



Top Ten

Keeping Your Diesel Control Program in Control

Sean McGinn

Background

- 35 years maintaining mining diesel equipment
- Researcher with Noranda Technology Centre
- Project Lead – DEEP Consortium – Maintenance & DPFs
- Consulting on diesel emissions control and maintenance
- Managing fleet and maintenance for arctic mining operation



Xstrata Nickel - Raglan

Mine Raglan

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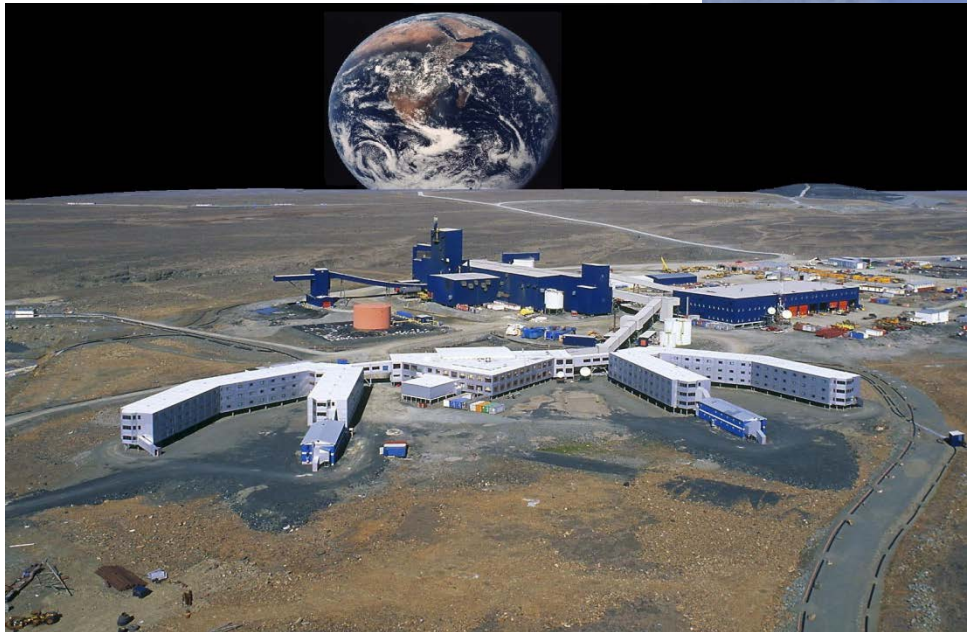
- Mining 1.3 million tonnes/yr
- Mobile Fleet 450 units
- Permafrost to 500 meters
- Diesel fuel 60 million liters/yr



Xstrata Nickel - Raglan

Mine Raglan

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- Cold starts
- Excessive idling
- Reduced engine life
- Urea problems

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Bleeding Edge Technology

- Understand the difference between prototypes and commercial solutions
- Manage the difference accordingly
- Technology transfer

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Hope

- “Hope is not a management tool”

Bill – Mine Manager

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Think

- “We think” is not a diagnostic tool
- “We know” is what produces the right decision
- Act on fact

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Training

- Train the majority – not the minority
- Operations need to know how to use it
- Maintenance needs to know how to take care of it
- Management needs to know what to expect from it

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Support

- Direct from manufacturer – 24 hour immediate
- Spare parts
- Planned inspections and audits
- Performance indicators – life cycles

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Solution In A Box

- Does not exist
- For miraculous results refer to #9
- Sounds too good to be true – it probably is
- Choose technology direction by committee

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Track Results

- Measure the results – what / who / how?
- Communicate the results
- Discuss the results and adjust accordingly

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Rules of Engagement

- Operations <> Maintenance
- There's no "I" in Team
- Only teamwork achieves the winning result
- Expectations of each are clear and understood
- Accountability

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Maintenance

- If you can't afford to maintain it you can't afford to own it
- Fixing and reacting = path to quick failure
- Emissions technology is maintenance intensive
- There are no short cuts around that

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Reliability

- Emissions technology must be reliable
- As reliable or better than existing machine
- The machine must remain reliable
- $OEE = Availability \times Performance \times Quality$
- OEE can apply to machine overall and emissions technology alone

The Key

Commitment

- By department
- By individual
- Find your fit on the team – be a difference maker
- This is everyone's problem – no one is left out
- We all have a role to play in the solution

Questions



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