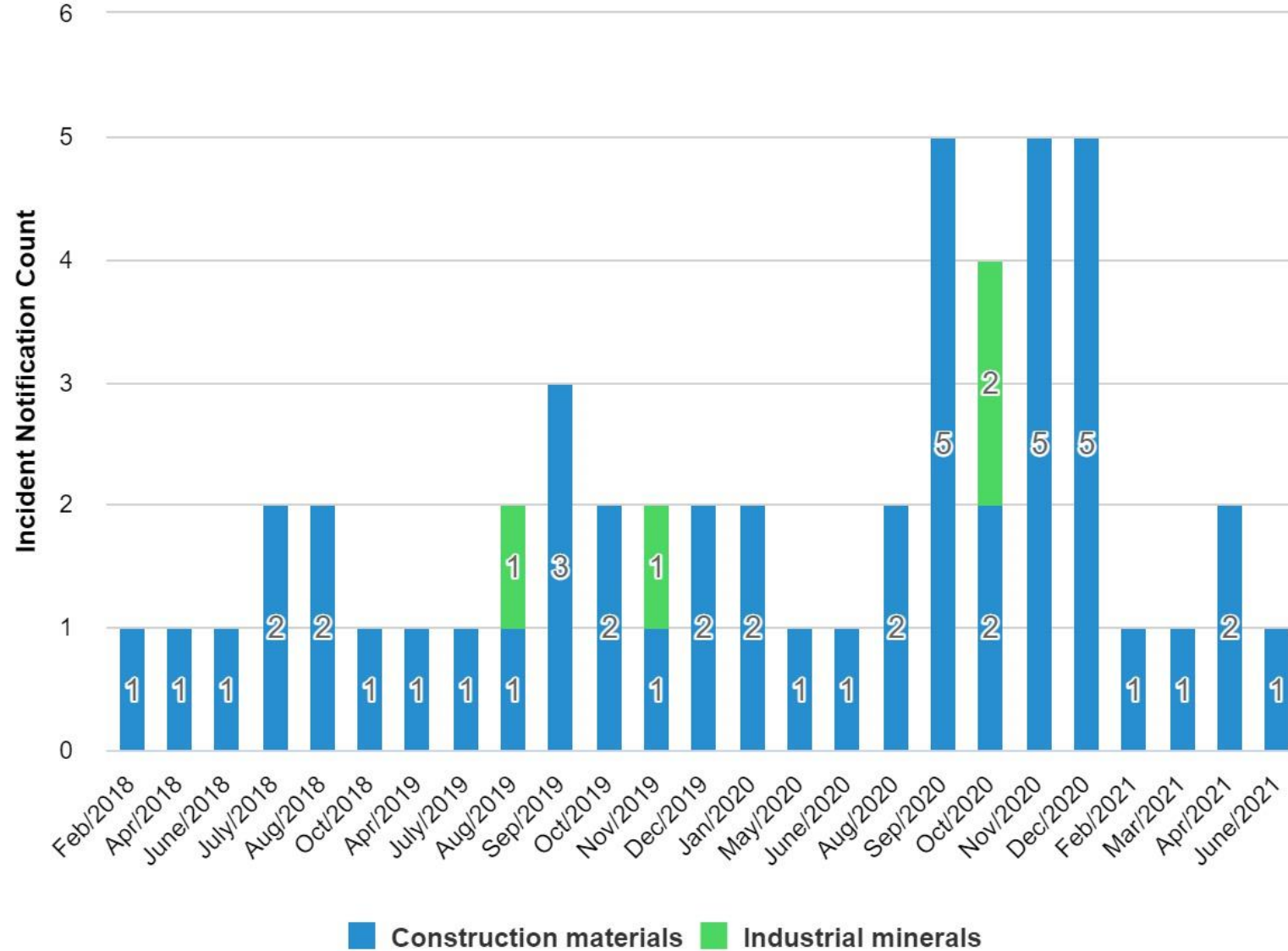


Dust Exposures

**Small Mine Safety Roadshow
February – April 2022**



Reported Dust Exceedances



Reporting Statistics

- Since 1 July 2020, mine operators have been required to report exceedances.
- All reported exceedances are assessed by the Resources Regulator's Central Assessment Unit.
- Further assessment may occur depending on:
 - the magnitude of the exceedance.
 - comprehensiveness of the review of control measures undertaken by the mine operator
- From the reports received we have found that the worker groups or similar exposure groups most represented are:
 - **maintainers working on fixed plant** and **control room operators.**

Personal monitoring is important

- WH&SR 2017 CI 49 – Must manage exposures
- WH&SR 2017 CI 50 – Must monitor if exposure is unknown.
- Monitoring personnel for dust exposures is the only way to understand the true extent of the hazard at your site!
- The information captured is powerful!
- Use this information to assist with a targeted approach to development of controls.
- Take small steps then check with monitoring to test effectiveness
- Report any exceedances.



