



SASKATCHEWAN
CONSTRUCTION SAFETY
ASSOCIATION

NCSO™ EXAM PREPARATION GUIDE



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Introduction

Welcome to the Saskatchewan Construction Association National Construction Safety Officer (NCSO™) study guide. This guide has been created to assist you with your preparation to write the national and provincial NCSO™ exams.

If you are reading this guide it means you are on your way to have completed all of the required mandatory and elective training programs and met the experience requirements needed to apply for the NCSO™ designation. You are ready to test your knowledge related to health and safety in the construction industry.

Let's have a look at how we can help you to prepare for your exams.

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Purpose of the Exam Preparation Guide: What is an Exam Preparation Guide?

This preparation guide is a tool that will help you organize the information you need to review to prepare for your exam. The guide assists with the following:

- Identification of resource materials
- Prioritizing the importance of each resource
- Review of each resource in an organized manner
- How to locate key information and ideas
- How to find and apply supporting evidence of key information i.e. examples or definitions
- Help you to understand how the exam is structured
- Explains what types of questions you will be asked
- What happens on exam day

This guide will only fulfill its intended purpose if you are committed to spending time and effort applying the recommendations it contains. It is designed to make “how” you study more effective. The guide will contain enough information on health and safety to let you complete the exam successfully. That information can only be found in the resources materials.

NCSO™ Designation Overview

What is the NCSO™?

The objective of the National Construction Safety Officer (NCSO™) program is to provide verification of a nationally recognized level of competency in relation to construction safety. The NCSO™ program will provide practical training in various construction safety management skills and principles.

Persons who achieve the NCSO™ designation will have a combination of three years of practical construction experience; providing a valuable resource to management in the administration and implementation of a company's health and safety program.

Definition of construction field experience: a construction worker (labourer or skilled construction tradesperson) working directly and actively in a construction field (i.e. residential, commercial, industrial, road building, labourer or tradesperson who constructs pipelines, mobile equipment operations on a construction site); ***or***, an individual who is directly and actively responsible for the supervision or safety of the construction worker, whom also works directly and actively in the construction field on a full time basis. ***The National Construction Safety Officer (NCSO™) program is developed for the building construction industry. The SCSA will inform applicants if their experience does not meet the criteria.***

Experience letters submitted must verify a minimum of three years field experience in the construction industry. The three years' experience must be within the last ten years – NO EXCEPTIONS.

The NCSO™ certification expires after three years. Maintenance is required to renew your designation.

Purpose of Examination

The purpose of the NCSO™ examination is to confirm a person comprehends the key health and safety concepts and can apply your knowledge in both general and specific situations related to industry.

NCSO™ National Exam

The most recognizable change to the SCSA NCSO™ program is the introduction of a written exam, nationally recognized by participating Canadian Federation of Safety Associations (CFCSA) members. The purpose of the national exam is to verify a nationally recognized level of competency in relation to various construction-related

health and safety management skills and principles. The core concepts of risk assessment, hazard assessment, controls, training and documentation are critical to successful safety cultures and programs in the workplace. They do not differ from province to province or territory. A safety professional must be intimately familiar with this information and the application of the assessments.

NCSO™ Provincial Supplements

Due to the differences between jurisdictions each province or territory has a supplemented portion specific to their Occupational Health and Safety Act and Regulations. Shall a person want to attain their designation outside of their home province they will not be required to write the entire National exam again. They will only be required to write the provinces' supplemented portion of the exam to which they are moving to or working in.

Please note:

While you do not need to be a subject matter expert you should be familiar with the industry specific legislation. The more you familiarize yourself with how to locate regulatory specifics, the easier the exam will be.

Examination Structure

This section focuses on how the exams are structured including an overview of the exam topics and types of questions you will be asked. Exams are created with the objective of confirming transfer of knowledge between the resource and the student. The objective of the NCSO™ exams are to confirm your understanding of occupational health and safety in construction.

NCSO™ Exam Details

The national exam focuses on eleven different topics using three different types of questioning formats. Approximately, 30% of the mark is assigned to multiple choice questions, 30% assigned to short answer questions and 40% assigned to long answer full written responses. The highest possible score for the exam is 100%.

PLEASE NOTE: There is more than one version of each exam. While the types of questions and topics are the same, the questions will differ on each version. This protects the integrity of the exams and allows for impartial testing for all candidates.

