



**PERFORMANCE TRAINING**

*Registered Training Organisation*

# Underground Mine Ventilation Management Course (Perth - 2022)



## Course Application Pack

Statements of Attainment issued by  
Performance Training  
Registered Training Organisation number: 1718



NATIONALLY RECOGNISED  
TRAINING

### **RIIUND601E**

Establish and maintain ventilation  
management systems

### **RIIUND603D**

Manage, operate and maintain  
the mine ventilation system

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## These units now recognised in Queensland

In 2021, the Mining Health and Safety Committee (MSHAC) ruled that candidates may apply for a place in the Queensland Ventilation Officer invigilated exam using a Statement of Attainment for the units RIIUND601E & RIIUND603D lawfully issued by any Australian RTO.

For more info: <https://bit.ly/3lAjKEw>



# Learn from Industry Leaders

Originally written by internationally recognised expert, Dr. Mike Howes (deceased), this course was updated by Dr. Roy Moreby for delivery as nationally recognised units of competency.

Having been regularly reviewed and updated on the basis of industry consultation, this course reflects the most recent industry trends. As such, it sets the benchmark for vocationally-based ventilation management training in Australia.

“

*The international mining community will be forever indebted to Dr. Mike Howes, who originally developed this course as non-accredited ventilation management training which he delivered all over the world, for some 30 years.*

*Dr. Howes focused on the fundamentals of ventilation, and people the world over relate stories about the success of his approach.*

*It is a such honour to have been asked by my friend and mentor to build upon his legacy by updating and developing the second-generation of this ventilation management course, for delivery as nationally recognised units of competency.*

**- Dr. Roy Moreby**

”

Upon enrolling in this course, you will be trained by industry leaders who between them have over 90 years' of experience, namely Dr. Roy Moreby, Leon van den Berg, and Jakes Raubenheimer.

Assessment will be conducted by Dr. Roy Moreby.

Photo credit: Clemcorp Australia



### **Dr. Roy Moreby** **Training and Assessment**

With over 40 years' underground mine ventilation experience in mines across the world, Dr. Moreby is highly respected in the field.

He was awarded a Consolidated Gold Fields Scholarship in 1978 and completed his undergraduate Mining Engineering degree at Camborne School of Mines in 1982, finishing with First Class Honours.

In 1987, Dr. Moreby was awarded a PhD for his thesis, Planning and Control of the Environment in Multi-Level Narrow Lode Mines. He also holds a NSW Underground Mine Manager's certificate.

In addition to being a Fellow of the Mine Ventilation Society of South Africa, Dr. Moreby has also been an Associate Professor at the University of New South Wales for 20 years. He developed the UNSW Graduate Diploma in Mine Ventilation, and has delivered that course since its inception.

Dr. Moreby currently provides ventilation consultancy services to mining companies across the world.



### **Leon van den Berg** **Training**

Leon has over 19 years' underground mining experience in both coal and metalliferous operations. Leon completed his engineering degree at the University of Pretoria. He also holds a ventilation qualification from the Chamber of Mines in South Africa, and a Graduate Diploma in Mine Ventilation from the University of New South Wales. Leon has a wealth of ventilation and refrigeration experience in both greenfield and brownfield mining projects, including conducting ventilation audits, primary and secondary surveys, ventilation modelling, and heat load assessments. Leon currently works as a ventilation management consultant, based in Perth.



### **Jakes Raubenheimer** **Training**

Jakes has over 33 years' experience in mine ventilation and refrigeration in mines across Australia, South Africa, India, PNG, and Indonesia. Jakes gained his ventilation qualification (Advanced Certificate in Mine Environmental Control) from the Chamber of Mines in South Africa. He also holds an occupational hygiene qualification (BEBOH) from the British Examination Board. Jakes is a Fellow of the Mine Ventilation Society of South Africa and a member of the Australian Institute for Mining and Metallurgy (AiMM). He was also the first (inaugural) President and member of the the Mine Ventilation Society of Australia. Jakes currently works as a ventilation management consultant, based in Perth.



