



**SCHOOL PLANT OFFICIALS
ASSOCIATION
OF BRITISH COLUMBIA**



**SCHOOL PLANT OFFICIALS
SOCIETY OF ALBERTA**

CERTIFICATION HANDBOOK

PREPARED BY SIMERA STRATEGY GROUP/JANUARY 2003

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CERTIFICATION HANDBOOK

1.0 OVERVIEW

The School Plant Officials Certification Program reflects a dedication to setting the highest standards for professionals in the management, maintenance and operations of school buildings in Canada. The program is a joint venture between the School Plant Officials Society of Alberta and the School Plant Officials Association of British Columbia. If circumstances permit, plans call for expansion of the certification program into other provinces.

The intent of this certification program is to advance the school plant facility maintenance and operations practice through the development and implementation of a valid, credible, and reliable certification system based upon a sound structure and quality standards. Industry needs will be met by establishing benchmarks for knowledge, performance, and professionalism. The certification program establishes identifiable career paths and promotes the development of a future workforce that can assure the continued growth of this practice.

To ensure the highest degree of professionalism and competency, all certified professionals must take a minimum number of continuing education units (CEUs) to maintain their certification. This requirement ensures certified practitioners always possess the most up-to-date knowledge and stay current in their skills and knowledge. Certification constitutes recognition by both organizations that, to its best knowledge, an applicant meets the minimum educational, experience, and ethical standards adopted by both organizations.

All SPOSA and SPOA members in good standing are eligible for certification, by submitting an application, fulfilling specified requirements in accordance with the regulations of SPOSA and SPOA and by practicing school plant management at a high level of ethical standards. All information in this Handbook and the Certification Application Form can be found on the SPOSA website at www.sposa.ca and the SPOA website at www.spoabc.com.

Background Information

Through an initiative of the staff of Alberta Education, SPOSA was formed in 1971, and achieved recognition as a Society in 1974. Its mission is "to work in partnership with Alberta education school jurisdictions in providing teaching and learning environments which promote excellence in education."

SPOA held its inaugural meeting in Duncan, B.C. in 1964, with approximately twelve interested school plant supervisors attending. They met for the purpose of forming an association that would benefit school plant officials from all districts throughout British Columbia.

The primary focus of this initiative is to provide a means of certifying people who work in school plants in Alberta and British Columbia.

GOALS FOR SCHOOL PLANT OFFICIALS PROFESSIONAL CERTIFICATION

- To improve and promote, on a continuing and systematic basis, the level of professionalism in the school plant management field.
- To provide recognition to those who have proven knowledge of the general principles and practices of school plant management, and who have demonstrated a high level of achievement and conduct in the practice of the school plant management profession.
- To educate the public, particularly school district management officials that the practice of school plant management calls for special training and experience.
- To inform the public, school plant management officials and other prospective members of the school plant management practices of the qualifications of school plant management professionals.
- To encourage and assist school plant management professionals in maintaining and increasing their knowledge and competence through continuing education and professional development activities.
- To encourage school plant management professionals to participate regularly in the various activities offered to members of SPOSA/SPOA.

MEMBER SERVICES

SPOSA and SPOA are continually developing services to meet the needs of its members. Some of these include:

- A Web site with complete instructions for certification and upgrading from one level to another as well as other valuable information.
- Members are listed in the roster of Certified Professionals available on the web site or from the administrative office of SPOSA AND SPOA.
- Members are included in the online directory, which can be searched by any potential employer in the province of Alberta and British Columbia.
- On payment of fees, an updated certificate is presented annually for display.
- Designations (CMP, COP, CFP, etc.) which can be used after a surname on business cards and in other ways.
- Periodic newsletter with updates.
- Annual meeting of the membership during the annual conference of SPOSA/SPOA
- Promotion of qualifications of members to the school plant management sector.
- Opportunity to network electronically or at conferences and meetings with other members.
- Provides a competitive edge to those who are certified over non-certified professionals.
- Provides confidence to school district employers needing consistently qualified professionals in the field.

SPONSORS

Each new applicant is required to find a sponsor, who is a certified member. Names of all certified members appear on the SPOSA/SPOA web site. The sponsor's role is to be available to the applicant as an advisor and mentor as he/she completes the certification documentation. The applicant sends the sponsor the completed documentation and the sponsor goes over all the documentation before it is sent to SPOSA/SPOA.

He/She checks for completeness and relevance of the information. If there are problems, the sponsor returns the documentation to the applicant with advice as to what needs to be done to bring it up to the minimum standard. If the sponsor is satisfied that it meets SPOSA/SPOA minimum requirements, he/she prepares a letter of support (See Appendix A:Application for required wording).

He/she returns it to the applicant, who forwards the entire package to SPOSA/SPOA. It is not necessary for a sponsor to personally know an applicant. Sponsors don't need to have face-to-face contact with applicants. The support can be provided by telephone, e-mail and mail. Certified members are encouraged to show their support for SPOSA/SPOA by agreeing to work with applicants. Certified members can also play a significant role in building school plant management capability for the benefit of the entire industry by encouraging co-workers and subordinates to seek certification.

CODE OF ETHICAL PRACTICES

SPOSA/SPOA expect their members to follow high standards of ethical practices. Members agree to adhere to these principles. There will be times when a member senses an ethical problem. These principles will be helpful at such times, although no statement of ethics will cover all questionable situations.

STANDARDS OF PROFESSIONAL KNOWLEDGE AND SKILL

- Members will strive to do their best work at all times, bringing the highest standard of professional knowledge and skill to their practice. This will include holding high standards regarding quality control and ongoing evaluation.
- Members are committed to personal and professional development and seek to be fully knowledgeable of best practices in this dynamic and changing field.
- Members will make information available on their qualifications to others. They will provide an updated and accurate profile/resumé when requested.
- Members render only those services in which they are competent and they seek expert advice when necessary.

2.0 THE CERTIFICATION PROCESS

CERTIFICATION CATEGORIES

All applicants are expected to be SPOSA and SPOA members in good standing. While the certification program does not require written examinations except at Level III of each specialty, people without degrees can apply for equivalency rating. An explanation of how to achieve equivalency is clarified later in this Handbook. (See Section 4 of this document for specific categories).

STEPS TO BECOMING CERTIFIED

Applicants applying for the first time to SPOSA/SPOA certification must complete the Application Form (Appendix A). In applying, the applicant should follow the Application Form carefully as all the steps are explained and the requirements for documentation fully outlined.

RENEWAL REQUIREMENTS

Certification remains in effect for three years and every Associate, Practitioner and Life Members need only pay the annual fee to remain active at his/her level of certification. An invoice will be sent out from the headquarters of SPOSA/SPOA.

UPGRADING TO A HIGHER CERTIFICATION LEVEL

Upgrading can be done at any time, and will be effective immediately upon approval of the Certification Committee. If Members at any level request upgrading at the same time as they are re-certifying after three years, they can use the same Professional Development Credits for both purposes.

RENEWAL REQUIREMENTS

Certified members must renew their certification every three years. This requires documentation of 36 Professional Development Credits. A Professional Development Credit Documentation Form can be found in Appendix B at the end of this Handbook. It is recommended that members make copies of this form and keep a file of PDCs as they achieve them throughout the three-year period.

A few months prior to renewal, SPOSA and SPOA's administrative offices will send out a renewal form that also appears in Appendix C of this Handbook. This form should be completed and sent in. Each certified member is expected to keep track of Professional Development Credits for re-certification and submit them for approval. The overall purpose of asking members to continue to accumulate PDCs is to encourage continuous learning and the building of new skills.

EQUIVALENCY

The basic requirements for any level of certification are specified in this Handbook. However, if equivalency can be demonstrated as outlined below, this will substitute for the lack of educational requirements or direct experience. The subject matter does not have to apply directly to the school plant management field, but will reflect the interest of the individual in core competencies that align with the school plant management field.

The applicant must make a case for equivalency. He/she should particularly reference the relevant core competency. As well as providing evidence in writing, the applicant should also submit third party evidence of completion of courses, leadership given, and other ways the person has gained. Part of the equivalency requirement is a meeting with a Certified Member of SPOSA/SPOA who will carry out an interview of the applicant. This interview will be on the information submitted by the applicant to test its quality, breadth/depth and applicability.

In applying for equivalency, the applicant should specifically request an equivalency rating and submit the information to the best of his/her ability. SPOSA/SPOA will appoint a Certified Member to work with the applicant and later interview him/her. This Certified Member won't be the Sponsor recruited by the applicant.

The equivalency rating is for SPOSA/SPOA purposes only and has no standing beyond SPOSA/SPOA.

DENIAL AND REVOCATION OF CERTIFICATION

Certification may be denied or revoked by the joint Certification Committee for any of the following reasons:

- Inaccurate information about professional employment experience.
- Inaccurate information about academic background.
- Employment or academic background is insufficient.
- Inadequate documentation of professional development credits.
- Insufficient competencies to meet the standards.
- Fees are not paid in a timely manner.
- Documentation for re-certification, after 3 years, is not submitted.
- If there is a violation of professional ethics.

