Practical Auxiliary Mine Ventilation Workshop

September 2 - 4, 2025

Workshop Overview	
Purpose	This workshop aims to equip mining operations with essential tools for the daily planning and efficient management of underground mine auxiliary ventilation systems.
Target Audience	The target audience consists of technologists, mine operators, and engineers involved in the design, management, and operation of auxiliary mine ventilation systems.
Presenter	The presenter will be Dr. Euler De Souza, President and CEO of AirFinders Inc., a consulting firm specializing in mine ventilation.
Details	**Tuesday, September 2nd** ▪ 8:00 am to 4:00 pm - Salon Cartier at Cedar Meadows on 1000 rue Norman Street, Timmins, Ontario P4N 8R2 **Wednesday, September 3rd** ▪ 6:00 am to 12:00 pm - Field workshop at Pan American Silver - Lake Shore Gold Timmins West Mine on 8215 Hwy 101 W, Timmins, ON, P4N 2G0 ▪ 1:00 to 4:00 pm - Salon Cartier at Cedar Meadows on 1000 rue Norman Street, Timmins, Ontario P4N 8R2 ▪ 4:00 pm to 6:00 pm - Manufacturer Information Session **Thursday, September 4th** ▪ 8:00 am to 4:00 pm - Salon Cartier at Cedar Meadows on 1000 rue Norman Street, Timmins, Ontario P4N 8R2
Cost	***Early Bird Special*:** $1,500 + HST/participant until August 01, 2025. **August 02, 2025:** $1,800 + HST/participant. Lunch and refreshments will be provided.
Registration	Register through the Workplace Safety North (WSN) website or by phone. **Online registration:** https://workplacesafetynorth.ca/en/training-events/sep-2-4-practical-auxiliary-mine-ventilation-workshop **Phone:** Amanda Caverly, WSN Health and Safety Services Assistance Client Engagement, 1 (705) 474-7233

Cancellation Policy

Registrants who submit a written cancellation notice at least one week before the course start date will not incur any charges. Cancellations made less than one week before the course or failure to attend will result in the full registration fee being charged. Substitutions can be made at any time prior to the course start.

WSN reserves the right to cancel or reschedule a course. If the course is canceled, registrants will be notified at least one week in advance. WSN's liability is limited to the registration fee.

Purpose

Auxiliary ventilation is essential to dilute fumes from blasting and diesel exhaust to safe levels, ensuring acceptable working conditions, and replenishing the oxygen consumed by the workers and diesel equipment. It also plays a crucial role in controlling airborne dust, as well as regulating temperature and humidity in the working area. This course is designed to provide mining operations with the fundamental tools needed for day-to-day planning, design, installation, maintenance, and effective operation and monitoring of auxiliary mine ventilation systems.

A duct ventilation training program for the ventilation operator:

- Planning
- Duct and Fan Selection
- Installation
- Management and control
- Maintenance
- Surveys

Who Should Attend?

This course is aimed at mining engineers, technologists, mine operators and engineers involved in the design, management, and daily operation of auxiliary mine ventilation systems.

Program

This intensive workshop offers in-depth training on the operation, planning, and design of auxiliary mine ventilation as a critical component of daily production. The first day focuses on familiarizing participants with standard techniques for duct ventilation design and operation, using case studies to highlight examples of best practices. The second day is dedicated to field testing a duct system installation at an active mine, which includes visual inspections, airflow and pressure surveys, and air quality checks. The data collected will be used to create a thorough evaluation of the auxiliary ventilation system's performance. At the end of day two, a Manufacturer Information Session will provide an opportunity for networking and updates on the latest products from manufacturers and suppliers of auxiliary ventilation equipment.

On the third day, participants are encouraged to bring technical materials from their own mining operations for informal discussions, which often become one of the most valuable aspects of the course. Participants are also invited to bring any specific challenges they face, to be addressed during ventilation design sessions.