Exam Outline

The NCSO™ exams use three common questioning formats:

1. Multiple choice
2. Short answer
3. Long Answer

EXAMPLES:

SECTION 1 - Multiple Choice:

Multiple choice exams are the most common format of testing used today. This type of question is used to determine if you are able to identify the “right” or “best” answer out of a list of choices based on your knowledge of the subject. These types of questions are typically short and are meant to focus on a single idea or step in a broad range of topics. Even though two or more of the answer options will appear plausible there will be a clear “best” answer which does not require explanation. This multiple choice format may also include the simpler format of “true or false” questions.

Examples of multiple choice questions:

If you see an unsafe condition or act you should:

- a) *Write it down and discuss it at a later time*
- b) ***Comment immediately and stop work if necessary***
- c) *Let it go if it is only a minor problem*

A corporate health and safety policy should:

- a) ***State the owner/management commitment;***
- b) *Discuss the hazards;*
- c) *Have corrective actions written and on file;*
- d) *Discuss hiring practices.*

Physical classes include:

- a) *Flammable gases, pyrophoric liquids, reproductive toxicity.*
- b) *Corrosive to metal, skin corrosive, hazardous to the ozone layer.*
- c) *Carcinogenicity, serious eye damage, hazardous to the aquatic environment.*
- d) ***Flammable aerosols, oxidizing solids, gases under pressure.***

SECTION 2 - SHORT ANSWER:

Using short answer questions is one of the most effective ways to determine understanding of key facts and terms. It expects the candidate to present information without being prompted with potential options. These questions are worded to ask for specific information which can be provided in a paraphrased, point form or list type response. Often short answer questions ask for definitions, functions, causes, item descriptions or equipment lists. Fill in the blank short answer questions are a popular option on written exams.

Examples of short answer questions:

What types of incidents should be investigated?

When an incident involves personal injury, property damage or a near miss (has the potential to cause personal injury or property damage).

What is a Job Hazard Analysis (JHA)?

A JHA is a careful analysis of the potential hazards associated with a specific task. The JHA breaks down the task into separate steps, examining each one for ways in which a worker could be hurt and / or property could be damaged.

Name three ways that an employer can demonstrate the above (DUE DILIGENCE)

If you answered with any 3 of the following 7 possible answers, it would be considered correct.

- 1) Identifying hazards (i.e. conducting hazard assessments)***
- 2) Preparing and enforcing safe work procedures***
- 3) Training workers***
- 4) Developing a safety program***
- 5) Conducting workplace inspections***
- 6) Enforcing rules (i.e. disciplinary action)***
- 7) Conducting toolbox talks with workers***

Why is keeping records and monitoring trends important to your safety program?

This demonstrates due diligence and helps to identify areas requiring more attention (i.e. what is the source/nature of the injury).

SECTION 3 – Long Answer:

Written response questions can vary in presentation. Typical formats include case studies, seek and find, identifying errors or omissions (in a document or processes) and creating a safety plan or training session. Similar to short answer questions they provide an opportunity to demonstrate your understanding of construction safety concepts usually using examples and explanations to support your answers.

For example:

You may be asked to review a completed incident investigation report and identify errors on the report as well as explain how the errors are to be amended to create a complete and correct report. You may be provided a picture of a worksite with unsafe conditions where you will need to identify the unsafe conditions, document the hazard, and explain how you would eliminate or control the exposure to the hazard.

Overview of Topics

The topics covered on the **national** exam include:

- Health & Safety Programs
- Hazard Assessment / Risk Assessment / Hierarchy of Controls
- Training and Orientations
- Inspections
- Investigations
- Audits / Auditing
- Documentation
- Emergency Preparedness / First Aid
- Adopted Standards
- WHMIS
- Criminal Code

The topics being tested on the national exam are related to the creation, implementation, functionality, enforcement, audit and revision of safety management systems.

You should be prepared to explain, list elements and answer questions on:

- The process and role of an NCSO™ and the COR system
- The processes regarding hazards risks, hazard controls, worksite inspections and incident investigations, as well as the documents that are associated with these processes.
- Regulatory requirements such as how to prepare for an emergency and WHMIS
- The responsibility for a safety management system as it pertains to the owner, management, supervisors and workers.
- Ensuring due diligence is executed in the areas of training, documentation and adopted standards.
- How the auditing processes and audits confirm the system is working
- Legal implications of non-compliance with a safety management system or Acts and Regulations.