APPEALS

Applicants for certification, re-certification and upgrade are entitled to appeal negative decisions made by the Certification Committee of SPOSA/SPOA. A letter of appeal should be submitted to the SPOSA/SPOA requesting an official review of the decision. The President of SPOSA/SPOA, on receiving the documentation, will carry out a review to assure that no mistakes have been made in how the application was originally processed. If mistakes are found, and the applicant is believed to have sufficient qualifications for the level of certification sought, the President may recommend acceptance.

If the appeal is not resolved on the above basis, then the President will first notify the applicant of the outcome of his/her review. If the applicant is not satisfied, and wishes to pursue the matter further, a second stage of appeal is put in place. The President, under these circumstances, will appoint a panel of three certified members of SPOSA/SPOA who are not currently associated with the Board to review the case and make a decision. The decision of this panel will be final.

Appeals must be received and dispensed with in a timely manner. Letters of appeal must reach the SPOSA/SPOA office within 60 days of the completion of the first certification decision.

The Presidential review must be completed within 30 days of the receipt of the letter of appeal. The panel review, if required, must be completed within 60 days following the applicant's rejection of the Presidential review.

FEE SCHEDULE

The SPOSA/SPOA Certification Program is a self-funded program. Its costs for operations come from application, examination and renewal fees.

APPLICATION FEES

All designations \$75.00

EXAMINATION FEES

All Level 3 designations 180.00
Certified School Plant Facility Manager \$200.00

RENEWAL FEES

All designations 100.00

Fees can be paid by MasterCard, Visa and or cheques. Application and renewal fees are paid at the time of admission to SPOSA and SPOA certification process. They are due on receipt of the invoice.

3.0 THE APPLICATION PROCESS

To become certified *all applicants* must complete the Application For Certification, pay the application fee, have appropriate experience and education, and pass the written test. Application instructions and fee schedules are listed on the application. After applications are received at the SPOSA/SPOA office, applicant information is compiled in the certification database. An application receipt is then mailed to each applicant. The experience and education given on the application are then reviewed by SPOSA/SPOA staff. Next, the applications are reviewed by the local Certification Committee. If the application is approved, then the applicant is eligible to take the certification exam. If the application is rejected, the applicant will be notified and may be asked to supply more information if warranted. After completing the written test, applicants are sent results. Those who pass will then be mailed certificates and wallet cards.

Test Design And Format: All certification tests are designed to test knowledge and abilities required to perform Essential Duties with threshold competence standard.

The Essential Duties and Test Content Areas for each certification were determined by a job analysis of job specifications using a modified DACUM¹ process participated in by members of SPOA and SPOSA. All test questions are designed to measure at least one area of knowledge or ability that is required to perform an essential duty.

Test Delivery Mechanism: All tests are downloadable from the SPOSA/SPOA website. Tests are written in the English language only.

Test Format: All tests are given completely in the multiple-choice format. The multiple-choice format is considered the most effective for use in standardized tests. This objective format allows a greater coverage in content for a given amount of testing time and improves competency measurement reliability. Multiple choice questions range in complexity from simple recall of knowledge to the synthesis and evaluation of the subject matter.

Test Scoring: All tests are scored by SPOSA/SPOA. The minimum passing score is 75% of items answered correctly.

Test Result Notification: Exam results are routinely mailed to certificate candidates approximately 6 weeks after the examination date. No results are given over the phone. All results are confidential and are only released to the certificate candidate. All candidates who did not pass the exam will be notified of their areas of deficiency, and make retake the exams no earlier than 90 days from the date of notification.

Issue of Certificate: Certificates will be issued to all candidates who pass the examination. Certificates are mailed about two to three weeks after result notifications have been mailed.

Renewal of Certification: All certificates must be renewed every three years. The first renewal is due three years from the last day of the month in which the certification exam was held. Certificate renewals less than one year past due are subject to the renewal fee plus a penalty fee of 100% of the renewal fee. Certificates more than one year past due are not renewable. Re-testing is required to reinstate certificates more than one year past due. Renewal notices are

¹ Acronym for Developing a Curriculum

mailed to certificate holders two months before the due date. It is the responsibility of the certificate holder to ensure that his or her certificate(s) remains valid. Continuing education will be required for renewal.

4.0 PROGRAM STRUCTURE

BACKGROUND

The School Plant Maintenance Official Certification and the School Plant Operations Official Certification describes the career path and increasing complexity of these parallel occupations typically involved in the effective management of facility operations. At the most advanced level (Certified School Facility Manager Level), certificate candidates are expected to have some technical knowledge of both vocations. The level of technical knowledge for each of these levels is outlined in the sections explaining qualifications for each one.

Levels 1 to III are composed of School Plant Maintenance and School Plant Operations certifications. The level of technical expertise at these levels is more specialized than at the most advanced level.

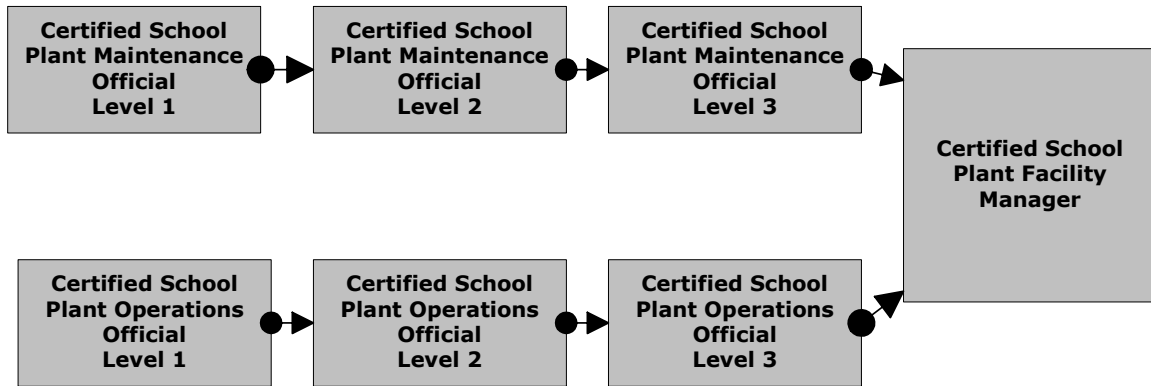
The School Plant Management Certification structure is based on the same research and job analyses that are the basis of the test design. Research consisted of analyzing job specifications through a modified DACUM process and working with the feedback from a combined SPOSA and SPOA working group.

HIERARCHICAL LEVELS

The figure below diagrams the certification structure. At the entry level is Certified Operations Professional Level 1 and Certified Maintenance Professional Level 1. These entry-level certifications are designed to measure competence as qualified entry-level professionals at each level. Certificate candidates should be familiar with the core competencies listed in this handbook.

Level II and III are specialist levels where candidates may choose to demonstrate their competency in either vocation. At these levels candidates are expected to have a wide range of knowledge within their specialty. Many candidates find that the scope of knowledge required for successful completion of the test is beyond that utilized on a daily basis at their own workplace. Certificate holders are expected to demonstrate a wide range of knowledge, skills, and abilities because they should be able to perform the essential duties of their jobs at any school plant. Certification at Level also involves competency as supervisors in the applicant's area of specialization.

Certification as a School Plant Facility Manager is designed for managerial level personnel involved with plant management, whose area of responsibility involves both maintenance and operations. It also requires basic knowledge of Facility Planning and Management. Certified individuals at this level are expected to demonstrate competency as managers of comprehensive plant maintenance operations. Qualified candidates should be able to demonstrate the managerial functions, as well as the ability to understand and make managerial level decisions regarding maintenance and operations issues.



CERTIFICATION LEVELS AND DESIGNATIONS

CERTIFIED SCHOOL PLANT MAINTENANCE OFFICIAL 1

School Plant Maintenance Official Level I Certification is designed to demonstrate competency at the entry and basic working level. More specifically, Level I certification implies competence in the knowledge, skills and abilities required to perform the *Essential Duties* of an entry level School Plant Maintenance Official.

ELIGIBILITY CRITERIA

Type of Activity	Typical Route	Equivalency
Academic Preparation	Grade 12 Diploma	General Education Diploma (GED)
No. of years of direct experience	Two years experience in Basic building contracting	
Other certifications, tickets, etc.	None	
SPOA/SPOSA Certification	Yes, by local District	
Examination	No	
Proof of qualification	Reviewed individually by local Certification Committee	

There are no additional experience or education requirements for Level I certification. Completing the Application for Certification, paying the appropriate application fee and fulfillment of these qualifications are the only requirements.