Topics

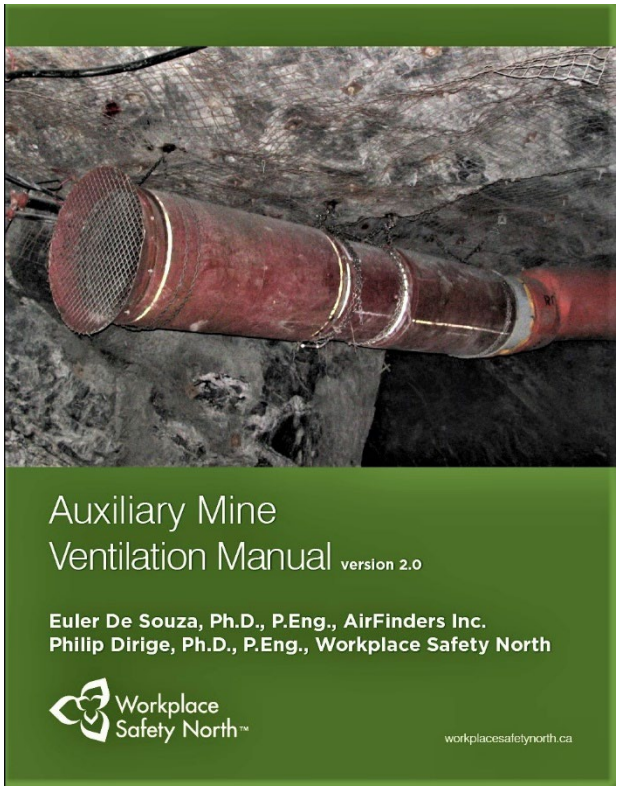
- Regulations relating to auxiliary ventilation
- Ventilation requirements in headings
- Auxiliary ventilation system sizing and design
- Fan and duct selection
- Auxiliary ventilation installation practices
- System maintenance, duct repair
- Ventilation checks and ventilation surveys

In Addition

- Manufacturer information session

Course Materials

The primary text for this course will be the comprehensive 260-page *Auxiliary Mine Ventilation Manual Version 3.0*, first published in 2010 and updated in 2024 by AirFinders Inc. and Workplace Safety North. This manual serves as a key resource for transferring both technical and practical knowledge and is an essential reference in the workplace.



Chapters include:

- Mine ventilation principles
- Auxiliary ventilation fans
- Methods of auxiliary ventilation
- Auxiliary fan location and operation
- Auxiliary ventilation ducts
- Devices for controlling airflow
- Air volume and fan requirements
- Practical design and operational requirements
- Auxiliary ventilation design
- Surveys for verification of system compliance
- Dilution ventilation model
- Ventilation economics
- Management and operation of auxiliary ventilation systems
- Ventilation plans and emergency preparedness
- Glossary
- Ontario regulations pertaining to mine ventilation
- Health & safety considerations
- Airflow fundamentals
- Fan characteristics
- Changing a fan blade setting
- Suggested auxiliary mine ventilation survey forms
- Case examples

Each participant will also receive a copy of the *Auxiliary Ventilation Design Calculator*, developed specifically for the mining industry to support engineers and planners in designing fan and duct systems.

Dr. Euler De Souza

Dr. Euler De Souza, a registered professional engineer in Ontario, is a mining engineer and technical advisor specializing in mine ventilation and environment. He holds B.Sc., M.Sc. and Ph.D. in Mining Engineering. Dr. De Souza is the President and CEO of AirFinders Inc., an engineering services company focusing on providing mine ventilation solutions.

Previously, Dr. De Souza served as an Associate Professor at the Robert M. Buchan Department of Mining, Queen's University, and is a well-respected advisor in the field of mine ventilation. He offers consulting services to mining companies across Canada and internationally. In 2002, he organized the North American /9th U.S. Mine Ventilation Symposium.

Dr. De Souza provides ongoing technical advice to several operating mines, offers technical support to junior mining companies, collaborates with various consulting firms, and has assisted regulatory agencies. He regularly conducts ventilation efficiency audits for mines and is actively involved in providing industrial training on mine ventilation at mine sites.