This list is intended to assist you in studying for the exam. It is not expected to be a complete list of topics covered by the exam.

It is expected that an NCSO™ is well versed in the information contained in the COR™ courses including Leadership in Safety Excellence and Safety Management.

National Exam - General Resources

The best resources to use to prepare for the national exam are the materials from the ten SCSA specific required training courses as listed below. You would have received the course material when you attended the course(s).

SCSA Specific Core Training

- Safety Management (1 day)
- Safety Auditor Training (certified) (Pre-requisite: Safety Management) (2 days)
- Leadership for Safety Excellence (2 days)
- WHMIS 2015 Live on the Job Site* (1 day) (Pre-requisite: Generic WHMIS 2015 Training)
- Claims Management (2 days)
- Safety Administration (1 day) (Pre-requisites: Safety Management, Safety Auditor Training, Leadership for Safety Excellence, WHMIS 2015 Train the Trainer and Claims Management)
- Confined Space and Respiratory Protection Awareness Training (1 day)
- Contractor Training (1 day)
- Basic Training Techniques (2 days)
- Safety Construction Orientation Training (SCOT®) (Online) (3 to 5 hours)

*This course replaces WHMIS 2015 Train the Trainer. The SCSA will accept WHMIS 2015 Train the Trainer for the NCSO™ program provided it has not expired.

It is recommended to focus initially on the contents of the Leadership for Safety Excellence (LSE), Safety Management and Safety Auditor Training programs as they contain the foundational curriculums. Once you feel comfortable with these resources you can refine your studies by reviewing the elective courses you took and WHMIS 2015 Live on the Jobsite or WHMIS 2015 Train the Trainer.

Contained within these resources are referrals to other sources of health and safety information including Worksafe Saskatchewan, Government of Saskatchewan and the Canadian Center for Occupational Health and Safety (CCOHS). You can find helpful publications and samples of safety documentation on their websites:

- Worksafe Saskatchewan
<http://www.worksafesask.ca/>
- Canadian Center for Occupational Health and Safety (CCOHS)
www.ccohs.ca

It is vital to accept that a national exam, which must meet the standards of every province and territory, can require you to recognize certain terms or descriptions of fundamental safety processes and practices that differ from region to region. What we describe in Saskatchewan as a “direct” cause related to an accident / incident occurrence may be described as an “immediate” cause in another province. When reviewing your resource materials and external sources be vigilant for such differences.

Course Review

Out of the ten compulsory courses these five programs are considered to be the core courses for the NCSO™ designation:

- Leadership for Safety Excellence (LSE)
- Safety Management
- Safety Auditor Training / the COR National Audit Instrument
- Basic Training Techniques
- WHMIS 2015 Live on the Job Site or WHMIS 2015 Train the Trainer

These courses contain the essentials or “core concepts” on which the construction safety officer training is based. Each of these programs define the roles and responsibilities of safety personnel in industry and how they can achieve safety excellence.

Let's look at each of the programs and where they are focused:

Leadership for Safety Excellence

This two-day course is designed to assist supervisors in building health and safety into their everyday planning. It encourages and promotes a safe work environment where people can work safely, and help make a lasting contribution to the reduction of incident in the industry. This course will provide a knowledge base required to satisfy the legislative duties and obligations.

Course Objectives:

To define the supervisor's role and explain the supervisor's responsibilities for safety on the worksite.

Course Content:

- *Supervisor's Role – Promoting and enforcing safety standards in the workplace; safety program elements; management, supervisory and worker responsibilities; regulatory requirements; and corporate culture.*
- *Inspections – Purpose and types of inspection; conducting an inspection; prioritizing deficiencies; reporting and follow-up; and presenting recommendations to management.*
- *Investigations – Reasons for and when to do an investigation; legislative obligations; presenting recommendations to management; preparing for and when to investigate; and conducting a successful investigation.*
- *Training – Reason for training; orientation and on-the-job training; planning and conducting a training session; and getting the most out of your safety training.*

Safety Management

The topics discussed in this one-day course provide the fundamental knowledge required for the development and implementation of an effective health & safety program. Participants can customize existing forms and layouts to complete their Company Safety Manual to suit their individual work places.