ESSENTIAL CORE COMPETENCIES

Individuals certified as Level I School Plant Maintenance Officials are expected to possess acceptable competency when performing the tasks that are necessary for entry-level responsibilities. These necessary tasks are known as the *Required Core Competencies*. The certification indicates knowledge, skills and abilities required to perform the *Required Core Competencies*.

Analyze components of the construction industry

- Identify components of the construction industry (e.g., residential, commercial, heavy, highway)

Estimate needed materials and costs

- Calculate area and volume of given dimensions
- Calculate the amount of material needed for given dimensions

Demonstrate knowledge of basic wood construction skills

- Identify types of layout instruments/tools and their functions
- Identify types of fasteners used in wood construction
- Select types of fasteners appropriate for a given assembly task

Demonstrate knowledge of basic electrical and electronics theory

- Differentiate between AC and DC terms and applications
- Demonstrate knowledge of safety procedures related to working with electricity and electronics

Verify proper installation of various electrical and electronic components and fixtures

- Demonstrate basic knowledge of circuit breakers, fuses, and other over-current devices
- Verify the operation of a ground-fault circuit interrupter using a GFCI tester
- Demonstrate knowledge of how to use electrical/electronic testing equipment

Demonstrate knowledge of refrigeration and heat principles and practices

- Identify how refrigeration and heat principles relate to the construction industry

Demonstrate knowledge of piping systems in the construction industry

- Demonstrate knowledge of the characteristics and functions of potable and nonpotable systems

Demonstrate knowledge of masonry basics in the construction industry

- Identify basic uses of concrete
- Identify alternative components

Build internal and external customer relations

- Recognize the importance of all customers to business
- Demonstrate knowledge of the relationship between meeting customer needs and profitability

Communicate using telecommunications tools

- Operate telecommunications equipment in accordance with company policy
- Communicate via telephones, voice mail, e-mail, and teleconferencing and paging systems
- Take complete and accurate telephone messages
- Give complete and accurate telephone messages
- Follow established telephone etiquette

Prepare documentation for work orders

- Write work orders, including change documents

Demonstrate use of basic measuring tools

- Identify measuring tools and their functions
- Select measuring tools appropriate for given task
- Measure inside/outside diameters, lift, end-play, and backlash

Operate power tools and stationary equipment

- Identify types of power tools and stationary equipment and their functions
- Select power tool and stationary equipment appropriate for given task
- Inspect power tools and stationary equipment
- Operate power tools and stationary equipment for given task
- Apply established safety procedures
- Maintain power tools and stationary equipment
- Store tools and accessories in designated area

Follow established procedures for using common hand tools

- Identify construction tools and their uses (impact, cutting, shaping, gripping, holding)
- Select tools appropriate for given task
- Inspect tools before using for specified task
- Follow established safety procedures for given tool
- Perform specified task with given tool
- Maintain tools
- Inventory tools
- Secure tools

Exhibit business and work ethics

- Attend work as scheduled
- Follow established rules of conduct
- Exhibit characteristics and responsibilities of teamwork
- Exhibit characteristics of a productive employee (friendliness, quality of work, honesty, loyalty, initiative, flexibility, positive attitude, punctuality)
- Respect property of customers, other trades, and coworkers

Identify legal issues and regulatory standards applicable to the construction industry

- Demonstrate knowledge of contracts
- Determine which code(s) apply to given situation

Maintain general safety in accordance with government regulations and health standards

- Wear protective clothing appropriate for job (hard hat, hard-toed shoes, buttoned-sleeve shirt, etc.)
- Wear protection devices appropriate for job (dust mask, hearing protection, respirators)
- Check self for potential hazards (secure hair, remove jewelry)
- Practice established lifting techniques
- Maintain personal protective equipment (inspect, clean, repair)
- Follow established procedures for the use of safety apparatus and equipment, including fall protection
- Identify the location of emergency flush showers, eye-wash fountains, first-aid stations, fire alarms, and exits
- Maintain work areas in accordance with standards for cleanliness and safety
- Demonstrate knowledge of how to operate fire extinguishers and of classes of fires
- Handle hazardous materials in accordance with Government regulations and health standards
- Identify types of hazardous materials
- Interpret container label precautions
- Interpret material safety data sheets (MSDSs)
- Handle tools, materials, and equipment in accordance with government regulations and health standards
- Follow established procedures for the safe use of tools, materials, and equipment, including operation, carrying, lifting, and handling
- Identify potential hazards associated with hand and power tools
- Conduct routine inspections of tools and equipment
- Maintain hand tools, power tools, and equipment
- Comply with organizational safety procedures
- Demonstrate knowledge of company safety procedures
- Demonstrate knowledge of company safety plan (e.g., contact person, forms, etc.)
- Identify basic first-aid procedures
- Identify health and safety hazards

- Perform preventive maintenance in accordance with guidelines specified by manufacturer and/or outside authorities with jurisdiction (e.g., government inspectors)
- Follow preventive maintenance schedule
- Log preventive maintenance performed

CERTIFIED SCHOOL PLANT MAINTENANCE OFFICIAL LEVEL 2

Certified School Plant Maintenance Official Level 2 certification is designed to demonstrate competency at the skilled or journeyman level. Demonstrates in-depth ability to perform complex tasks, without supervision, IN ADDITION TO LEVEL ONE core competencies.

ELIGIBILITY CRITERIA

Eligibility criteria are summarized in the table below.

Type of Activity	Typical Route	Equivalency
Academic Preparation	Journeyman Certificate and Level 1 Certification	
No. of years of direct experience	Two years single trade experience, at least one (1) year in supervision	
SPOA/SPOSA Certification	Yes, by local district	
Examination	No	
Proof of qualification	Yes, reviewed individually by SPOA/SPOSA Certification Committee	

ESSENTIAL CORE COMPETENCIES

Individuals certified as Level 2 School Plant Maintenance Officials are expected to possess acceptable competency when performing the tasks that are necessary for journeyman or skilled level responsibilities. These are outlined under the *Required Core Competencies*. The certification indicates knowledge, skills and abilities required to perform the *Required Core Competencies*.

REQUIRED CORE COMPETENCIES

Analyze trends and issues in the construction industry

1. Identify environmental issues related to construction

Estimate needed materials and costs

1. Calculate time (e.g., charge for labour on a job, project completion, project schedules)

Demonstrate knowledge of basic wood construction skills

1. Identify construction features and their relationships to the overall structure

Demonstrate knowledge of basic electrical and electronics theory

1. Demonstrate knowledge of local codes and National Electrical Code (NEC) "

Demonstrate knowledge of refrigeration and heat principles and practices

1. Identify how refrigeration and heat principles relate to the construction industry
2. Identify the properties of heat, refrigerants, and mechanical refrigerant cycles
3. Demonstrate awareness of local, provincial, and national codes related to refrigeration/heating systems

Build internal and external customer relations

1. Interact with customers and vendors in a professional manner (prompt, friendly, courteous, helpful, knowledgeable, understandable, ethical, accurate)
2. Follow through on goals, objectives, and commitments made to customers and vendors (deadlines, delivery specifications)

Interpret blueprints and schematics

1. Identify established procedures for interpreting blueprints and diagrams

2. Interpret dimensions, symbols, types of lines, views, and scales
3. Determine tolerances associated with dimensions

Interpret construction drawings

1. Identify types of drawings and specifications, including those created electronically
2. Identify common scales used in construction drawings
3. Identify information about construction features and their relationship using sections and details

Document accidents

1. File reports with appropriate personnel

Troubleshoot maintenance problems in accordance with established procedures

1. Document maintenance problems
2. Obtain all available information about given maintenance problem, including safety procedures (e.g., LOTO, MSDS), using specifications manuals

Exhibit business and work ethics

1. Prioritize work

Demonstrate the ability to work on a team in a construction environment

1. Identify types of teams (e.g., cross-functional, cross-trained)
2. Identify the role of teams in high-performance workplaces
3. Analyze unique issues associated with working on teams
4. Apply team problem-solving and conflict-resolution practices

Identify legal issues and regulatory standards applicable to the construction industry

1. Demonstrate general knowledge of contracts
2. Determine which code(s) apply to given situation

Analyze information from job-related reference materials

1. Locate needed reference materials
2. Select useful support materials and documentation
3. Interpret information (e.g., specifications, drawings, contract documents) provided in reference materials

Maintain general safety in accordance with government regulations and health standards

1. Conduct routine building safety inspections

Perform preventive maintenance in accordance with guidelines specified by manufacturer and/or outside authorities with jurisdiction (e.g., government inspectors)

1. Access needed information using preventive maintenance manuals

Coordinate maintenance activities and resources

1. Develop, maintain and coordinate procedures to ensure timely response to plant maintenance.
2. Supervise the current inventory of supplies, tools and equipment.
3. Supervise the dispersal of required materials and supplies.
4. Complete maintenance schedule for areas assigned, with the frequency requirements provided.

