and
- Pass an examination.

A Professional Engineer who has a degree in electrical engineering and is registered with the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC) may obtain a Certificate of Qualification as a Field Safety Representative by passing an exam.

Certificates of Qualification Classes of Field Safety Representative		
Electrician (IPSE) Canadian Interprovincial Standards Examination, Trade Certificate of Qualification	With Trade Certification BC Industry Training Credential	Without Trade Certification
Class A Unrestricted	EC Electronics Communications Technician	FE Full Entertainment
	ET Electronics Technician	LE Limited Entertainment
Class B Max. 750 Volts	EV Elevator Mechanic	LO Low Energy Systems
	LS Locksmith	PV Solar Photovoltaic Systems
Class C Max. 150 Volts and 200 Amps single phase	SA Security Alarms Installer	UR Underground Raceway Installer
	TV Radio & Television Signal Distribution (CATV)	WW Water Well Installer
	(IPSE) Canadian Interprovincial Standards Examination, Trade Certificate of Qualification	
	EA Electrical Appliance Service Technician	
	IN Instrument Mechanic (Instrumentation)	
	LI Power Line Technician	
	RE Refrigeration Mechanic	
	WE Winder Electrician	

These are the various Certificate of Qualification Classes of Field Safety Representative that the Electrical Program issues to individuals.

Contractor's Licences

Under the *Electrical Safety Regulation*, anyone who wants to work as an electrical contractor in British Columbia must hold a valid provincial contractor's licence. A licensed electrical contractor is allowed to obtain permits and perform regulated electrical work as required by the *Safety Standards Act* and regulations. The licence ensures the contractor and the people employed by the contractor are qualified and can perform the work safely.

To qualify as an electrical contractor, the applicant must do the following:

- Provide the name of a Field Safety Representative;
- Provide evidence of the bond required by the Safety Manager; and
- Pay the required application fee.

After successfully meeting the requirements, the applicant is issued a licence. Contractor permits are issued on the basis of the licence. As well, the scope of regulated work is determined by the certification class of the Field Safety Representative that is named on the licence. A contractor may not perform work that is beyond the scope of that certification.



Audits

A Safety Officer may initiate an audit on Field Safety Representatives or Licensed Contractors. An audit could include a review of past or current performance. If the Safety Officer notes serious or repetitive non-compliant behaviour or work by an individual or contractor, the Safety Officer may recommend disciplinary action to the Safety Manager. This could include suspension or revocation of a license or certification, monetary penalties, or the Safety Manager may set terms, conditions, or restrictions on the licence or certification.

Installation Permits

An installation permit is required to ensure the electrical work is being performed by qualified persons. All electrical work must comply with standards as well as code and regulatory requirements. Installation permits will expire if an inspection has not been requested within a 180 day period. An inspection on an installation must be requested before the work can be concealed, prior to the connection of power to the electrical supply system, or otherwise as per the Safety Officer's orders.

Electrical Contractor Installation Permits

Electrical contractors are responsible for obtaining permits for any electrical work they or their employees perform. A licensed contractor can also allow a homeowner to do electrical work if the contractor supervises the work. In addition, the contractor is responsible for correcting any non-compliance that is noted on the Certificate of Inspection. A non-compliance is any work or equipment that does not meet the code and regulatory requirements.

All electrical work performed under an electrical contractor's permit must be supervised and inspected by a Field Safety Representative, who must submit an inspection request to a Safety Officer prior to commencing with the next phase.

The installation permit does not affect a contractor's or owner's right to terminate a contract before the completion of a job. In a case like this, the contractor must submit an inspection request for the work that has been completed to that point. Any non-compliance must be corrected before the installation permit can be finalized and the owner or the new contractor is responsible for obtaining permits to finish the uncompleted work.





Homeowner Installation Permits

A homeowner may apply for an electrical installation permit to perform electrical work on his or her own home if it is a permanent residence or the structure is located on the same property that is associated with the residence. All work performed under a homeowner's installation permit will be inspected by a Safety Officer. Electrical work may include up to a maximum 200 amps, 150 volts to ground, single phase. Some of the conditions for qualifying for a homeowner installation permit are as follows:

- The home is, or is intended to be, the owner's permanent residence, is a fully detached dwelling, and is designed for single family use. Homeowners may also do electrical work on vacation homes that are not rented or used as a source of income.
- The applicant will do all of the electrical work described on the permit or with the help from a qualified person who is not paid for doing the work. Anyone assisting with the work must be named on homeowner declaration form.
- The electrical work is not being performed on a structure that is, or is intended to be, used for commercial purposes. This would include rental or commercial properties, e.g., farm buildings.
- The electrical work does not include connection of a manufactured home or recreational vehicle to the power supply of a manufactured home park or recreational vehicle park.