# About the course

## Training products

- RIIUND601E - Establish and maintain ventilation management systems
- RIIUND603D - Manage, operate and maintain the mine ventilation system

## Usage recommendation

- Current

## Certification documentation

- Certification documentation is issued by Performance Training, Registered Training Organisation number: 1718

## Modes of delivery

- Pre-readings (self paced) delivered electronically
- Face-to-face / webinar training (2 workshops)
- On-the-job mentoring in your workplace

## Estimated duration

- 209 hours of training (total)
- 68 hours of assessment

## Location of training

- Face-to-face training workshops in Perth (with option to attend virtually via Microsoft TEAMS)
- On-the-job mentoring at your underground mine site

## Third-Party Provider details

Company: Morvent Mining Ltd

Tel: +44 (07) 7562 384 930

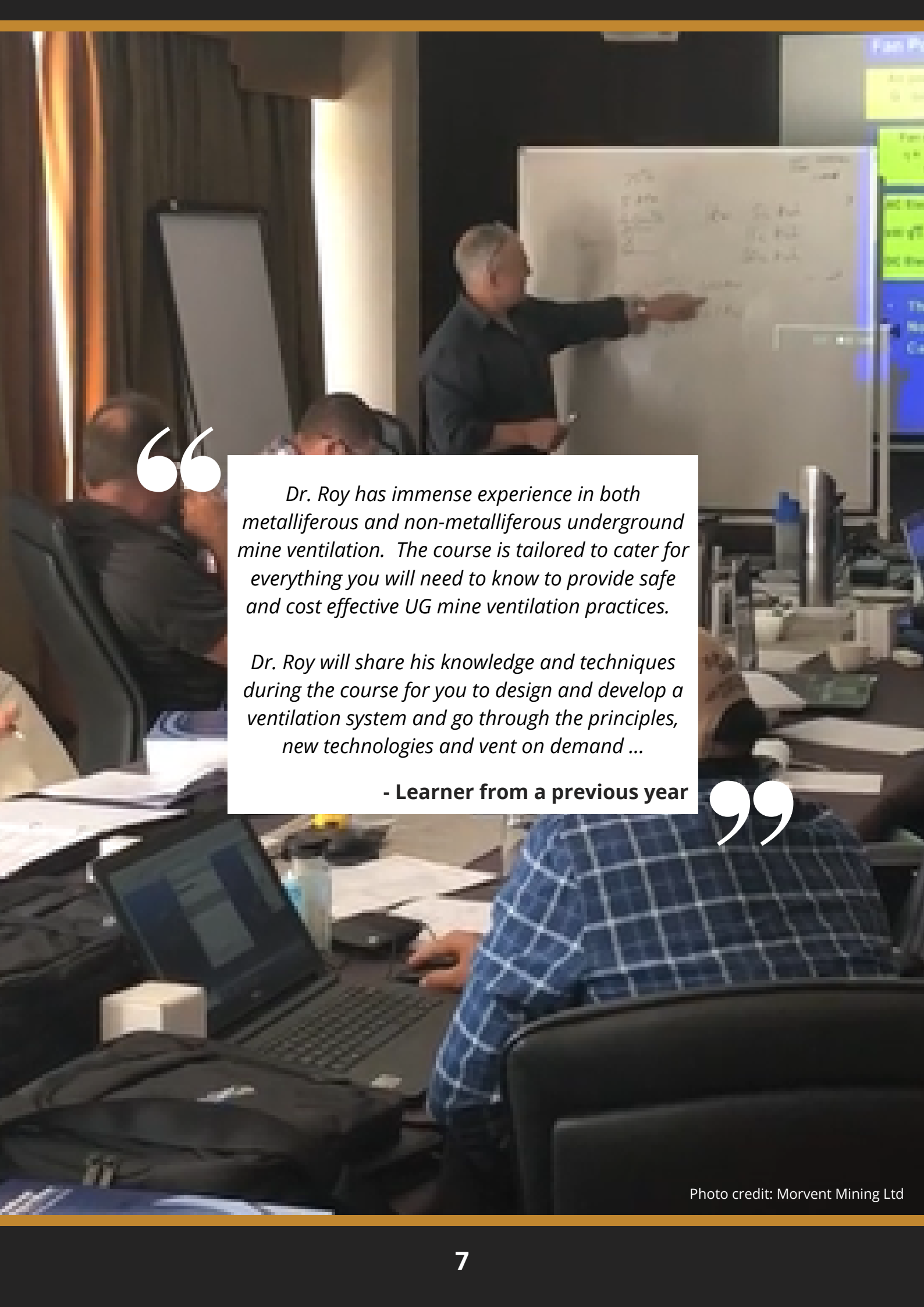
Email: [roy.moreby@btinternet.com](mailto:roy.moreby@btinternet.com)

Services provided:

- Training and assessment
- Providing learner support
- Managing complaints
- Marketing and recruitment
- Enrolment



Photo credit: Parmelia Hilton (Perth)



“

*Dr. Roy has immense experience in both metalliferous and non-metalliferous underground mine ventilation. The course is tailored to cater for everything you will need to know to provide safe and cost effective UG mine ventilation practices.*

*Dr. Roy will share his knowledge and techniques during the course for you to design and develop a ventilation system and go through the principles, new technologies and vent on demand ...*

**- Learner from a previous year**

”

Photo credit: Morvent Mining Ltd

# Training arrangements

## Pre-readings

*Electronic*

### Pre-Readings

You will be provided with online access to pre-course readings which you are expected to work through at your own pace, prior to coming to the workshops.

You will be issued with your pre-readings in advance of the face-to-face training. You should start them straight away so you get the most out of your face-to-face training.

## Workplace Mentoring

*On-the-job*

### Workplace Mentoring

You will be provided with a mentor handbook, containing issues to discuss and/or activities to carry out with the following mentors from your mine site:

- Ventilation officer
- Maintenance supervisor
- Development supervisor
- Production supervisor

Note that the mentor handbook is not assessment. Rather, the mentor handbook is designed to:

- reinforce classroom learnings
- let you practice your skills over time in a real (not simulated) environment
- develop / improve reflective listening and communication skills

## Workshops

*Face-to-face*

### Workshops

Two workshops (6 days each) will be held in Perth. You can attend in-person, or by logging in remotely (via Microsoft TEAMS).

The workshops will be run by our three trainers, who will run through key theory and provide worked examples. You will have the opportunity to practice some key ventilation skills under the guidance of the trainers. (See over for the workshop topics).



## **Induction and Orientation**

There is a compulsory 2 hour induction and orientation session which will be held on Saturday 24 September 2022. Learners will need to log into this session via Microsoft TEAMS.

The induction and orientation session is very important, as it allows course administration and instructions to be finalised prior to commencing the workshops.

## **Workshop Location**

Workshops will be held at Parmelia Hilton, 14 Mill Street Perth (Western Australia).

## **Virtual Attendance**

Learners may log into the Workshops via Microsoft TEAMS if they are unable to get to Perth. Learners will see the trainer's screen, and can interact with the trainer using their microphone and speakers.

## **Workshop Dates**

The dates of workshops are as follows:

- **Induction & orientation:** Saturday 24 September 2022 (2 hours - Microsoft TEAMS)
- **Workshop 1:** Sunday 2 October - Friday 7 October 2022 (6 days)
- **Workshop 2:** Sunday 15 January - Friday 20 January 2023 (6 days)

Lunch and morning tea are provided for learners who attend in Perth. Note that accommodation and travel are not included in the course fee.

## **Workshop 1 schedule**

- Day 1 - Fluid flow and fans
- Day 2 - Network analysis
- Day 3 - Ventsim (ventilation)
- Day 4 - Heat and refrigeration
- Day 5 - Ventsim (heat and refrigeration)
- Day 6 - Case studies and applications

## **Workshop 2 schedule**

- Day 7 - Gases, gas laws and gas management
- Day 8 - Gas monitoring and mine fires
- Day 9 - Respirable and flammable dust
- Day 10 - Ventsim (gas, dust and emergency)
- Day 11 - Mine ventilation system design and management
- Day 12 - Case studies and applications

# Fees

## Option 1

*Assessable*

### **Fee payable:**

Both workshops & assessment: \$21,000

### **Training you will receive:**

Pre-readings, textbook, mentoring handbook, and both workshops.

### **Assessment:**

You will be assessed against the nationally recognised units. You will have 12 months (from when training commences) to submit your assessments. If you wish to be assessed after 12 months, an enrolment reinstatement fee will apply.

### **Accredited outcome:**

Upon successful completion of all assessments, you will be issued with a Statement of Attainment for the nationally recognised units.

## Option 2

*Non-assessable*

### **Fee payable:**

Attend both workshops: \$14,000

Attend your choice of either workshop: \$7,500

### **Training you will receive:**

Pre-readings, textbook, mentoring handbook, and one or both workshops.

### **No assessment:**

You will not be assessed against the nationally recognised units.

### **Non-accredited outcome:**

Upon completion of training, you will not be issued with a Statement of Attainment for the nationally recognised units. You will instead enrol as a 'non-assessable' learner and be issued with a non-accredited Certificate of Completion.