Manage single trade projects

1. Identify stakeholders, decision makers and escalation procedures

CERTIFIED MAINTENANCE PROFESSIONAL LEVEL 3

Level III Certification is designed to demonstrate competency at the lead or advanced technical level and supervisory core competencies. More specifically, Level III certification implies competence in the knowledge, skills and abilities required to perform the essential duties of a lead or advanced school plant maintenance official.

ELIGIBILITY CRITERIA FOR TAKING THE TEST

Eligibility criteria are summarized in the table below.

Type of Activity	Typical Route	Equivalency
Academic Preparation	Level 2 Certification, plus Journeyman Certificate	University degree in relevant Discipline, with articulated equivalencies
No. of years of direct experience	Four (4) years of multitrade experience, with at least 2 years in a supervisory capacity	
SPOA/SPOSA Certification	Yes	
Examination	Yes, for all applicants	
Proof of qualification	Yes, reviewed individually by SPOA/SPOSA Certification Committee	

Qualifying With Your Education

Holding a college degree, or its equivalent, in a field related to your vocation may replace the typical educational background required and Level 2 certification. Your degree must be in a field that is related to the certificate for which you are applying. If you are uncertain if your degree is related to your vocation you should still include your degree information in your application. The Certification Program Committee will determine if your degree qualifies. If it does not, you will be accepted for the next highest level for which you qualify. Associate’s and Bachelor’s degrees in technical fields are usually accepted. Degrees are evaluated on a case-by-case basis upon receipt of the application. College credit without a degree is not accepted unless it can be demonstrated that the credit is equivalent to a degree.

REQUIRED CORE COMPETENCIES

Knowledge, skills and abilities identified on the Competency Specifications for Certified Maintenance Professional Level I, and Certified Maintenance Professional Level II.

Analyze trends and issues in the construction industry

1. Analyze how demographic changes influence the labour market conditions

Estimate needed materials and costs

1. Estimate the cost of labour and overhead based on given set of contract documents

Build internal and external customer relations

1. Handle customer complaints in accordance with customer service policy
2. Deliver formal and informal presentations

Prepare documentation for work orders

1. Evaluate job costs

Interpret blueprints and schematics

1. Make spatial interpretation of various three-dimensional forms for two-dimensional drawings

Analyze the role of technology in construction

1. Identify technological advancements and their influence on the construction industry
2. Analyze the costs and benefits of technological innovations

Demonstrate the ability to work on a team in a construction environment

1. Identify the role of teams in high-performance workplaces
2. Apply team problem-solving and conflict-resolution practices

Identify legal issues and regulatory standards applicable to the construction industry

1. Demonstrate knowledge regarding negligence and its consequences
2. Identify established company/agency policies for dealing with legal issues
3. Analyze the interrelationship between local and national codes

Coordinate maintenance activities and resources

1. Monitor the development of the both short- and long-range plant maintenance plans.

Supervise and train staff

1. Supervise assigned personnel, conduct annual performance appraisals and make recommendations appropriate employment action.
2. Interview and recommend the hiring of custodians.

Manage complex projects

1. Define scope of project
2. Identify stakeholders, decision makers and escalation procedures
3. Identify required resources and budget
4. Evaluate project requirements
5. Identify, evaluate and mitigate risks
6. Identify and track critical milestones
7. Initiate and participate in project phase review

CERTIFIED SCHOOL PLANT OPERATIONS OFFICIAL

CERTIFICATION

CERTIFIED SCHOOL PLANT OPERATIONS OFFICIAL 1

School Plant Operations Official Level I: Certification is designed to demonstrate competency at the entry and basic working level. More specifically, Level I certification implies competence in the knowledge, skills and abilities required to perform the essential duties of an entry level School Plant Operations Official.

Eligibility Criteria

Type of Qualification	Level 1	Equivalent
Academic Preparation	Grade 12 Diploma	GED
No. of years of direct experience	Two (2) years of multi-site school experience	Three (3) years of single site school experience
Other certifications, tickets, etc.	WHMIS, TDG (where applicable) Building Service Worker Certificate	SPOSA/SPOA examination
SPOSA/SPOA Certification	Yes, locally administered	
Examination	No	Yes
Proof of Qualification Required	Reviewed individually by District Certification Committee	

There are no additional experience or education requirements for Level I certification. Completing the Application for Certification, paying the appropriate application fee and fulfillment of these qualifications are the only requirements.

ESSENTIAL CORE COMPETENCIES

Individuals certified as Level I School Plant Operations Officials are expected to possess acceptable competency when performing the tasks that are necessary for entry-level responsibilities. These necessary tasks are known as the *Required Core Competencies*. The certification indicates knowledge, skills and abilities required to perform the *Required Core Competencies*.

REQUIRED CORE COMPETENCIES

Operate cleaning tools and other equipment

1. Identify types of cleaning equipment (buffer, auto scrubber, carpet cleaner, etc.) and their functions
2. Select cleaning tool appropriate for given task
3. Operate cleaning tools and wide variety of hand and power tools for given task
4. Apply established safety procedures
5. Maintain cleaning tools and stationary equipment

6. Store tools and accessories in designated area

Provide care and routine maintenance of grounds.

1. Properly operate power mowing, tilling and trimming equipment to cut grass, edge walks, flower beds, curbs, etc.
2. Monitor and maintain fluid levels as pertaining to each piece of equipment.
3. Observe safety rules while operating equipment (i.e. directions of discharge, transport and mowing speeds, yielding to motorized and pedestrian traffic). Wears protective equipment.
4. Maintain appearance and safety conditions outside of building: remove snow and ice; collect litter; sweep walkways; prepare grounds for planting. Seed, water, mow, and fertilize lawn and repair benches, tables, sprinkling equipment, and planters
5. Pick up and dispose of debris and leaves as needed and according to guidelines.

Perform building security and minor mechanical adjustments and repairs.

1. Monitors climate control system to conserve energy, and to ensure public safety.
2. Locks and unlocks building(s).
3. Coordinates with supervisor to establish security procedures.
4. Responds to calls on security problems when needed.
5. Keeps up-to-date material safety data sheets (MSDS) on file.
6. Makes recommendations to supervisor(s) for operating building(s) more efficiently.

Demonstrate general knowledge of various technologies involved in operating and maintaining a building.

1. Demonstrate knowledge of circuit breakers, fuses, and other over-current devices
2. Demonstrate knowledge of the operation of compressors, condensers, and metering devices
3. Demonstrate knowledge of safety guidelines and regulations applicable to working with these systems

Build internal and external customer relations

1. Recognize the importance of all customers to business
2. Interact with customers and vendors in a professional manner (prompt, friendly, courteous, helpful, knowledgeable, understandable, ethical, accurate)

Communicate using telecommunications tools

1. Operate telecommunications equipment in accordance with organizational policy
2. Communicate via telephones, voice mail, e-mail, and teleconferencing and paging systems
3. Take complete and accurate telephone messages
4. Give complete and accurate telephone messages
5. Follow established telephone etiquette

Exhibit business and work ethics

1. Attend work as scheduled
2. Follow established rules of conduct
3. Exhibit characteristics and responsibilities of teamwork
4. Exhibit characteristics of a productive employee (friendliness, quality of work, honesty, loyalty, initiative, flexibility, positive attitude, punctuality)
5. Respect property of customers, other trades, and coworkers

Maintain general safety in accordance with government regulations and health standards

1. Wear protective clothing appropriate for job (hard hat, hard-toed shoes, buttoned-sleeve shirt, gloves, eye protection, etc.)
2. Wear protection devices appropriate for job (dust mask, hearing protection, respirators)
3. Practice established lifting techniques
4. Follow established procedures for the use of safety apparatus and equipment, including fall protection
5. Identify the location of emergency flush showers, eye-wash fountains, first-aid stations, fire alarms, and exits
6. Maintain work areas in accordance with standards for cleanliness and safety
7. Demonstrate knowledge of how to operate fire extinguishers and of classes of fires

Handle hazardous materials in accordance with government regulations and health standards

1. Identify types of hazardous material
2. Interpret container label precautions
3. Interpret material safety data sheets
4. Store hazardous materials in accordance with government regulations

Handle tools, materials, and equipment in accordance with government regulations and health standards

1. Follow established procedures for the safe use of tools, materials, and equipment, including operation, carrying, lifting, and handling
2. Identify potential hazards associated with hand and power tools
3. Conduct routine inspections of tools and equipment
4. Maintain hand tools, power tools, and equipment

Comply with organizational safety procedures

1. Demonstrate knowledge of organizational safety procedures
2. Demonstrate knowledge of organizational safety plan (e.g., contact person, forms, etc.)
3. Identify basic first-aid procedures
4. Identify health and safety hazards
5. Follow environmental precautions when discarding parts

CERTIFIED SCHOOL PLANT OPERATIONS OFFICIAL LEVEL TWO

Certified School Plant Operations Official Level 2 certification is designed to demonstrate competency at the skilled or journeyman level. Demonstrates in-depth ability to perform complex tasks, without supervision, IN ADDITION TO LEVEL ONE core competencies.