The BC Safety Authority supplies an *Electrical Safety Homeowner Information Guide* for applicants. This package is to be read and contains an *Electrical Homeowner*

Declaration form for the applicant to sign stating that the terms of the conditions of the installation permit are understood.

As mentioned previously, any work performed under a homeowner installation permit must be inspected. None of the electrical work may be concealed or connected unless it has been inspected and authorized by a Safety Officer. The homeowner must request at least one inspection for every 180 day period or else the installation permit will expire. This is to ensure that the installation of the electrical equipment is safe.

Once the installation permit has been issued, the permit holder must inform a Safety Officer if any situation arises that may render the installation unsafe. A Safety Officer may decide to impose additional conditions or restrictions on any installation permit, with which the homeowner must comply. Failure to comply may result in corrective action, a monetary penalty, and possible disconnection of the electrical supply to the installation. The goal is to prevent incidents from occurring.

Installation Permit Exemptions

Under the Electrical Safety Regulation, only certain types of electrical work may be performed without requiring a permit. These are the types of work that do NOT require an installation permit:

- (1) Testing is the only electrical work performed.
- (2) Replacing the following regulated products, up to a maximum rating of 150 volts to ground, with electrical equipment of a similar type or rating:
 - receptacles
 - cord attachment plugs
 - snap switches
 - ballasts
 - dimmer switches
 - fan speed controllers
 - thermostats
 - overcurrent devices
- (3) Replacing a lamp of up to 347 volts to ground with a lamp of a similar type or rating.
- (4) Replacing a fuse of up to 750 volts with a fuse of a similar type or rating.
- (5) A licensed electrical contractor performs repairs involving the components of existing installed and certified regulated electrical equipment where the following takes place:
 - There are no modifications or additions to the electrical installation;

- Neither the electrical rating nor the characteristics of the equipment is altered; and
- The replacement components are of a type which do not invalidate the original certification mark.

Operating Permits



Many facilities, such as schools, shopping malls, and large manufacturers, perform regular maintenance of their electrical equipment and systems. Owners, tenants, and occupants of a building may obtain operating permits to do electrical maintenance work. Under the *British Columbia Electrical Code*, all electrical equipment must be kept in safe and proper operating conditions.

To apply for an operating permit, the owner must name a certified Field Safety Representative who may be a licensed electrical contractor, an employee of the owner, or an employee of the business. This individual is responsible for all electrical work performed under the operating permit and must supervise all such activity. This is to ensure anyone doing the electrical work under the operating permit is qualified to do so as permitted under the provisions of the *Safety Standards Act* and regulations.

Inspections

Electrical work may be inspected by a Safety Officer in order to ensure the work done by a licensed contractor or homeowner complies with minimum safety standards and code and regulatory requirements.

Homeowners in general have neither the technical expertise nor the training of a certified Field Safety Representative. The risk of the electrical installation would be higher than if a Field Safety Representative completed or supervised the work. It is important that each phase of work under a homeowner installation permit is inspected before proceeding on to the next phase.

Field Safety Representatives may supervise electrical installations done by licensed contractors and must submit legal declarations at the completion of each phase before continuing on with the next phase. These declarations verify that the work is done in accordance with code and regulatory requirements. A Safety Officer has the discretion of conducting an inspection to confirm the declaration is consistent with the work performed.