*No government funding and/or student loans are available for this training course.*

# Assessment arrangements

The assessment arrangements below are for learners who wish to be assessed against the nationally recognised units (Option 1 - see previous page).

## Written assessments

These assessments are designed to assess underpinning knowledge and some practical skills.

The written assessments will consist of questions for you to answer, based on the learning materials you have been provided in the course.

You will have multiple attempts at assessment and your assessor will give you feedback after each attempt.

You will be required to complete these assessments and then submit by the due date.

## Workplace project assessments

These assessments are designed to assess practical skills and will involve you completing projects (e.g. ventilation and respirable dust surveys).

A workplace supervisor verification will be required for each workplace project, to confirm that the tasks were undertaken in accordance with your mine safety health management system, and were in fact completed by you.

You will have multiple attempts at assessment and your assessor will give you feedback after each attempt.

You will be required to complete these assessments in the workplace and then submit by the due date.



Photo credit: Clemcorp Australia

# Course requirements

## All Learners

*Things you must provide*

### Current employment requirements

You must demonstrate that you are permitted access to:

- The working underground mine area and SMS / SHMS of a currently operating Australian underground mine
- Access to the following workplace mentors:
  - Ventilation officer
  - Development supervisor
  - Maintenance supervisor
  - Production supervisor

### Materials and equipment you must provide

You must provide the following materials and equipment:

- Access to internet to download your pre-readings
- Laptop to bring to workshops, with ability to connect to the training room wi-fi
- Ventsim, Microsoft Excel and Microsoft TEAMS installed on your laptop
- Scientific calculator
- Travel to face-to-face workshops
- Accommodation close to the Perth CBD such that fitness for work (fatigue) requirements are complied with during each day of training
- A webcam, microphone, speakers and internet access

### Excel and Ventsim requirements

You must be proficient in the basic functions of Microsoft Excel and Ventsim before starting your training. **You must have Ventsim and Excel software installed on your laptop before you come to your first workshop.** We can arrange a temporary Ventsim licence, however this must be managed before you come to training.

## Assessable Learners

*Further requirements*

**If you wish to be assessed, then in addition to the above, you must:**

- have at least two (2) years' recent operational underground mine experience (in Australia or overseas)
- have access to a workplace supervisor who can verify authenticity of your project assessments
- demonstrate that you are at (or can achieve with support) ACSF Level 5 in literacy and numeracy on the foundation skills test



# Important information

## **Travel and accommodation**

You must have accommodation close to Perth CBD during face-to-face workshops such that you do not exceed 'fit for work' requirements in respect of fatigue.

You are required to make your own travel arrangements. We suggest that you invest in appropriate travel insurance that meets your needs.

## **Changes to delivery**

Information given herein is accurate at the date of publication and aligns with the training and assessment strategy.

In the event there is a lockdown due to coronavirus (or other COVID-related disruption), then arrangements for delivery of the face-to-face workshops may need to be changed to either deliver the course via Microsoft TEAMS and/or change delivery to another hotel in Perth. In the event this occurs, Morvent Mining Ltd will make every effort to advise you as soon as possible.

In the event that face-to-face delivery is changed due to circumstances outside our control, neither Performance Training and/or Morvent Mining Ltd are able to refund monies you have paid in advance for accommodation / flights.

## **Photos are for illustrative purposes only**

The face-to-face workshops are to be conducted in training room at Paremlia Hilton, Perth. On-the-job mentoring and project assessments are to be undertaken at learners' own mine sites. Since the ventilation equipment used at each mine site will vary, the photos of ventilation equipment shown in this information booklet are for illustrative purposes only and do not represent the exact brands and/or configurations of ventilation equipment that will be used at every mine during workplace mentoring and/or assessment.

## **Privacy notice**

Personal information is collected on this form in order to assess your application for enrolment. Personal information will be disclosed to Morvent Mining Ltd, its approved sub-contractors (if any), and Performance Training Pty Ltd. Personal information may also be disclosed to third parties with your consent or as permitted or required under a law and/or as set out in the National VET Data Privacy Policy Notice on the Enrolment Application Form. Personal information will be stored securely. If you wish to access or correct any of your personal information, discuss how it has been managed, or have a concern about the way your personal information has been collected, used, stored, or disclosed, please contact Performance Training Pty Ltd (07) 5445 2435.