ELIGIBILITY CRITERIA

Type of Qualification	Level 2 (Typical)	Equivalency
Academic Preparation	Level 1 SPOSA/SPOA Certification	
No. of years of direct experience	Level 1 experience plus 1 additional year	
Other qualifications	40 hours of training in supervisory techniques	1 year of direct experience supervising at least 2 employees
Certification	Yes, by SPOSA/SPOA	
Examination	No (with proof of completion)	Yes, without transcripts
Proof of Qualification	Reviewed individually by SPOSA/SPOA Certification Committee	

ESSENTIAL CORE COMPETENCIES

Individuals certified as Level 2 School Plant Maintenance Officials are expected to possess acceptable competency when performing the tasks that are necessary for journeyman or skilled level responsibilities. These are outlined under the *Required Core Competencies*. The certification indicates knowledge, skills and abilities required to perform the *Required Core Competencies*

REQUIRED CORE COMPETENCIES

Troubleshoot custodial problems in accordance with established procedures

1. Identify specific problem(s)
2. Document custodial problems
3. Obtain all available information about given problem, including safety procedures (e.g., MSDS), using specifications manuals
4. Perform operational checks
5. Identify possible solutions for identified custodial problems

Estimate needed materials and costs

1. Calculate area and volume of given dimensions
2. Calculate the amount of material needed for given dimensions
3. Calculate time (e.g., charge for labour on a job, project completion, project schedules)
4. Determine actual measurements based on a given
5. Calculate ratio and proportion of materials
6. Estimate materials needed for a given job
7. Solve job-related problems using mathematical handbooks, charts and tables (bend pipe, roof pitch)

Demonstrate general knowledge of various technologies involved in operating & maintaining a building.

Demonstrate knowledge of the characteristics and functions of heat systems (e.g., electric resistance, gas-fired, heat pump, oil-fired, and air/water)

Build internal and external customer relations

1. Follow through on goals, objectives, and commitments made to customers and vendors (deadlines, delivery specifications)
2. Handle customer complaints in accordance with customer service policy

Communicate using telecommunications tools

1. Identify organizational policies regarding use of telecommunications tools (telephones, Answering machine, voice mail, e-mail, teleconferencing systems, pagers, fax, Internet)
2. Keep up-to-date concerning new and emerging communication technologies

Prepare documentation for work orders

1. Write work orders, including change documents
2. Calculate billing
3. Confirm parts prices

Document accidents

1. Complete accident reports in accordance with established standards (e.g., completely, legibly, neatly, accurately, in a timely manner)
2. File reports with appropriate personnel
3. Demonstrate knowledge of the workers compensation system

Exhibit business and work ethics

Prioritize work

Demonstrate the ability to work on a team

1. Identify types of teams (e.g., cross-functional, cross-trained)
2. Apply team problem-solving and conflict-resolution practices

Analyze information from job-related reference materials

1. Locate needed reference materials
2. Select useful support materials and documentation
3. Interpret information (e.g., specifications, drawings, contract documents, instruction manuals) provided in reference materials

Maintain general safety in accordance with government regulations and health standards

1. Check power sources for potential hazards
2. Confirm proper grounding
3. Shut down power equipment in dangerous situations using power disconnect switches and established lock-out/tag-out procedures
4. Establish procedures that ensure personnel awareness of government rules and health-safety standards and ensure the standards are implemented.
5. Inspect air makeup and exhaust systems, including intake filters, exhaust filters, fan and other mechanical components.

Handle hazardous materials in accordance with government regulations and health standards

Dispose of hazardous materials in accordance with government regulations

Coordinate custodial activities and resources

1. Supervise the dispersal of required materials and supplies.
2. Supervise current inventory of custodial supplies, tools and equipment.
3. Complete cleaning schedule for areas assigned, with the frequency requirements provided, and look for ways to improve the schedule.

Supervise and train custodial staff

1. Interview and recommend the hiring of custodians.

CERTIFIED SCHOOL PLANT OPERATIONS OFFICIAL LEVEL 3

Level III Certification is designed to demonstrate competency at the lead or advanced technical level and supervisory core competencies. More specifically, Level III certification implies competence in the knowledge, skills and abilities required to perform the essential duties of a lead or advanced school plant maintenance official, i.e. To provide leadership, supervision and maintenance of the sanitation, cleanliness and safety for the physical plant and grounds.

ELIGIBILITY CRITERIA

Type of Qualification	Level 3
Academic Preparation	Level 2 Certification
No. of years of direct experience	Level 2 experience plus Three (3) years of direct Supervisory experience
No. of years of related Experience	Level 2 plus 80 hours of management education and/or training
Certification	Yes, by SPOA/SPOSA
Examination	Yes, for all applicants
Other proof of qualification	Reviewed individually by SPOA/SPOSA Certification Committee

ESSENTIAL CORE COMPETENCIES

Individuals certified as Level 3 School Plant Operations Officials are expected to possess acceptable competency when performing the tasks that are necessary for advanced supervisory responsibilities. These are outlined under the *Required Core Competencies*. The certification test measures knowledge, skills and abilities required to perform the *Required Core Competencies*

REQUIRED CORE COMPETENCIES

Estimate needed materials and costs

Estimate the cost of labor and overhead based on given set of contracts

Build internal and external customer relations

Deliver formal and informal presentations to stakeholders, as appropriate

Prepare documentation for work orders

Evaluate job costs

Demonstrate the ability to work on a team

1. Identify the role of teams in high-performance workplaces

2. Analyze unique issues associated with working on teams

Identify applicable legal issues and regulatory standards

1. Demonstrate knowledge of contracts
2. Demonstrate knowledge regarding negligence and its consequences
3. Identify established organizational/agency policies for dealing with legal issues
4. Analyze the interrelationship between local and national codes
5. Determine which code(s) apply to given situation

Coordinate custodial activities and resources

1. Develop, maintain and coordinate procedures to ensure timely response to plant maintenance.
2. Prepare all required reports and maintain all appropriate records.
3. Monitor the development of the both short- and long-range plant maintenance plans.
4. Supervise the physical security of school building/s.

Supervise and train custodial staff

Supervise assigned personnel, conduct annual performance appraisals and make recommendations for appropriate employment action.

Design and manage complex project

1. Define scope of project
2. Identify stakeholders, decision makers and escalation procedures
3. Estimate time requirements
4. Gantt/ PERT chart sequenced appropriately.
5. Identify required resources and budget
6. Evaluate project requirements
7. Identify, evaluate and mitigate risks
8. Develop initial project, including options analysis
9. Identify and track critical milestones
10. Initiate and participate in project phase review

CERTIFIED SCHOOL PLANT FACILITY MANAGER

The Certified School Plant Facility Manager designation is designed for managerial level personnel involved with all aspects of the plant environment. Certified individuals at this level are expected to demonstrate competency as managers of both plant maintenance and operations. Qualified candidates should be able to demonstrate the managerial functions, as well as the ability to provide overall leadership in the design, management and monitoring of all aspects of building design, construction, improvement and major repair projects for school board facilities, including the areas of cleanliness and safety in facilities and school grounds.

ELIGIBILITY CRITERIA

Type of Qualification	Typical Route	Equivalency
Academic Preparation	Grade 12 Diploma	General Education Diploma (GED)
No. of years of direct experience	Five years of experience Level 3 Certification	
Other certifications, tickets, etc.	Journeyman Status CET Engineering degree	Two-year certificate in Building Technologies IFMA/BOMA Certification
SPOA/SPOSA Certification	Yes	
Examination	Yes, for all applicants	
Proof of Qualification	Yes, reviewed by Certification Committee	

Qualifying With Your Education

Holding a college degree, or its equivalent, in a field related to your vocation will reduce the number of years required for your test (see the table above). Your degree must be in a field that is related to the certificate for which you are applying. If you are uncertain if your degree is related to your vocation, you should still include your degree information in your application. The Certification Program Committee will determine if your degree qualifies. If it does not, you will be accepted for the next highest grade level for which you qualify. Associate's and Bachelor's degrees in technical fields are usually accepted. Degrees are evaluated on a case-by-case basis upon receipt of the application. College credit without a degree is not accepted unless it can be demonstrated that the credit is equivalent to a degree.

Core Competencies

Individuals certified as Certified School Plant Facility Managers are expected to possess acceptable competency when performing the tasks that are necessary for overall school building management. The certification test measures knowledge, skills and abilities on core competencies required to perform the *Essential Duties*.

