

Development and Use of Operator Tools: ERP, MMP & SOPs

Course Outline

Course Description

Operators of water treatment facilities are responsible for ensuring the supply of safe drinking water at all times. Daily duties such as performance monitoring, minimum maintenance, and troubleshooting do not leave much room for additional planning of non-routine activities. Relevant tools that support operators are therefore critical.

An Emergency Response Plan (ERP) helps prepare the operator and their managers for any potential emergencies which could alter the supply of safe drinking water. A clear definition of roles, an up-to-date contact list, and user-friendly procedures can greatly help the response time during an emergency. The preparation of the ERP is also a great brainstorming exercise for the community, and can increase stakeholder awareness and buy-in.

A Maintenance Management Plan (MMP) addresses all the required maintenance tasks for all the equipment in a water system. It provides a visual annual schedule of maintenance tasks, specifications of equipment and step-by-step procedures to complete maintenance tasks. The MMP is a practical time management support tool that also facilitates the training of new operators.

Standard Operating Procedures (SOPs) are step-by-step procedures to support the operator in regular operation tasks. The SOPs can be used as stand-alone reference guides and can be included in the MMP.

This one-day course provides students with an understanding of what these tools include and how they can be developed to efficiently support operator duties.

Course Pre-requisites

There are no specific pre-requisites for this course. However, Grade 12 (or equivalent) math skills are an asset. Math upgrades are available –contact us.

Continuing Education Units (CEUs)

This course is recognized by EOCP for 0.6 CEUs (core for SWS, BWD, WT, WD, WWT, WWC and SWWS certifications).

Course Duration

- 1 day
- 8:30 am to 4:00 pm
- lunch break (60 minutes)
- morning and afternoon break (15 minutes each)

Course Topics and Learning Outcomes

Upon successful completion of the course, students will be able to:

- Identify the rationale for an Emergency Response Plan specific to drinking water supply management
- Define a chain of command and build a local communication plan to follow in case of an emergency
- Identify the relevant emergencies for a specific system
- Develop strong and efficient emergency procedures for their system
- Explain the role and value of a Maintenance Management Plan as a powerful tool to support the operation and maintenance of a system
- Define the main components of a Maintenance Management Plan and their interconnection
- Develop a Maintenance Management Plan which applies to their own system
- Describe the role of Standard Operating Procedures
- Develop Standard Operating Procedures for their system

Delivery Method/Format

Instructional Method	Percentage of Class Time
Hands-on/Q & A	15%
Examples/Case Study	25%
Slides	55%
Video/DVD	5%

Material/Handouts (supplied)

- Student Binder: Yukon University. Development and Use of Operator Tools: ERP, MMP & SOPs; an elective –Workplace Essential Skills – course. Whitehorse, Yukon.
- EOCP Course Completion and Evaluation Form.
 - every student needs to complete and return this form for any CEU allocation
- Calculators are provided but students are welcome to use their own.
 - please return

Course Requirements

Attendance and participation in class are required. It is the student's responsibility to attend all classes.

CEUs will be allocated based on attendance and course completion; Yukon University records will show a pass or fail result. If the participant doesn't attend the class, Yukon University records will show a "no show" result and no CEUs will be allocated.

Evaluation

There will be a quantifiable evaluation at the end of this course with a passing mark of 70%. Please note that this evaluation is for self-assessment purpose only.

The final evaluation for this course is NOT an EOCP certification exam. To challenge a certification exam, register separately with EOCP at least 3 weeks in advance: 1-866-552-3627 or crm.eocp.ca.

Appropriate Language

In all areas of the University environment, students are responsible for showing respect for others. Swearing, or language that is discriminatory or derogatory in relation to race, sex, ethnic background, religious beliefs, age, and physical condition is not appropriate.

Electronic Devices

In order to be successful in classes and minimize distractions for others, cell phones, iPods, and other electronic devices must be turned off while students are in class. In an emergency situation, the instructor may give a student permission to use a cell phone or pager.

Academic and Student Conduct

Information on academic standing and student rights and responsibilities can be found in the current Academic Regulations that are posted on the Student Services/Admissions & Registrations web page.

Plagiarism

Plagiarism is a serious academic offence. Plagiarism occurs when students present the words of someone else as their own. Plagiarism can be the deliberate use of a whole piece of another person's writing, but more frequently it occurs when students fail to acknowledge and document sources from which they have taken material. Whenever the words, research or ideas of others are directly quoted or paraphrased, they must be documented according to an accepted manuscript style (e.g., APA, CSE, MLA, etc.). Resubmitting a paper which has previously received credit is also considered plagiarism. Students who plagiarize material for assignments will receive a mark of zero (F) on the assignment and may fail the

course. Plagiarism may also result in dismissal from a program of study or the University.

Academic Accommodation

Reasonable accommodations are available for students requiring an academic accommodation to fully participate in this class. These accommodations are available for students with a documented disability, chronic condition or any other grounds specified in section 8.0 of the Yukon University Academic Regulations (available on the Yukon University website). It is the student's responsibility to seek these accommodations. If a student requires an academic accommodation, they should contact the Learning Assistance Centre (LAC) at LearningAssistanceCentre@yukonu.ca.

Class Outline

Morning – Emergency Response Plan

- Section 1. Introduction and housekeeping items (10 min)
- Section 2. Rationale, Definitions and Typical Content (30 min)
- Section 3. Revision page and Introduction (10 min)
- Section 4. Administration and Communication (30 min)
- Section 5. Mapping the system (10 min)
- Break (10 min)
- Section 5. Emergency Procedures (40 min)
- Section 6. Reporting and Investigation (30 min)
- Section 7. Activity (40 min)

Afternoon – MMP and SOPs

- Section 8. Definition of a Maintenance Management Plan, Rationale and Typical Content (30 min)
- Section 9. Asset Inventory and Asset Record Cards (20 min)
- Section 10. Task Description Cards (20 min)
- Section 11. Standard Operating Procedures (30 min)
- Section 12. Maintenance Schedule and Tracking Tools (20 min)
- Break (10 min)
- Section 13. Activity: Develop a basic MMP (50 min)
- Section 14. Wrap-up and Evaluation (30 min)