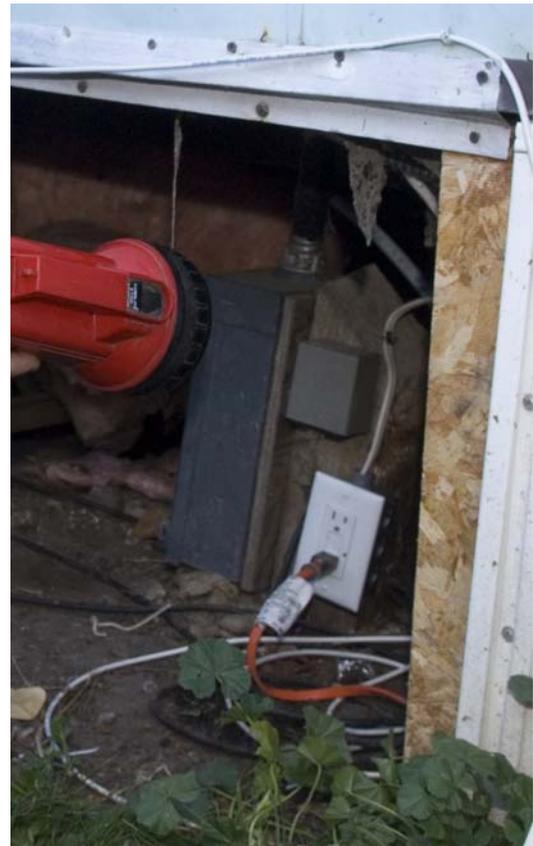
Inspections on licensed electrical contractors and Field Safety Representatives may be based on the assessment of risk involved in the installation. This assessment takes into account both the Field Safety Representative's performance history and the type of installation the licensed contractor is performing.

Inspections may occur at any time. If a non-compliance or an incident is suspected, a Safety Officer has reasonable grounds and the authority to enter the premise at a reasonable time to investigate any incident and to inspect all electrical work. Any unsafe wiring or electrical equipment may require corrections and in some instances the Safety Officer can order the disconnection of the equipment to the power supply.

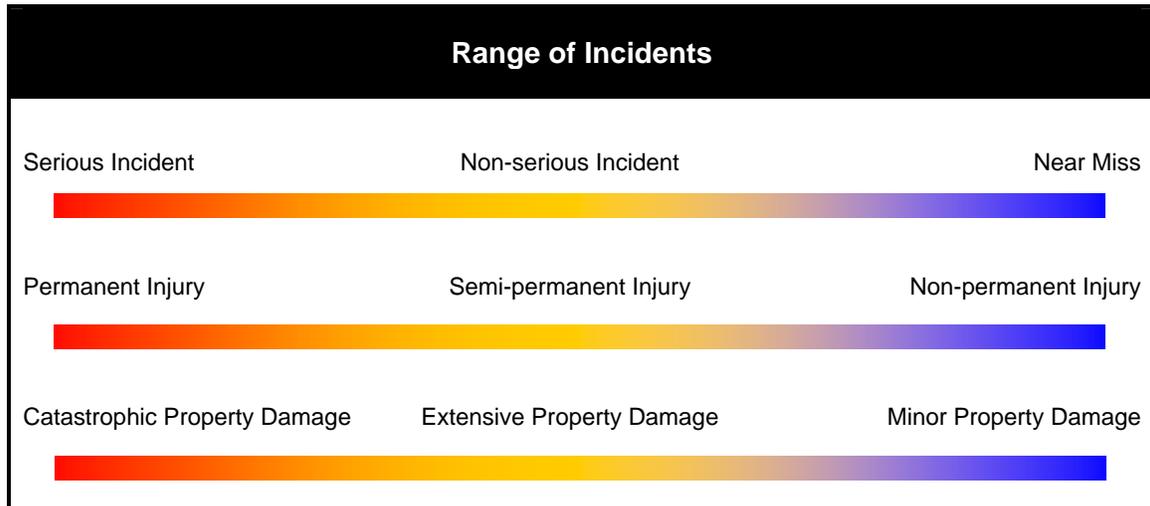
Investigating Incidents

Incidents involving electrical products can be potentially dangerous and can lead to electrical accidents or fires. The *Safety Standards Act* defines an incident as the occurrence of a death, personal injury, or damage to property, or the risk of personal injury or damage to property. An incident must be the result of regulated work or the testing, use or operation of a regulated product. The individual responsible for the electrical installation is to notify the BC Safety Authority when an incident has occurred.

A Safety Officer investigates an incident as soon as it is brought to the attention of the BC Safety Authority. In particular to the Electrical Program, the Safety Officer determines if the cause of the incident was electrical in nature; however, determining whether or not an incident was the direct result of an electrical product or its installation can be difficult.



Levels of incidents, personal injury, and damage to property can range from serious to minor. Most electrical-related incidents involve personal injury (shocks and burns) or damage to property because of fires. Electrocution or injuries sustained due to a fire can result in a fatality. Incidents can also be the result of electrical equipment failure.