REQUIRED CORE COMPETENCIES

Analyze components of the construction industry

1. Identify components of the construction industry
2. Demonstrate knowledge of the process of construction, from identifying customer needs to final construction stages
3. Identify the interrelationships between the skilled trades, architects/engineers, and materials suppliers
4. Investigate historical influences on the construction industry (e.g., urbanization, architectural styles, transportation needs, technological advancements, demographic/population shifts)

Analyze trends and issues in the construction industry

1. Keep up-to-date regarding technology in tools, equipment, materials, and practices
2. Identify environmental issues related to construction
3. Identify changes in production methods over time
4. Demonstrate knowledge of new and emerging safety procedures
5. Analyze how economic trends affect the construction industry

Estimate needed materials and costs

1. Calculate area and volume of given dimensions
2. Calculate the amount of material needed for given dimensions
3. Calculate time (e.g., charge for labor on a job, project completion, project schedules)
4. Determine actual measurements based on a given project
5. Calculate ratio and proportion of materials
6. Solve job-related problems using mathematical handbooks, charts, and tables (e.g., bend pipe, roof pitch)
7. Estimate materials needed for a given job
8. Estimate the cost of labor and overhead based on given set of contract

Demonstrate knowledge of basic wood construction skills

1. Identify the structural properties, grades, and types of wood and wood products
2. Identify construction features and their relationships to the overall structure
3. Identify types of layout instruments/tools and their functions
4. Identify types of fasteners used in wood construction
5. Select types of fasteners appropriate for a given assembly task

Operate cleaning tools and other equipment

1. Identify types of cleaning equipment (buffer, auto scrubber, carpet cleaner, etc.) and their functions
2. Select cleaning tool appropriate for given task
3. Apply established safety procedures

Troubleshoot custodial problems in accordance with established procedures

1. Identify specific problem(s)
2. Document custodial problems
3. Obtain all available information about given problem, including safety procedures (e.g., MSDS), using specifications manuals
4. Identify possible solutions for identified custodial problems

Ensure the performance of building security and minor mechanical adjustments and repairs, including:

1. Monitoring of climate control system to conserve energy, and to ensure public safety.
2. Establishment of security procedures.
3. Prompt response to calls on security problems when needed.
4. Maintenance of up-to-date material safety data sheets (MSDS) on file.

Demonstrate knowledge of basic electrical and electronics theory

1. Identify how electronics and electricity are used in the construction industry
2. Demonstrate knowledge of scientific laws related to electricity
3. Demonstrate knowledge of uses of series, parallel, and parallel-series circuits
4. Differentiate between AC and DC terms and applications
5. Interpret schematic drawings and blueprints
6. Demonstrate knowledge of local codes and National Electrical Code (NEC)
7. Demonstrate knowledge of safety procedures related to working with electricity and electronics

Verify proper installation of various electrical and electronic components and fixtures

1. Demonstrate knowledge of circuit breakers, fuses, and other over-current devices
2. Demonstrate knowledge of conductors and other properties
3. Verify the operation of a ground-fault circuit interrupter using a GFCI tester
4. Attach testing equipment
5. Comply with safety procedures established for the use of testing equipment
6. Determine needed repairs

Demonstrate knowledge of refrigeration and heat principles and practices

1. Identify how refrigeration and heat principles relate to the construction industry
2. Identify the properties of heat, refrigerants, and mechanical refrigerant cycles
3. Demonstrate knowledge of the operation of compressors, condensers, and metering devices
4. Demonstrate knowledge of the characteristics and functions of heat systems (e.g., electric resistance, gas-fired, heat pump, oil-fired, and air/water)
5. Identify piping, venting, and draining systems appropriate for a given job
6. Demonstrate knowledge of local, provincial, and national codes related to refrigeration/heating systems
7. Demonstrate knowledge of safety guidelines and regulations applicable to working with refrigeration/heating systems

Demonstrate knowledge of piping systems in the construction industry

1. Demonstrate knowledge of the characteristics and functions of potable systems
2. Demonstrate knowledge of the characteristics and functions of nonpotable systems
3. Identify piping materials
4. Demonstrate knowledge of safety procedures applicable to working with piping systems

Demonstrate knowledge of masonry basics in the construction industry

1. Demonstrate knowledge of masonry materials and construction techniques
2. Identify uses of concrete
3. Identify alternative components
4. Analyze the relationship between the work of masonry and other trades

Communicate effectively with various levels of stakeholders

1. Build internal and external customer relations
2. Recognize the importance of all stakeholders to business
3. Demonstrate knowledge of the relationship between meeting stakeholder needs and success
4. Interact with stakeholders and vendors in a professional manner (prompt, friendly, courteous, helpful, knowledgeable, understandable, ethical, accurate)
5. Follow through on goals, objectives, and commitments made to stakeholders and vendors (deadlines, delivery specifications)
6. Handle customer complaints in accordance with customer service policy
7. Deliver formal and informal presentations

Communicate using telecommunications tools

1. Identify company policies regarding use of telecommunications tools (telephones, answering machine, voice mail, e-mail, teleconferencing systems, pagers, fax, Internet)
2. Operate telecommunications equipment in accordance with company policy
3. Communicate via telephones, voice mail, e-mail, and teleconferencing and paging systems
4. Keep up-to-date concerning new and emerging communication technologies

Ensure accurate documentation of work orders, including review and supervision of:

1. Work orders, including change documents
2. Billing
3. Evaluation of job costs

Interpret blueprints and schematics

1. Identify established procedures for interpreting blueprints and diagrams
2. Interpret dimensions, symbols, types of lines, views, and scales
3. Determine tolerances associated with dimensions
4. Make spatial interpretation of various three-dimensional forms for two-dimensional drawings
5. Apply basic algebraic procedures and geometric concepts to blueprint reading
6. Work within established industry tolerance parameters as defined by the blueprints

Interpret construction drawings

1. Identify types of drawings and specifications, including those created electronically
2. Identify common scales used in construction drawings
3. Identify information about construction features and their relationship using sections and details
4. Interpret symbols
5. Identify general construction information not clearly indicated by the dimensions using schedules
6. Demonstrate knowledge of zoning, building permits, property lines, utilities, building line, setback, building corners, and elevation
7. Identify the need for the coordination of all trade documents
8. Develops design criteria and prepares architectural, HVAC, electrical, and plumbing/mechanical plans and material specifications

Ensure thorough and accurate documentation of accidents, including:

1. Completion of accident reports in accordance with established standards (e.g., completely, legibly neatly, accurately, in a timely manner)
2. Filing of reports with appropriate personnel
3. Appropriate application of the provisions of the workers compensation system

Analyze the role of technology in construction

1. Demonstrate knowledge of technology trends
2. Identify technological advancements and their influence on the construction industry
3. Analyze the costs and benefits of technological innovations

Demonstrate use of basic measuring tools

1. Identify measuring tools and their functions
2. Select measuring tools appropriate for given task
3. Measure inside/outside diameters, lift, end-play, and backlash
4. Interpret charts, graphs, and schematics

Operate power tools and stationary equipment

1. Identify types of power tools and stationary equipment and their functions
2. Select power tool and stationary equipment appropriate for given task
3. Apply established safety procedures

Ensure compliance with established procedures for using common hand tools, including:

1. Appropriate use and maintenance of construction tools (impact, cutting, shaping, gripping, holding)
2. Selection of tools appropriate for given task
3. Inspection of tools before using for specified task
4. Compliance with established safety procedures for given tool

Ensure troubleshooting of maintenance problems in accordance with established procedures, including:

1. Performance of multi-sensory inspections
2. Identification of specific problem(s)
3. Documentation of maintenance problems
4. Collection of all available information about given maintenance problem, including safety procedures (e.g., LOTO, MSDS), using specifications manuals
5. Performance of operational checks
6. Identification of possible solutions for identified maintenance problems

Establish elevation reference points from benchmarks and baselines

1. Locate bench marks and/or baselines
2. Establish height using a levelling instrument (e.g., laser, transit)
3. Set grade stakes

Exhibit business and work ethics

1. Attend work as scheduled
2. Follow established rules of conduct
3. Exhibit characteristics and responsibilities of teamwork
4. Exhibit characteristics of a productive employee (friendliness, quality of work, honesty, loyalty, initiative, flexibility, positive attitude, punctuality)
5. Respect property of customers, other trades, and coworkers

7. Prioritize work

Demonstrate the ability to work on a team in a construction environment

1. Identify types of teams (e.g., cross-functional, cross-trained)
2. Identify the role of teams in high-performance workplaces
3. Analyze unique issues associated with working on teams
4. Apply team problem-solving and conflict-resolution practices

Identify legal issues and regulatory standards applicable to the construction industry

1. Demonstrate knowledge of contracts
2. Demonstrate knowledge regarding negligence and its consequences
3. Identify established company/agency policies for dealing with legal issues
4. Analyze the interrelationship between local and national codes
5. Determine which code(s) apply to given situation

Analyze information from job-related reference materials

1. Locate needed reference materials
2. Select useful support materials and documentation
3. Interpret information (e.g., specifications, drawings, contract documents) provided in reference materials

Ensure that general safety is maintained by all employees, in accordance with government regulations and health standards, including:

1. Wearing of protective clothing appropriate for job (hard hat, hard-toed shoes, buttoned-sleeve shirt, gloves, eye protection, etc.)
2. Wearing of protection devices appropriate for job (dust mask, hearing protection, respirators)
3. Checking self for potential hazards (secure hair, remove jewelry)
4. Practicing established lifting techniques
5. Maintaining personal protective equipment (inspect, clean, repair)
6. Following established procedures for the use of safety apparatus and equipment, including fall protection
7. Conducting routine building safety inspections
8. Identification of the location of emergency flush showers, eye-wash fountains, first-aid stations, fire alarms, and exits

Ensure that hazardous materials are handled in accordance with government regulations and health standards, including:

1. Identification of types of hazardous materials
2. Interpretation of container label precautions
3. Interpretation of material safety data sheets (MSDSs)
4. Storage of hazardous materials in accordance with government regulations
5. Disposal of hazardous materials in accordance with government regulations

Ensure that tools, materials, and equipment are handled in accordance with government regulations and health standards, including:

1. Compliance with established procedures for the safe use of tools, materials, and equipment, including operation, carrying, lifting, and handling

Ensure compliance with organizational safety procedures, including:

1. Company safety procedures
2. Company safety plan (e.g., contact person, forms, etc.)
3. Identification of liability of technician and employer
4. Identification of basic first-aid procedures
5. Identification of health and safety hazards
6. Ensure compliance with environmental precautions when discarding parts

Ensure the performance of preventive maintenance in accordance with guidelines specified by manufacturer and/or outside authorities with jurisdiction (e.g., government inspectors), including:

1. Creation of operating and maintenance records
2. Implementation of preventive maintenance schedule
3. Maintenance of a preventive maintenance log.

Initiates, monitors, inspects, and reports on contracts for building, building equipment, and construction work

1. Develops design criteria and prepares architectural, HVAC, electrical, and plumbing/mechanical plans and material specifications
2. Conducts pre-bid site visits with contractors and assists in the contractor evaluation and selection process
3. Prepares proposals and cost estimates for five-year capital improvement plans for various departments

Coordinate all facility construction, maintenance and custodial activities

1. Develop, maintain and coordinate procedures to ensure timely response to plant maintenance.
2. Coordinates with the Purchasing agent to procure janitorial, window or other cleaning services.
3. Monitors and reviews the work of contractors.
4. Coordinates purchasing and inventory of cleaning and maintenance equipment and supplies and monitors equipment and supplies purchased by contractors for adequacy and compliance with hazardous materials standards.
5. Supervise the dispersal of required materials and supplies.
6. Prepare all required reports and maintain all appropriate records.
7. Monitor the development of the both short- and long-range plant maintenance plans.
8. Coordinate the selection of design and construction professionals.
9. Locate and recommend sites for new schools and other facilities

Manage the organization's short- and long-range facility plans

1. Monitor and evaluate the planning and completion of capital improvement projects.
2. Ensure that both capital and major maintenance projects are coordinated with appropriate regulatory agencies.
3. Promote cooperative relationships and coordinated efforts among support services to facilitate the instructional program.
4. Coordinate activities with architects, engineers and contractors.
5. Evaluate and review, on a continuous basis, financial requirements and maintain a system of cost accounting in cooperation with the Finance Department.

Supervise and train staff

1. Supervise assigned personnel, conduct annual performance appraisals and make recommendations for appropriate employment action.
2. Interview and recommend the hiring of custodial and maintenance staff
3. Develop and deliver appropriate and current training for all assigned staff.

Manage complex projects

1. Define scope of project
2. Identify stakeholders, decision makers and escalation procedures
3. Estimate time requirements
4. Sequence Gantt/ PERT charts appropriately.
5. Identify required resources and budget
6. Evaluate project requirements
7. Identify, evaluate and mitigate risks
8. Develop initial project, including options analysis
9. Identify and track critical milestones
10. Initiate and participate in project phase review

FREQUENTLY ASKED QUESTIONS (FAQS)

- 1. Question: Is it required that I begin at the Level I level then work my way up from there to higher levels?**

Answer: No, you may take any test that you qualify for with your education and experience. However, if you are just starting out you can see by the education and experience requirements that you can work your way up the levels faster if you become certified at Level I then achieve each successive certification as soon as you get the required education and experience.
- 2. Question: If I take a Level III test will I have to know the Content Areas for the lower level certification?**

Answer: Yes, the subject matter for each test builds on the subject matter for those tests below its level. A thorough knowledge of the Test Content Areas for the level that you are taking is most important to your preparation, but you should expect questions from any of the lower Level levels.
- 3. Question: Is continuing education required to renew my certification?**

Answer: Yes.
- 4. Question: How long is the test?**

Answer: All tests have about 75-100 questions and 3 hours are given for completion.
- 5. Question: Can I take more than one certification test at once?**

Answer: Yes, but you can only take up to two at a time. You will be given a total of three hours each to complete both tests.
- 6. Question: How do I get a receipt showing I paid for the test?**

Answer: A receipt is sent to all applicants who have paid their fees about one month after the application deadline. Hold on to this receipt until the certification process is over in case you have to submit it to your employer for reimbursement.
- 7. Question: If I am applying for the Level III test do I need to be a Supervisor?**

Answer: No, you just need to the required number of years of supervision experience. You do not have to hold the title of "Supervisor."
- 8. Question: Does my qualifying experience need to be at a school plant?**

Answer: Not necessarily. Similar experience maintaining another facility is also acceptable as long as it generally fits the core competencies specified.

CERTIFICATION RENEWAL POLICY AND CONTACT HOURS

Certificate holders will be required to participate in at least 12 hours of continuing education or training every year. The policy affects all certification levels.

Continuing Education is required to help ensure that individuals certified by this program continue to be knowledgeable of technological advancements and regulatory requirements in the school plant management fields. Continuing education enhances the operation, maintenance and management skills of the certificate holders, and ensures the quality of school plant management treatment. This ultimately increases the ability and confidence of certificate holders and the credibility of the school plant management professions certified by this program.

WHAT THIS MEANS FOR CERTIFICATE HOLDERS

Certificate holders will be required to include documentation of 36 Contact Hours of pre-approved training and/or education with their certificate renewals every three years. The training must address the Essential Duties of the vocation and level of the certificate held. The Essential Duties are a list of job tasks that are covered on the certification tests. The Essential Duties for each certificate are available in the Certification Handbook.

Remember, any training or educational activity will be acceptable as long as it is related to at least one of the core competencies and is pre-approved by SPOSA/SPOA. You may even apply your Contact Hours to more than one certificate as long as the training program focuses on some of the Essential Duties of each vocation. A list of pre-approved training programs will be listed on www.sposa.ca and www.spoabc.org.

12 HOURS EVERY YEAR

The basic definition of a Contact Hour is 50 minutes of training or instruction, or its equivalent. There are many ways to earn Contact Hours. A few examples are listed below:

- Participating in on-the-job training
- Attend training conferences or workshops
- Complete courses offered by postsecondary institutions
- Complete self-study courses
- Teaching a course
- Training others
- Writing technical articles or books
- Giving a technical presentation

Any training or education activity that focuses on the Essential Duties of the vocation is likely to be approved. Since all training programs must be approved before they are given, certificate holders are sure to know which programs will be able to offer Contact Hours.

Renewing Your Certificate

When Contact Hours are due, certificate holders will need to pay their fees and submit all paperwork documenting their Contact Hours. To minimize the flow of paperwork, SPOSA/SPOA will only accept complete renewal packages that include all required Contact Hour paperwork and the appropriate fee. Partial Contact Hour documentation will not be accepted. It is the responsibility of the certificate holder to make sure that the records are kept until renewal time. SPOSA/SPOA recommends that certificate holders keep a copy of all training certificates just in case things get lost in the mail. SPOSA and SPOA offices will send a renewal reminder three months prior to the renewal date.

Although SPOSA/SPOA will provide a general form to record Contact Hours earned at a training event, any paperwork will be acceptable as long as it includes the following information:

- Certificate holder's name
- Course completion date
- Educational unit type earned (Contact Hours, semester units, quarter units, or continuing education units or points)
- Number of Contact Hours, units, or points awarded
- Course title
- Name of the issuing organization
- Authorized signature, stamp, seal, or other means of validation accepted by SPOSA/SPOA.

The following basic information must be included in the package for training program approval:

- Name of the Instructor(s)
- Name of sponsoring organization
- Date(s) of the event
- Detailed, timed course outline or agenda

SPOSA/SPOA CERTIFICATION

PART 2. "GRANDFATHERING"

Grandfathering is an accepted practice for establishing professional status when organizations embark upon a certification process. The SPOSA/SPOA Consortium agrees that this is a preferred option and hereby presents the opportunity.

Grandfathering, in the spirit of professional certification must have meaning and be valued. This can only be accomplished through a rigorous review process that validates a candidate's worthiness. While an examination is not a part of the grandfathering validation process there is nevertheless competencies that must be evaluated and interviews that must be successfully completed before certification is granted. Professional certification must be earned; it is not a right that accrues because of length of service or educational qualifications.