# How to apply

1

**Apply for a place**

**Email the following to Dr. Moreby:**

- Page 13
- Enrolment application form

**If wanting to be assessed, also attach:**

- Current resume
- Foundation skills test (download from our website)



roy.moreby@btinternet.com

2

**Letter of Offer**

**After you apply:**

Your application will be reviewed by Dr. Moreby.

He may contact you to discuss your application and/or to organise a support plan.

Keep an eye on your email!

3

**Purchase Order**

**Purchase order:**

Upon being offered a place in the course, you will be required to provide Performance Training Pty Ltd with a purchase order prior to starting your first workshop.

Details will be in your letter of offer.

# Apply for a place

## 1. Write your details:

Your name

Your contact email address

## 2. Tick to confirm:

☐

You are currently permitted access to the underground working area and SHMS of an Australian underground mine, workplace mentors, and (if being assessed) a workplace supervisor. You also have the required materials listed on page 10 herein.

Name of mine site

Your supervisor's email address

## 3. Tick one of the following:

☐

You are proficient in the use of basic functions in Ventsim

☐

You will participate in a non-accredited Ventsim course at your own cost before commencing face-to-face training

## 4. Tick one of the following:

☐

You are proficient in the use of basic functions in Microsoft Excel

☐

You will participate in free tutorials ([link](#)) before you commence face-to-face training

## 5. Tick one of the following:

☐

You have attached your current resume showing your operational experience working underground

☐

You do not wish to be assessed

## 6. Tick one of the following:

☐

You have attached your completed Foundation Skills Assessment

☐

You do not wish to be assessed

## 7. Tick which option you are applying for:

☐

**Option 1: I want full training and assessment.** (\$21,000)

☐

**Option 2: I do not want assessment.** You agree to enrol as a 'non-assessable' learner and understand that you will not obtain a Statement of Attainment for the nationally recognised units. You want to come to the following:

☐

**Both workshops**  
(\$14,000)

☐

**Workshop 1 only**  
(\$7,500)

☐

**Workshop 2 only**  
(\$7,500)

## 8. Tick to confirm:

☐

I have read this entire document and the Pre-enrolment Student Handbook

**Continued over the page (Application for Enrolment)...**



# RIIUND601E & RIIUND603D Enrolment Application

## 1 Personal Details

Title	Mr <input type="checkbox"/> Mrs <input type="checkbox"/> Miss <input type="checkbox"/> Ms <input type="checkbox"/> Other <input type="text"/>	Date of Birth	<input type="text"/> / <input type="text"/> / <input type="text"/>
First name	<input type="text"/>	Middle name	<input type="text"/>
Surname	<input type="text"/>		
Unique Student Identifier (USI)	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		
Home address	<input type="text"/>		
	State	Postcode	
Postal address (if different)	<input type="text"/>		
	State	Postcode	
Mobile number	<input type="text"/>		
Home phone no.	( <input type="text"/> ) <input type="text"/>		
Email address	<input type="text"/>		
Emergency contact	Name: <input type="text"/> Email: <input type="text"/>		
	Phone: <input type="text"/> Address: <input type="text"/>		

## 2 Employment Details

Which of the following best describes your current employment? ☐ Full time ☐ Part time ☐ Self employed ☐ Employer ☐ Employed (unpaid) ☐ Unemployed (seeking work) ☐ Unemployed (not seeking)

Employer name	<input type="text"/>		
Worksite address	<input type="text"/>		
	State	Postcode	
Phone No.	( <input type="text"/> ) <input type="text"/>		

## 3 Photographic Identification

Type	Drivers Licence <input type="checkbox"/> Passport <input type="checkbox"/> '18 Plus' Card <input type="checkbox"/> Other <input type="text"/>	<b>QMRS representative use only</b> Has the identification been sighted? Yes <input type="checkbox"/> No <input type="checkbox"/> Initials <input type="text"/>
Number	<input type="text"/>	





## RIIUND601E & RIIUND603D Enrolment Application

### 4 Language and Cultural Diversity

Are you of Aboriginal descent? ☐ Yes ☐ No

Are you of Torres Strait Islander descent? ☐ Yes ☐ No

Were you born in Australia? ☐ Yes ☐ No If not, where:

Is English your first language? ☐ Yes ☐ No If No, specify other language:

How well do you speak English? ☐ Very Well ☐ Well  
☐ Not Well ☐ Not at all

### 5 Disability

Do you consider yourself to have a disability, impairment or long term condition? ☐ Yes ☐ No

☐ Acquired Brain Impairment ☐ Medical Condition ☐ Intellectual  
☐ Hearing / Deaf ☐ Mental Illness ☐ Physical  
☐ Learning ☐ Vision

### 6 Education

Are you still at secondary school? ☐ Yes ☐ No In which year did you complete school?

