



UPPER HUNTER MINING DIALOGUE

School Tours Project





UHMD School Tours Project

Upper Hunter
Mining Dialogue

~1200 Students Per Annum – It's Ambitious!

*Each Year, Y5 & Y9 Students from **19 Schools** to visit **13 Mine Sites***





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The School Tours idea originated at 2015 & 2016 UHMD Forums....

- Create a sustainable tour program to provide students with an inside view of the whole mining process and value chain - to explain the facts about mining in a balanced manner
- Provide a positive and memorable experience that students will remember for many years to come
- Provide a consistent message across all tours in program





UHMD School Tours Project – Initial Ground Work 2016

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Pilot tour & workshop

- 63 x years 5&6 students and teachers visited Mangoola on 24/11/16.
- 8 x years 9&10 students attended a workshop at UHMD Forum on 3/12/16

Aim: to set the direction for the project:

1. Understand current level of knowledge of resources, sources and uses of material/energy
2. Understand beliefs and values around Mining
3. Understand the areas of interest
4. Logistical planning – manageable group size, mine tour route planning & key highlights to include





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UHMD School Tours Project – Initial Ground Work 2016

Knowledge Category	Y5,6	Y10/12
Their impacts - Source of Everyday Use Items	Little knowledge, some idea about power/energy sources	Broad statements on what is mining and why do it, but didn't really know any details
Knowledge of what is coal (or geology for that matter), and uses of coal	Little knowledge apart from power generation (energy topic at school)	Little knowledge, some idea about steel making, but not anything else
Beliefs regarding environmental impacts and Mining	Not negative Amazed by at the scale	Not overly negative, but little idea about rehabilitation and putting things back Little idea about approval requirements
What were they most interested in	Big Equipment & the people driving Blasting Process Rehabilitation Mining Careers	VR Package (metalliferous) Mining Process Underground Equipment (concept and scale). Roof support Careers
Logistics	Group Size ~20-25 is ideal – tour guide can engage with whole group Avoid normal blasting times Tours will be postponed in wet or very hot weather	



UHMD School Tours – Project Team Formed 2017

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Multidisciplinary Team

1. Education Representatives

- Laura Bradford & Margaret Bagnall & Beau Berman - SHS
- James Tibbett - UNSW

2. Local Community Representatives

- Gill Eason, Di Sneddon, Scott Brook

3. Mining Company Representatives

- Suzie Messner – Bloomfield Group
- Phillipa Salm / Lynnan Muldoon – Rio Tinto (HVO)
- Bob Sutherland /Tim Muldoon – Whitehaven Coal
- Rae O'Brien – Glencore Coal Assets

4. UHMD representatives

- Bob Mackie, m Greg Sullivan / James Barben



UHMD School Tours Project Team Tasks 2017

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1. Design the Tour Program

- Match schools with mines & schedule tours
- Develop Mine Tour Design Criteria
- Agree Content/Key Messages and Develop Tour Material
 1. Pre tour material for delivery in classrooms
 2. Tour Guide Guidance/Speaking Notes
 3. Tour Guide Training material / sessions

2. Run Additional Pilot Tour:

- Test the tour design, logistical planning & delivery of key messages





UHMD School Tours Project Team Tasks 2017

Match schools with mines:

- Tours limited to 50 students (bus size, group size)
- Allocation considers travel time
- Size of class matched with size of mine (where possible)

Site	Tour 1	Tour 2	Tour 3	Tour 4
Mt Arthur	Muswellbrook High School	Muswellbrook High School	Muswellbrook High School	
Bengalla	St Joseph's High School	St Joseph's High School	St Joseph's High School	
Mangoola	Denman Primary	St Josephs' Denman Primary		
Muswellbrook Coal	Muswellbrook Christian School			
Ravensworth	St James Primary School	Aberdeen Public		
Liddell	Sth Muswellbrook Primary	Sth Muswellbrook Primary		
Glendell	Australian Christian school	Mt Pleasant Primary		
HVO	St Catherine's High School	St Catherine's High School		
Mt Owen	King Street Primary	King Street Primary		
Rix's Creek	Singleton High School	Singleton High School	Singleton High School	Singleton High School
Bulga	Singleton Public Primary	Singleton Public Primary		
MTW	Singleton Heights Primary	Singleton Heights Primary		
Wambo	smaller schools collective	smaller schools collective		

Muswellbrook <30km

Singleton <30km



UHMD School Tours

Project Team Tasks 2017

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Mine Tour Design Criteria :

- 2hr tour, ~9:30-11:30AM, avoid blast window, fit in with school t/port
 - Postpone during inclement or hot weather
- Tour Guide rides on the bus & speaks over PA
 - Additional Tour Guide(s) in escort vehicle, assist at Mine Lookout.
- View as much as possible from mine lookout(s), view other process areas en-route to/from lookout(s). Ensure view of established rehabilitation.
- Tour route to cover whole of mining process:
 - Exploration drilling, approval requirements,
 - Clearing ahead of mining, Pre-strip operations
 - Coaling operations, Dumping operations
 - View of highwall, or other exposed wall showing geology/stratigraphy. This will help students visualise the stratigraphic structure, the difference between coal and other rocks, and some of the geological/geotechnical difficulties presented.
 - Dragline operations, CHPP, Train load out, Maintenance workshop
 - Full Rehabilitation process including shaping/seeding & Established rehabilitation
- Facilitate worksheet completion
- Photo opportunity (near large equipment, or at the lookout wearing PPE)



Photo Opportunity!