The 'door' to grandfathering should only remain open for two years beginning January 1, 2003. Certification after December 31, 2004 can only be achieved through the examination process described elsewhere in this handbook.

Grandfathering is a one time process. Should a member be certified under the grandfathering provision and then let their certification lapse the only recourse for again being certified will be through the examination process.

The basis for grandfathering will be founded upon experience, education and professional development in the fields of operations, maintenance and management. It is possible for an applicant without significant school based experience to become certified as long as they are currently employed within a K-12 school environment and meet the grandfathering provisions.

The SPOSA/SPOA Consortium will be the 'grandfathering review board' and must be appointed to this position through a vote of the respective directors for SPOSA & SPOA. Members of the Consortium will be certified by the same standards as all members but will be subject to interviews and background reviews by the consultants, Simera Strategy Group. Simera Strategy Group will make recommendations for certification of the Consortium members to their respective Board of Directors. The respective Boards will award certification based upon the consultants recommendation and their professional opinion.

Applications will be available December 1, 2002 for consortium members and January 1, 2003 for regular members of SPOSA/SPOA. Members must be in good standing with their respective organizations as a prerequisite to applying for certification through the grandfathering process. Such a list of members will be established and made available to the Consortium.

For the purpose of the grandfathering certification process the following position definitions will generally apply:

A. MAINTENANCE/OPERATIONS

- Lead Hand (or equivalent): Single discipline; oversees 1 – 3 staff in the performance of their duties. Coordinates manpower, materials and supplies for small projects.
- Sub Foreman (or equivalent): Single trade jurisdiction; oversees 3 – 5 staff in the performance of their duties. Activities include providing direction, guidance, supervision and motivation to work crews. Schedules and budgets within established standards
- Foreman (or equivalent): Single trade jurisdiction; oversees 5 – 12 staff in the performance of their duties. Activities include providing direction, guidance, supervision and motivation to work crews. Schedules and budgets within established standards.
- Supervisor (or equivalent): Multi discipline jurisdiction; oversees multiple crews in the performance of their duties. Activities include providing direction, guidance, supervision and motivation to work crews. Establishes budgets for work programs within school board standards.
- Manager (or equivalent): Responsible for planning, organizing, directing and controlling operations, maintenance and capital programs for a school district. Generally reports to the secretary treasurer. Manages high level complex work programs incorporating all tasks associated with management of school infrastructure.

Note: Titles are descriptive, not necessarily all inclusive

**SCHOOL PLANT OFFICIALS SOCIETY OF ALBERTA
SCHOOL PLANT OFFICIALS ASSOCIATION OF BRITISH COLUMBIA**

APPLICATION FOR CERTIFICATION

I INSTRUCTIONS TO APPLICANTS

1. Read all the instructions carefully. Incomplete or improperly prepared applications will be returned. Faxed applications are not accepted. Applications without supporting documents attached will be returned.
2. Applications must be typed or printed neatly in ink.
3. Attach photocopies of your certificate, validation card, and/or college transcripts.
4. Mail this form, a check or money order in the amount of the application fee, and all supporting documents to _____. Make your check payable to _____. You will be mailed an application receipt about 3 weeks after the application deadline.
5. Test eligibility notifications are mailed about 4 to 6 weeks after the application deadline.

Fees

Application for Certification

All Certification Levels \$ 75.00

Certification Exams

School Plant Maintenance 3 \$180.00
School Plant Operations 3 \$180.00
School Plant Facility Manager \$200.00

II. APPLICATION INFORMATION

This is an application for certification in (check one):

- School Plant Maintenance 1
- School Plant Maintenance 2
- School Plant Maintenance 3
- School Plant Operations 1
- School Plant Operations 2
- School Plant Operations 3
- School Certified Facility Manager

Credit Card Payment Information (Complete only if you are using a credit card):

Choose one: MasterCard American Express Visa

Number: _____ Exp. Date ____ / ____ / ____

Your Signature: _____

BIOGRAPHICAL INFORMATION

Name _____
(last) (first) (middle)
Mailing address _____

Work phone _____ cell _____ fax _____
E-mail (optional): _____
Current member of SPOSA/SPOA? ____yes ____no _____ # of years

SPONSORS: (Must supply 3.)

Name: _____
Employer and Position Title: _____
Relationship: _____
Years Associated: _____
Willing to Sponsor for Certification as: _____
Signature: _____ Date: _____ Phone: _____

Name: _____
Employer and Position Title: _____
Relationship: _____
Years Associated: _____
Willing to Sponsor for Certification as: _____
Signature: _____ Date: _____ Phone: _____

Name: _____
Employer and Position Title: _____
Relationship: _____
Years Associated: _____
Willing to Sponsor for Certification as: _____
Signature: _____ Date: _____ Phone: _____

WORK HISTORY: (Relevant to maintenance, operations and/or management – current to past. Please use additional pages, if necessary.)

Employer _____
Title: _____
Employed from : _____ to _____
Immediate Supervisor: _____ Phone #: _____
Describe Core Responsibilities: _____

Employer _____
Title: _____
Employed from : _____ to _____
Immediate Supervisor: _____ Phone #: _____
Describe Core Responsibilities: _____

Employer _____
Title: _____
Employed from : _____ to _____
Immediate Supervisor: _____ Phone #: _____
Describe Core Responsibilities: _____

Employer _____
Title: _____
Employed from : _____ to _____
Immediate Supervisor: _____ Phone #: _____
Describe Core Responsibilities: _____

Note: Please submit along with this application;
1. Your organization chart clearly showing your position and reporting relationships.
2. Position descriptions and business card (if you do not have a position description, attach a written description of your position).

EDUCATION AND TRAINING

ATTACH COPIES OF TRANSCRIPTS OR CERTIFICATES OF COMPLETION AS PROOF

EDUCATION	DIPLOMA	CERTIFICATE	DEGREE	JOURNEYMAN	OTHER
a. Secondary					
b. Post Secondary					
▪ Trade School					
▪ College					
▪ University					
▪ Other					

EXPERIENCE												
a. In School Facility Management						Years						Describe Experience
	1	2	3	4	5	6-10	11-15	16-20	21-25	26+		
▪ Lead Hand												
▪ Sub Foreman												
▪ Foreman												
▪ Supervisor												
▪ Manager												
Total												
b. In Related Industry						Years						Describe Experience
	1	2	3	4	5	6-10	11-15	16-20	21-25	26+		
▪ Lead Hand												
▪ Sub Foreman												
▪ Foreman												
▪ Supervisor												
▪ Manager												
Total												
SPOSA/SPOA Events Attended in the Past 3 Years:												
▪												
▪												
▪												

Positions Held in SPOSA/SPOA:

**USE ADDITIONAL SHEETS TO LIST ADDITIONAL EDUCATION, TRAINING AND EXPERIENCE
DO NOT FORGET TO ATTACH TRANSCRIPTS IF YOU ARE USING EDUCATIONAL CREDITS**

SIGNATURE OF APPLICANT

I, the undersigned, certify that I am the above named applicant; that all statements made and information contained in the above application are true and correct to the best of my knowledge and belief; that I understand that any omissions or misrepresentations may result in ineligibility of the examination being applied for or revocation of any certificate granted. I also consent to a thorough investigation of my employment records and other qualifications in related activities for the purpose of verification of my qualifications for the certificate for which I have applied. I have read and understand the policies listed on Page 4 of this application.

DATE: _____ Signature of Applicant: _____

SCHOOL PLANT OFFICIALS SOCIETY OF ALBERTA
SCHOOL PLANT OFFICIALS ASSOCIATION OF BRITISH COLUMBIA

SPONSORSHIP FORM

Dear Sponsor:

This is a request for your help in providing a reference for the person whose name appears below. This individual is applying for certification as a _____ . As part of the certification process, the applicant must be sponsored by a certified member of SPOSA or SPOA who are knowledgeable of his/her qualifications as a School Plant Official. Please provide your comments and return the letter to the applicant in a sealed envelope, with your signature across the seal. Also, please include a business card. Thank you.

Applicant's name, mailing address, phone, and fax:

STATEMENT BY APPLICANT: I do _____ do not _____ hereby agree to relinquish my right to review this reference at a future date.

Applicant's Signature _____ Date _____

GENERAL: How long have you known the applicant? _____ years. In what capacity have you observed his/her activities as a school plant official?

PROFESSIONAL QUALIFICATIONS:

Evaluate the applicant based on his/her demonstrated expertise in the use and application of core competencies relevant to the certification level the applicant is applying for.

Highest Expertise	Above Average	Qualified	Below Average	Unqualified	Unknown
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Comments:

Please add any additional comments that would be helpful in evaluating the educational and professional qualifications of the applicant.

Printed Name of Sponsor: _____

Signature of Sponsor _____

Date _____