Course Objectives:

- *To teach owners, managers and supervisors the steps to take in developing a company specific health & safety program*
- *To provide information to participants about the benefits of having a company health & safety program.*
- *To assist employers in the health & safety implementation process.*

Course Content:

- *Explain the purpose of a health & safety program.*
- *Identify the elements required in an effective health & safety program.*

Review the applicable legislation (Occupational Health & Safety Act & Regulations)

Safety Auditor Training

This two-day course is designed to provide training to those who will be evaluating a company health & safety program. Safety audits are a cost-effective method of measuring existing management systems. This program provides education necessary to effectively evaluate the health and safety system in a company.

Participants must have an understanding of health and safety management systems before enrolling in this program. All auditor candidates are required to have a working knowledge of field operations and possess strong communication and analytical skills.

Course Objectives:

- *To teach participants the necessary skills to conduct effective health and safety audits.*

Course Content:

The participant will discover what role the auditor has in the health and safety management system including:

- *Reasons for performing audits*
- *Legislative and due diligence requirements*
- *Examine how corporate culture affects the health and safety program*
- *How to carry out effective interviews, communicate the findings through a close-out meeting and the Auditor's Executive Summary Report*
- *The Saskatchewan Construction Safety Association (SCSA) Quality Assurance Review*
- *A hands-on workshop starts the afternoon of the first day and concludes during day two with the audit close-out meeting*

WHMIS 2015 Live on the Jobsite

This one day course is designed for managers, supervisors or workers who are responsible for preparing and conducting a company's "site specific" WHMIS 2015 training. Prior to enrolling in this training, individuals are required to have taken generic WHMIS 2015 training.

This course replaces the previously offered WHMIS 2015 Train the Trainer. If you have taken WHMIS 2015 Train the Trainer, it will be accepted for the NCSO™ program until it expires.

Course Objectives:

- *Understand the WHMIS 2015 Legislated requirements*

- *Explain the elements of the SDS system*
- *Describe the purpose of, as well as when WHMIS 2015 Labels and SDSs are required*
- *Demonstrate an ability to assess the need for and prepare site specific WHMIS 2015 Training for workers*

Course Content:

- *Workers Right & Responsibilities*
- *WHMIS 2015 Provincial and Federal Legislation*
- *Employer's Duties*
- *Identifying Hazardous Products on a Construction Site*
- *Review Labels and Safety Data Sheets*
- *Site Specific Training for Workers and Techniques Used*

As stated earlier, it is highly recommended you complete as many elective courses as possible in order to be fully prepared for exam. The information and topic specific learning objectives will be taught in the curriculums directly. If you need assistance in sourcing this information or would like to enroll in a course, please contact SCSA.

Examination Preparation

Now that you have been accepted to write the NCSO™ exam what is going to happen? You need to know what to expect and how to prepare for participating.

The exam will be available in English only. The exam will be offered at Saskatchewan Polytechnic Testing Centres in Regina, Saskatoon, Prince Albert and Moose Jaw.

Individuals are expected to have the ability to self-study. Individuals are given a maximum of two hours to complete the closed-book exam.

Exam Options

- 1) Paper Exam – must be written at SaskPoly locations
- 2) Computer Based – must be administered via a computer at SaskPoly locations
- 3) Remote Proctoring – administered via a personal computer

Remote Proctoring - LockDown Browser System Requirements

Operating Systems

Windows: 10, 8, 7

Mac: MacOS 10.14 to 10.12, OS X 10.11, OSX 10.10

iOS: 10.0+ (iPad only). Must have a compatible LMS integration. [Details.](#)

Chromebook: (K-12 only). [Details.](#)

Functioning webcam (internal or external) and microphone

Adobe Flash Player (bundled with the LockDown Browser installation)

Broadband internet connection

Memory

Windows: 75 MB permanent space on the hard drive

Mac: 120 MB permanent space on the hard drive

Browser Requirements

LockDown Browser is a client application that is installed to a local computer. Both the Windows edition and the Mac edition of the browser are based on Chromium, Google's open source framework. Students do NOT need Google's Chrome browser installed; nor will this version affect a Chrome browser that's already installed.