Incidents involve personal injury or damage to property and range from serious to minor.

Collecting data from incidents is important and has improved how the program assesses risks regarding electrical products and regulated work. Data for a *near miss* can be just as revealing as an actual incident. A near miss is an event that has occurred but in this instance did not result in any injury or property damage. In a similar situation, this event has the potential to result in injury or property damage. The program learns from investigating incidents to prevent similar incidents from happening again.

Product Approvals

The Electrical Program provides a special inspection program for new and used electrical products that are to be manufactured or sold in British Columbia that do not bear evidence of approval. Each electrical product must meet code and regulatory requirements and display a label affirming its approval. The BC Safety Authority ensures that each electrical product for sale, use, display, trade or exchange in any way, or offered for sale in this province displays an acceptable label or mark.

When the electrical equipment is accepted for approval, it has only been inspected with regard to electrical fire and shock hazard. This inspection program is not for the evaluation of electrical equipment that has been rejected through a previous evaluation by a certification agency under its approval program.

The following electrical products are not covered by the special inspection program:

- Wire and cable;
- Components (these are not complete, and therefore, cannot be installed under the *BC Electrical Code*);
- Equipment for use in hazardous locations, such as gasoline or diesel dispensers;
- Equipment for use in health care laboratory facilities, if it involves patient contact;
- Gate operators, cranes, hoists, lifts, etc.;
- Equipment designed to administer an electric shock (bug killers, electric fences, etc.); and
- Hydro massage bathtubs, spas, hot tubs.

Technical Expertise

Many different kinds of electrical parts and equipment exist on the market today. For the program's Safety Manager and Safety Officers to upgrade their knowledge and stay current on the technological advances is critical. Their technical expertise becomes vital to the program as stakeholders and clients, many of which are homeowners, rely on their experience.



It is important for the Safety Manager to take an active role in the electrical industry. The Safety Manager participates in the review, amendment, and development processes of the *Canadian Electrical Code* as this code has seen several revisions since its first publication in 1927. The Safety Manager also attends *Canadian Standard Association Part 1* (Electrical Wiring Installations) and *Part 2* (Equipment Standards) code meetings. In addition, the Safety Manager sits on various electrical industry committees. By becoming active in industry meetings, the Safety Manager increases technical knowledge and stays current with industry technology.

Safety Officers also provide technical expertise to legal counsel regarding the operational information on electrical products and regulated work. In some cases, the Safety Officer may be asked

to attend hearings and coroner inquests or to testify as an expert witness. Safety Officers are also helpful in assessing the need for changes in the codes, standards, and regulations.

Technical expertise is essential on two current issues. One deals with counterfeit electrical products that are becoming available on the market. The other concern is marijuana grow operations that continue to surface throughout the province. Counterfeit products are most likely not approved, not certified, potentially hazardous, and generally of substandard quality. Regarding grow operations, which pose risks to public safety, the program combines its resources with other enforcement groups. These include local municipal councils, BC Hydro, fire departments, and police departments.

Variances

A variance is a formal document that allows a client to deviate from the codes and regulations for a one-time circumstance without compromising safety. The program grants very few variances; in fact, it is quite a rare occasion. In order to grant a variance, the program would need the assurance that if an electrical product is not certified by the Canadian Standards Association or the installation does not meet the code requirement as it is written, that the client would ensure the product or installation is safe. For example, if a client requests a variance to install an uncertified conductor in a building, the Safety Manager may grant the variance under the condition that the installation is restricted to only one specific room. The installation must meet or exceed the level of safety achieved if no variance was granted.

Equivalent Standards Agreements

Equivalent Standards Agreements are formal agreements that the Safety Manager enters into with clients. This is becoming an innovative way for the program to develop a working partnership to ensure safety. The agreement allows a client operational flexibility, or an alternative approach, on performing regulated work or using a regulated product in a different manner as per the codes and regulations.

Before entering into the agreement, the Safety Manager must be satisfied that the alternative approach to regulated work or use of the product is consistent with the objectives of the regulations and does not increase or create additional risk to injury or damage to property.

Accessibility and Communications

The top priority of the program is to ensure electrical safety. Installations of electrical parts and equipment continue to increase throughout the province. It is therefore critical for clients and homeowners to have access to information and the employees at BC Safety Authority concerning electrical safety. Several documents and forms are accessible at any BC Safety Authority office or through its website. The program also informs the public, clients, and stakeholders on safety issues, potentially hazardous products, and regulatory amendments.

