

Improving Control of Exposure to Silica Dust in Ballast

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Working Group

BDWG – A collaborative approach

Balfour Beatty
Rail



TXMPlant Ltd



DB **SCHENKER**

amey**COLAS**

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BDWG – 2013 Focus

- Awareness campaign
- Gather intelligence
- COSHH risk assessments
- Improvements
- Site controls
- Feedback



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BDWG – Silica & Silicosis



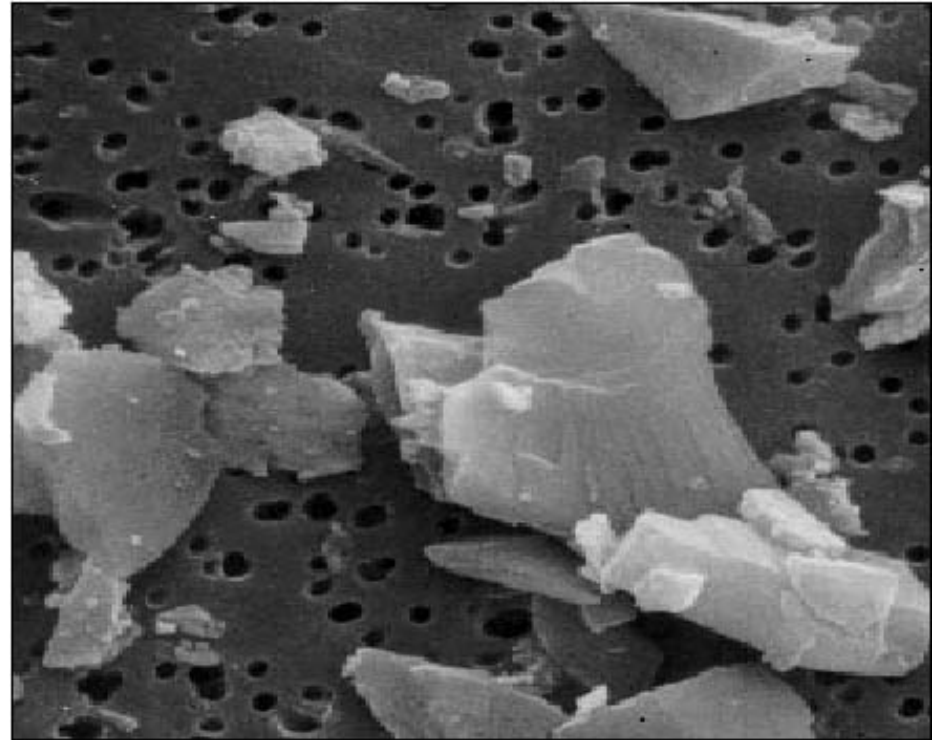
- Total inhalable
- Respirable
- Silica
- Eyes, Nose, Mouth
& Skin



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BDWG – Silica Dust

- Known as Respirable Crystalline Silica (RCS) or 'free silica'
- Can be found in ballast, which is granite (20-45%)
- All RCS is hazardous



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BDWG – Silicosis: symptoms & factors



- Chest tightness
- A cough, with or without sputum
- Shortness of breath
- Premature death
- Smoking



There is no cure for Silicosis



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BDWG – It's not just about 'health'

Poor visibility may contribute to personal accidents



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BDWG – Awareness campaign

- Safety Central
- Trade Unions and senior management
- Briefing material
- COSHH assessments
- Toolbox talks
- Safe Systems of Work
- Respiratory Protective Equipment (RPE)
- Newsletter



BDWG – Poster

Move away from the dust

Wear appropriate RPE



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Ballast Dust.
Are you exposed?

Move away from the area if you are not involved in the task.