LockDown Browser is a locked browser for taking quizzes in Brightspace. It prevents you from printing, copying, going to other URL, or accessing other applications during an exam. You will not be able to take the exam with a standard web browser. During the exam you cannot exit LockDown Browser until the exam is submitted.

As previously stated, your computer must meet specific system requirements, have internet connection, have a webcam and microphone. You will be required to install LockDown Browser and complete a “sample quiz” to test the install and identify technical issues prior to exam day. The student is encouraged to repeat the “sample quiz” as many times as necessary until the student is comfortable with the process.

The webcam and program will be used to:

- See the students face and background of the room
- Take a photo of the students face
- Take a photo of the students government photo identification
- Student will be periodically asked during the exam to use the camera to scan the span of the room.
- Record the entire exam session

The program will lock the student out of the exam if:

- student face/eyes do not remain in front of the camera
- student is talking to someone or someone else is detected in the room
- student exits the program
- student tries to open another browser

Problems with LockDown Browser

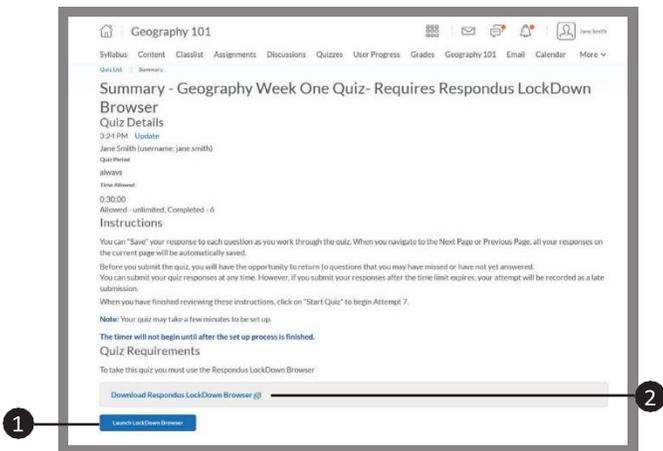
If you have problems downloading, installing, completing the “sample quiz” or taking the exam with LockDown Browser, contact:

Melissa Aubichon
(Technology Lead, Assessment Services, Saskatchewan Polytechnic)
1-306-659-4360

Installing LockDown Browser

Upon being deemed eligible to write the NCSO Exam, SaskPoly will provide a link to install the LockDown Browser. There are 5 easy steps:

1. Log into Brightspace with a regular browser, select the course and navigate to the quiz.
2. From this screen, either install LockDown Browser or launch it to take the exam.



1. If the computer already has LockDown Browser installed, simply click the “Launch LockDown Browser” button.
2. If the computer does not have LockDown Browser installed, this link will enable you to install LockDown Browser to the computer. LockDown Browser installed, this link will enable you to install LockDown Browser to the computer.
3. If prompted to close a blocked program (e.g. screen capture, instant messaging), choose Yes.
4. You are required to use a webcam to record yourself during a test, a Startup Sequence will guide you through a webcam check and other items required by the instructor.
5. Once a test has been started with LockDown Browser, you cannot exit the test until the Submit button is clicked.

Registration

It is strongly recommended to check with the SCSA prior to registering for the exam to confirm your eligibility.

Registration for an exam may only be completed online by visiting:

<https://canada.registerblast.com/ReginaCampus/Exam/List>. The cost of the exam is \$75.00. For the paper exam and computer exam at a SaskPoly location, you may pay in advance by credit card or at the time of the exam. If paying at time of writing, credit card and Interac Debit are the only form of payments accepted. Remote proctored (administered via a personal computer) exams require credit card payment in advance.

The link directs you to the Regina test centre. If you would like to write the exam in one of the other test centres, select the desired location from the location links of this page.

Choose the exam title from the drop down menu, selecting the “SCSA NCSO™ Exam”. Follow the directions on the remainder of the page. You will be required to read the acknowledgements and procedures for writing the exam and verify your acceptance and eligibility by checking the acknowledgement boxes. Then select your preference for the exam option. Paper and computer based options must be written at SaskPoly locations. Remote Proctoring option, allows for you to write the exam from home, work, etc. As stated in the **Exam Options** section (pg. 15), ensure the computer you are using meets the necessary system requirements before registering for this option.