What is your highest completed school level?

☐ Completed Year 12 ☐ Completed Year 9 or equivalent  
☐ Completed Year 11 ☐ Completed Year 8 or lower  
☐ Completed Year 10 ☐ Did not go to school

Have you successfully completed any of the following? ☐ Yes ☐ No

☐ Bachelor Degree or Higher Degree ☐ Certificate III (or Trade Certificate)  
☐ Advanced Diploma or Associate Degree ☐ Certificate II  
☐ Diploma (or Associate Diploma) ☐ Certificate I  
☐ Certificate IV (or Advanced Certificate/Technician) ☐ Other (e.g. overseas qualifications)

### 7 Enter details of prior qualifications and mining experience below

(Attach additional sheets if required)

Mine sites you have worked at	
Positions held	
Number of years in mining industry	

## RIIUND601E & RIIUND603D Enrolment Application

### 8 Enter the reason for undertaking this training

- |   |  |
|---|--|
| <input type="checkbox"/> To get a job                               | <input type="checkbox"/> To develop my existing business           |
| <input type="checkbox"/> To start my own business                   | <input type="checkbox"/> To try for a different career             |
| <input type="checkbox"/> To get a better job or promotion           | <input type="checkbox"/> It was a requirement of my job            |
| <input type="checkbox"/> I wanted extra skills for my job           | <input type="checkbox"/> For personal interest or self development |
| <input type="checkbox"/> To get into another course of study        | <input type="checkbox"/> Other reasons                             |
| <input type="checkbox"/> To get skills for community/voluntary work |  |

### 9 Training to be undertaken

<b>RII60320 Advanced Diploma of Underground Coal Mining Management</b>
--

Unit Code	Competency Unit Title
RIIUND601E	Establish and maintain ventilation management systems
RIIUND603D	Manage, operate and maintain the mine ventilation system

# RIIUND601E & RIIUND603D Enrolment Application

## Student Rights and Responsibilities

Performance Training respects your right to be treated fairly, and to learn in an environment free from discrimination and racial, sexual or other harassment.

### Student Rights

You have the right to:

- be treated fairly and with respect
- learn in a supportive and safe environment, free of discrimination and harassment
- have personal records kept private, subject to statutory requirements
- have access to your personal records on request
- be given information about assessment requirements at the beginning of study
- have your existing skills and knowledge recognised (Recognition of Prior Learning - RPL)
- receive feedback on your academic progress
- appeal academic or procedural matters
- respectfully challenge directions or decisions if they appear to be unlawful or endanger your or another person's health or safety
- have access to counseling and support services.
- have complaints dealt with fairly, promptly, confidentially and without retribution.

### Student Responsibilities

When communicating or interacting with Performance Training staff, your employer or fellow students, you must:

- make true statements in regard to your student status, representation and entitlements
- treat all people with respect and fairness
- show respect for others by not using obscenities or making offensive gestures
- not do anything that could offend, embarrass, threaten, bully, harass or disrupt others in the performance of their duties or studies
- not possess, drugs, alcohol, weapons or be under the influence of drugs or alcohol
- respect and not damage or steal property of other persons
- follow all safety practices required and follow directions, written or spoken
- report bullying, intimidation, discrimination, violence, abuse of power and harassment so that the appropriate action can be taken

## Declaration

Yes ☐ No ☐ I authorise Performance Training to make a copy of my qualification available to my trainer/assessor.

Yes ☐ No ☐ I authorise Performance Training to apply for a Unique Student Identifier (USI) on my behalf and to access VET records to identify pre-requisite or credit transfers relevant to this qualification.

If you require Performance Training to raise your USI, please write the town/city of your birth below.

Your town/city of birth is:

Yes ☐ No ☐ I consent to the information in this form being provided to State and Commonwealth agencies for administrative, regulatory or research purposes.

Yes ☐ No ☐ I understand that I may receive a NCVER student survey from an NCVER employee, agent or third party contractor and that I can opt out of the survey at the time of being contacted.

Applicant Signature

*I certify that all detail provided on this form are true and correct.*

Date

**Please return this form to Performance Training Pty Limited**

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