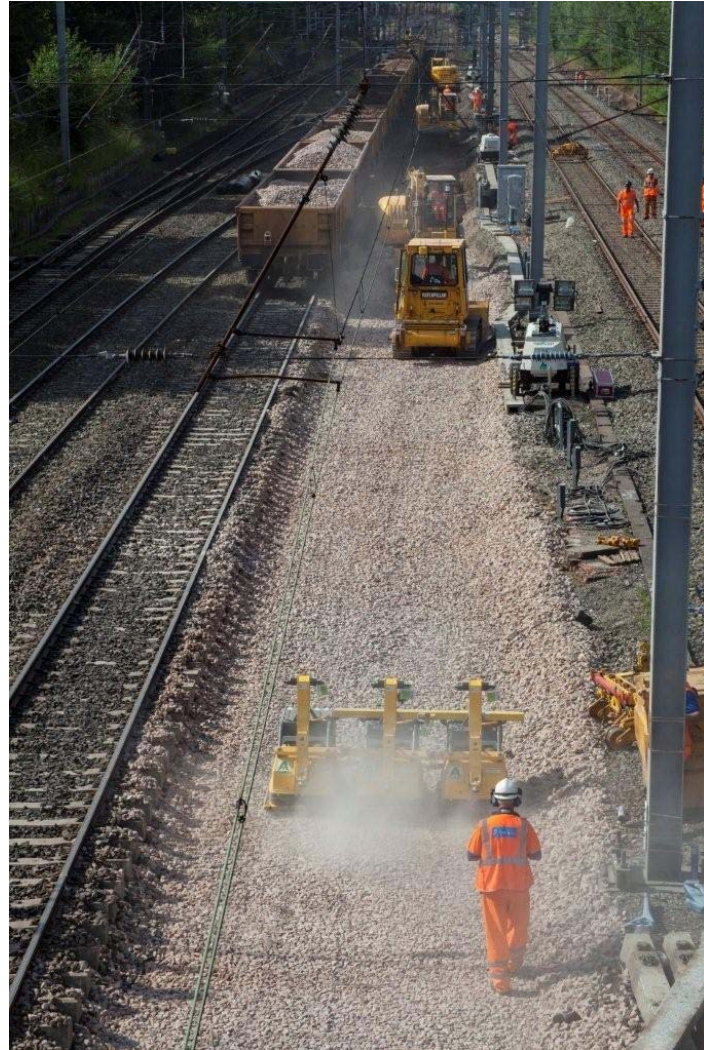
Do you have the correct protective equipment for the task?

everyone home safe every day

Produced in conjunction with the Ballast Dust Working Group (BDWG).



BDWG – New ballast



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BDWG – Quarry ballast washing



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BDWG – Water dousing at LDCs



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BDWG – Water dousing at LDCs



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BDWG – Exposure Monitoring



- Independent monitoring of 16 activities
- Results so far:
 - 10 activities monitored
 - 3 out of the 10 indicate a significant level of respirable quartz (0.06, 0.06 and 0.08mg/m³)



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BDWG – RPE

Assigned Protection
Factor:– FFP3



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BDWG – Site Controls



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BDWG – Move away if you're not involved with the task



Wear the correct Personal Protective Equipment

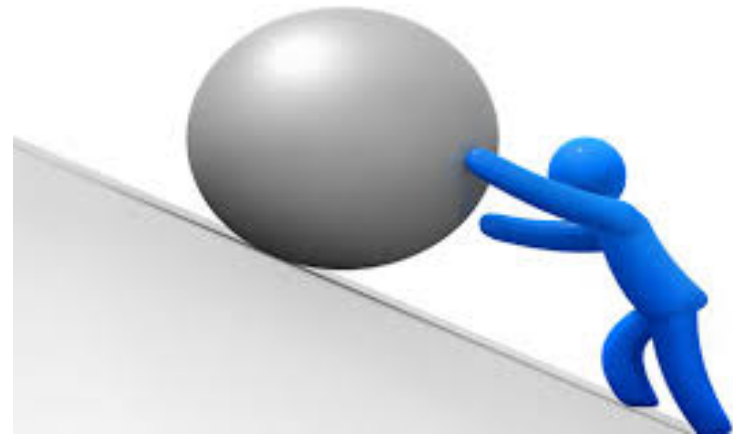


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BDWG – Challenges

- Water dousing & dust suppression
- Communication
- Focus
- Stockpiles and wagons
- Feedback – what is an acceptable level of dust?



BDWG – The next steps



- COSHH
- Quarries
- LDCs
- Site controls
- Communication



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BDWG – how you can help

- Visit <http://www.safety.networkrail.co.uk/Toolbox-for-Supervisor/National-Delivery-Service-NDS/Ballast-Dust-Working-Group> and familiarise yourself with the briefing material
- Communicate key messages to staff who work with ballast
- Use the COSHH risk assessments
- Arrange for RPE face fit testing
- Review and improve site controls to help reduce dust levels
- Use the feedback sheets and send them to bdwg@networkrail.co.uk



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Any Questions?