Communicating Information		
Recipients	Documents	Methods
<ul style="list-style-type: none"> • Clients • Homeowners • Public • Stakeholders 	<ul style="list-style-type: none"> • Safety advisories • Directives • Information bulletins • Safety orders 	<ul style="list-style-type: none"> • Website • Contractor Meetings • Post and electronic mail • Notices

The Safety Manager may issue any of four documents to relay information to clients, stakeholders, homeowners, and the general public.

The Safety Manager can issue any of four types of documents. Safety advisories are non-binding and non-statutory and inform or remind the public of existing potential hazardous electrical products or unsafe practices. The Safety Manager issues a directive to clarify the interpretation of the codes and regulations, to provide directions on the application of a regulation, or to exercise the powers granted under the *Safety Standards Act*, regulations, or code. Information bulletins are non-binding and non-statutory and are issued to provide general information to the public, clients, stakeholders, and BC Safety Authority staff. Finally, safety orders are binding and are issued to prevent, avoid, or reduce the risk of personal injury or damage to property. A safety order can be processed within a few days and is sent out to reach as many affected clients as possible.

Other Services

One of the goals of the Electrical Program is to increase public awareness of electrical safety. BC Safety Authority works with retailers, manufacturers, and other authorities, such as WorkSafe BC and local fire authorities, to achieve this goal. By providing information and knowledge, the BC Safety Authority can encourage greater responsibility to the public about electrical safety when purchasing, using, or installing electrical products.

An area of concern is counterfeit products that are available on the market. Although these products may look identical to real products, they have not been manufactured

and tested to the same standards. Aside from being illegal, these products may be unsafe and can result in electrical fires or shock hazards. Some homeowners may not have an awareness of these imitation products and may have purchased them because they are typically less expensive than the brand name products. The program can inform retailers about counterfeit products or work with them in educating the public.

The revision of exams is another service that the program provides. As the *Canadian Electrical Code* continues to go through amendments, the exams must reflect the changes in the code.



Resources

The Safety Manager and Safety Officers are granted certain powers under the *Safety Standards Act*. This enables them to ensure electrical safety by enforcing the *Safety Standards Act*, the *Canadian Electrical Code*, and the regulations.

In the program, the Safety Manager and the Senior Safety Officer are major resources for providing technical expertise to Safety Officers, clients, and industry stakeholders. Previous experience as a Safety Officer, several years of electrical work experience, competent technical knowledge, and good interpersonal communication skills are important assets for the Safety Manager to have.



Safety Officers must have completed a recognized four-year apprenticeship and a minimum of five years experience as a journeyman electrician. Their knowledge, understanding of electrical safety, and personal attributes should be such that they would make ideal candidates to enforce the codes and regulatory requirements. In addition, the Safety Officer candidate should have at least one year practical experience of supervising electrical installation work. They are also required to successfully pass the *Electrical Inspector's Certificate of Qualification Examination* within six months of employment with the BC Safety Authority.

Safety Officers must have full knowledge of the *Safety Standards Act*, the *Safety Standards General Regulation*, and the *Electrical Safety Regulation*. This is necessary as clients and homeowners may have inquiries about the codes and regulations regarding electrical products and installations. Safety Officers may also provide training to recently hired Safety Officers. To further guide the Safety Officers, the BC Safety Authority provides additional training and continues to update and develop internal policies and procedures for them to follow.

Clients and Stakeholders

Maintaining an active and open relationship with clients and stakeholders in the electrical industry allows the program the practicable delivery of safety services in British Columbia. With the number of installations of electrical products in the province, the program realizes the importance of working closely and consulting with various groups. These groups come from a wide array of manufacturers and retailers of electrical products, licensed electrical contractors, and different local governments, municipalities, and districts. Below is a list of some of the groups with which the program interrelates:

- Canadian Standards Association (CSA)
- Canadian Advisory Committee on Electrical Safety (CACES)
- American National Standards Institute (ANSI)
- Electrical Contractors Association of British Columbia (ECABC)

- British Columbia Institute of Technology (BCIT)
- Industry Training Authority (ITA)
- Canadian Council of Directors of Apprenticeship (CCDA)
- Electrical Code Instructors Association (of Lower Mainland in BC)