UHMD School Tours Project - Deliverables

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Tour Program Components

1. Information Pack for Mine Sites

- Tour Route Design (Guidance Notes)
- Tour Guide Speaking Notes
- Tour worksheets & Hand-out information
- Tour Guide Information/Training Session

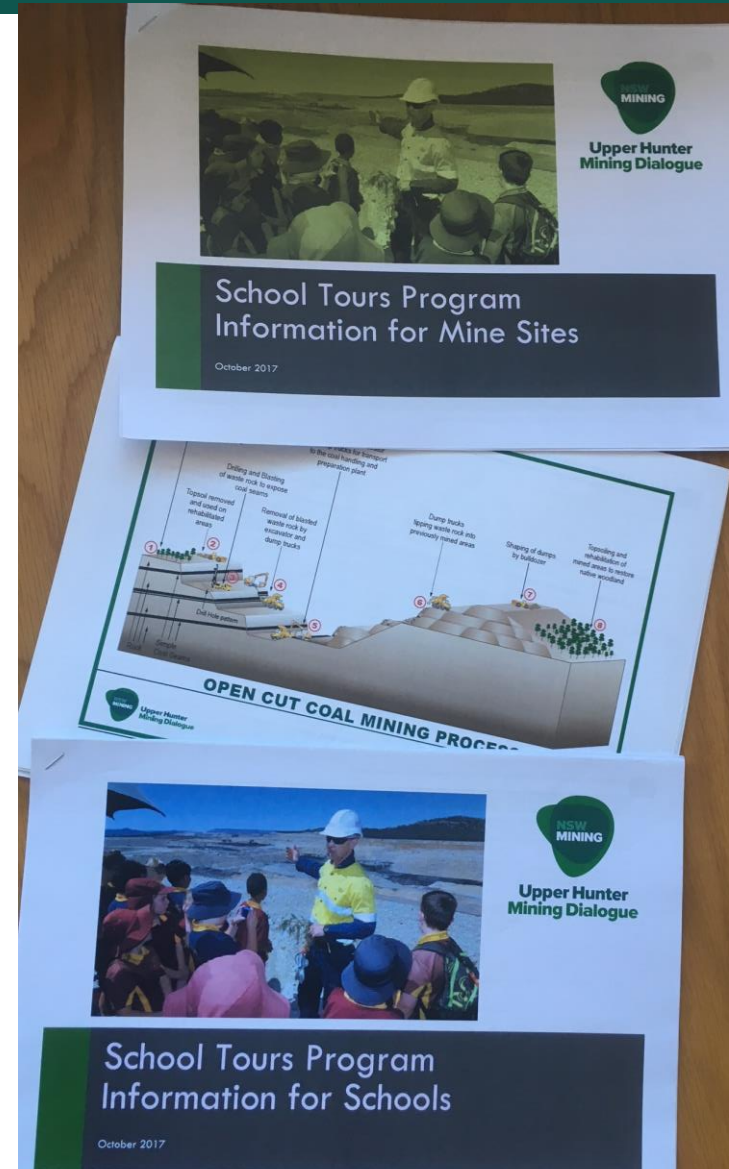
2. Information Pack for Schools

- Pre-tour teaching material**
- Tour Worksheets & Hand-out information
- Excursion Plan – including Justification, RA & permission notes

3. UHMD – Coordination Tasks

- Match schools & sites wrt travel distance, size of groups/mines
- Provision of Buses/Transport
- Set up annual schedule –
 - Aim for ~2 tours per site per year
 - Communicate schedule to schools & mines

*** Y9 Geography teaching unit + Virtual Reality package both due for completion Q4 2017*





UHMD School Tours Project Status Update

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October - December 2017 High School Tours

- Singleton High School @ Rix's Creek
- St Catherine's High School @ HVO
- St Joseph's High Muswellbrook @ Bengalla
- Muswellbrook High School @ Mt Arthur





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Acknowledgements:

Success is from a group effort! Thankyou to all involved so far:

- High Schools – they've all re-arranged their final term to fit in the tours
- Tour Guides - exceptional effort in delivering exceptional quality tours!
 - Construction of viewing areas & placement of equipment for photo opportunities
 - **Mangoola Guides** (1st Pilot tour) – Nathan Lane, Damien Ryba & Martin Salm
 - **Mt Owen Guides** (2nd pilot tour) – Ashley Macleod, Monique Pollock, Zach , Hannah Richardson
 - **Rix's Creek Guides** - Luke Treloar, Riley Lewis
 - **HVO Guides** - Bill Baxter, Alison Tibbett and Robert McGrath
 - **Mt Arthur Guides** - Nigel Smith, Blake Holden, Ebony Ford
 - **Bengalla** - Debbie Day, Cam Halfpenny
- School Tours Project Team - all volunteers who have dedicated a lot of time to making this a success!