If you are a WCB client, please include your WCB claim number when prompted. Once you register, you will receive an email verifying receipt of your request to write the exam. Upon confirmation of eligibility to write the exam, you will receive an email from the SCSA giving your eligibility to write the exam on the selected date. If you are **not** eligible, you will be contacted by the SCSA.

Cancellations

If you have pre-paid for your exam and are not eligible, you will receive a refund within 2 weeks from Saskatchewan Polytechnic, less a \$5 administration charge.

No-shows at exams will be charged the cost of the exam, which examinees will be required to pay the next time they write the exam.

If you need to change your exam time or cancel, please return to the above website and follow the instructions for cancelling an exam. NCSO™ Exams cannot be rescheduled. You must cancel and re-book through the online booking form.

Exam Day at SaskPoly

On the day of the exam, please arrive at the designated location, a minimum of 15 minutes prior to the scheduled exam start time. You must provide one (1) piece of government issued photo identification.

Parking is available at metered sites at the testing centres. The meters accept coins or credit cards. Debit cards are NOT accept at the meters.

Individuals must abide by the “Exam Guidelines” as outlined by Saskatchewan Polytechnic and the NCSO™ Code of Ethics during the exam. Failure to do so will result in the individual immediately being removed from the exam and further penalty to be determined by the SCSA Director of Operations.

When you receive your exam booklet you will need to put your name on the exam. All answers are to be written **neatly and legibly** on the exam booklet.

You will have two hours to complete this closed-book exam and must score a minimum of 75% in order to pass.

After the Exam

A letter will be issued within 4-6 weeks of the exam date indicating a successful or unsuccessful result. Under no circumstances will the individual be able to receive their score in % nor will they receive the exam back.

New NCSO™ Certification

The new NCSO™ certificate will be valid for a three year period. Individuals shall receive a wall certificate, wallet card and passport sticker. Evidence of completion will be evident through the introduction of a nationally recognized NCSO™ logo and certificate with three year expiry. These will be key indicators to employers of those who have achieved NCSO™ certification, meeting the new national standard, established on September 1, 2017.

Maintenance of New NCSO™ Certification

Holders of the new NCSO™ certificate are solely responsible to maintain any/all compulsory courses and elective courses which expire as well as maintaining a valid SCSA Internal Auditor status.

The following submission items are required before the NCSO™ certificate expiry date:

-copies of any valid certificates (proof of maintaining courses which expire)

*-One personal maintenance audit during the three year validity of the **SCSA Safety Auditor Training**. The audit must be conducted using the SCSA national standard audit document. Best practice is to submit the required audit to the SCSA no later than four months prior to their **SCSA Safety Auditor Training expiry date** to allow time for the audit review and possible corrections.*

Failure to Maintain New NCSO™ Certification

Holders of the new NCSO™ certificate (three year expiry) are solely responsible to submit all maintenance requirements in sufficient time prior to expiry. Failure to meet the maintenance requirements before expiry will result in the individual having to write the NCSO™ exam to renew certification. Once again, all NCSO™ training requirements must be met before being eligible to write the NCSO™ exam.

Unsuccessful Exam Attempts

Upon failure of the NCSO™ exam a waiting period of 90 days will be enforced before the individual may re-write the exam. Each attempt will cost \$50.00. A maximum of two re-writes will be allowed. Failure to achieve NCSO™ certification following a second re-write will result in the individual having to submit a new SCSA NCSO™ Application Form and experience letter(s) for consideration. Acceptance would be dependent on the individual meeting the national standard experience criteria as of Sept. 1, 2017. Upon acceptance the individual will be required to repeat all current Compulsory Courses (10) and Elective Courses (2) before being eligible to write the NCSO™ exam to achieve the new three year NCSO™ certification.

Failure to Transition by August 31, 2019

For both previously certified SCSA NCSO's and CSO's, failure to achieve certification meeting the new national standard before August 31, 2019 will result in the individual having to submit a new SCSA NCSO™ Application Form and experience letter(s) for consideration. Acceptance would be dependent on the individual meeting the national standard experience criteria as of Sept. 1, 2017. Upon acceptance the individual will be required to have completed and maintained the Compulsory Courses (10) and Elective Courses (2) before being eligible to write the NCSO™ exam to achieve the new three year NCSO™ certification.

Please refer to the 'New NCSO™ Standards' information package for further details on the current NCSO™ designation, application and training requirements, maintenance of designation standards and the Code of Ethics.