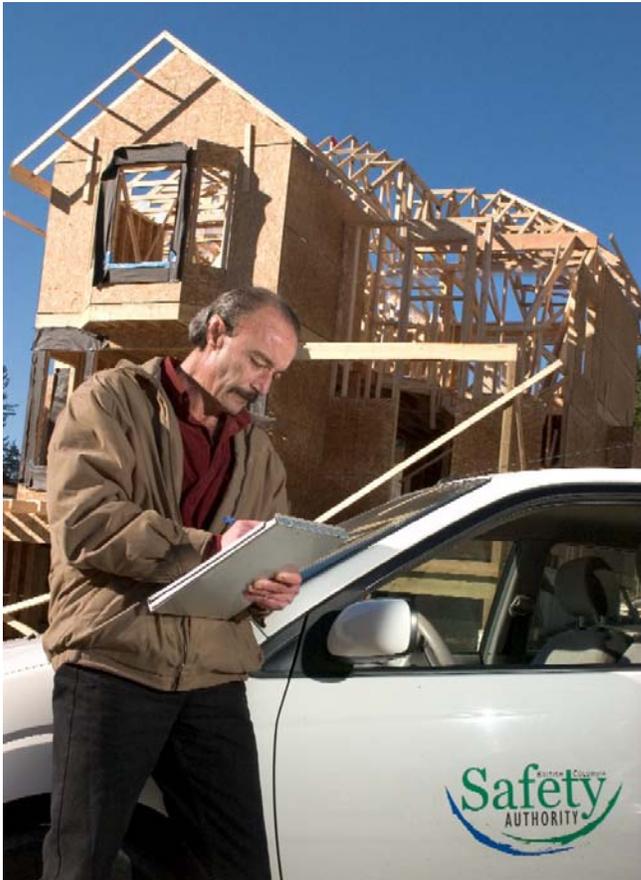
- Electrical Inspectors Association of British Columbia (EIABC)
- International Association of Electrical Inspectors (IAEI)

- Underwriters' Laboratories of Canada (ULC)
- Applied Science Technologists and Technicians of BC (ASTTBC)
- Association of Professional Engineers and Geoscientists of British Columbia (APEGBC)
- Standards Council of Canada (SCC)
- Quality Auditing Institute Ltd. (QAI)

Listening to the concerns raised by clients regarding codes and regulations is important to the program. Changes to the *Canadian Electrical Code Part 1* occur at the committee level; however, these changes can affect clients inadvertently. For example, a sudden code change that calls for a minor alteration to electrical equipment could affect the manufacturers who would need to revise their operations accordingly. Clients do not have an impact on changing the codes directly, but can bring issues to the attention of the Safety Manager.



Future Growth



The amount of activity in the electrical industry is rising with the growth and economy of British Columbia. Keeping up can become a challenge for the Electrical Program, which needs to accommodate accordingly to the increasing development in the commercial, industrial, and residential sectors. With rapid changes in technology and industry, the program sees an increasing need for harmonization of standards at a global level.

One area the program may need to further develop is public education. Homeowners are doing more of the electrical installations themselves; however, many of them may not have the knowledge or skills required to do the work safely or as required by the codes and regulations. As well, counterfeit electrical products are finding their way on the market and

can pose safety risks. These are just some of the issues that can compromise electrical safety where public education may be helpful.

Marijuana grow operations in British Columbia and the electrical hazards associated with them is an alarming issue that warrants consideration. Electrical installations for grow operations are serious non-compliances, which can result in fires and shock hazards; the damage can extend to adjacent properties. The program will continue to work with local authorities in order to reduce the significant risk to public safety.

A cornerstone of the program is the role of a Field Safety Representative. These are individuals who are certified to take responsibility of the electrical work they perform or supervise. This is an innovative and effective concept that the other safety programs at the BC Safety Authority may implement.

The BC Safety Authority has a vision of being an internationally recognized authority by 2014 in the delivery of safety services. In order to reach that level, the Electrical Program strives to offer the best and most up-to-date services and retain qualified people with expertise to deliver those services.

Revision History

Revision	Revision Date	Revision history	Revised by
00	2006/12/21	New release	Jeff Taylor

Approval

This document has been approved for adequacy by:



Ivan Pye
Provincial Safety Manager – Electrical

December 21, 2006

Date