Consideration of dust controls at Small Mines



- Monitor and know the extent of the problem. Where is the dust generated?
- Consult with workers when reviewing control measures.
- Consider the hierarchy of controls.
- Suppression options are often a practical solution.
- The ability to remove dust from clothing and mud from boots prior to entry into control rooms or cabins can greatly reduce exposures.
- Remember to keep your RPE fitted when de dusting.
- Regular cleaning of cabins and workstations is important.
- Use the right cleaning tools – wet vs dry

What controls have a positive effect

- Dust Extraction, when properly designed, professionally installed and well maintained is very effective.
- Extraction greatly reduces airborne dust at the source and also reduces the amount of residual dust that settles on surfaces keeping work environments far cleaner.
- Extraction systems won't work in every situation and are usually only seen in large crushing and screening plants that are enclosed in a building.
- Extraction can be cost prohibitive.



Effective controls continued



- Dust Suppression is also a proven control and can be very effective.
- Using water for suppression is relatively simple and cost effective.
- The best systems utilise high pressure misting sprays which greatly reduce airborne dust and do not lead to blockages or quality problems when you get the balance right.
- Water quality is very important and filters are required.
- The system must be regularly inspected and maintained to ensure that sprays are functioning correctly.
- You can enhance the effectiveness of your sprays by having enclosed chutes and transfer points.

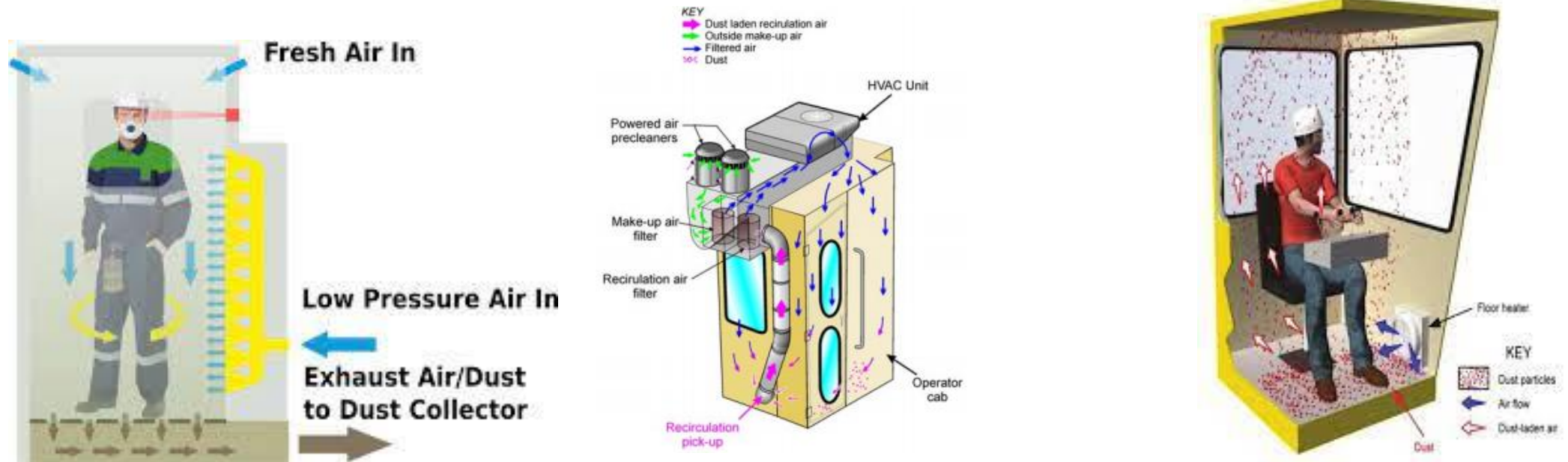
Effective controls continued

- Washdown dusty plant and equipment prior to conducting maintenance.
- Washing down plant greatly reduces exposures for maintainers.
- Washing down plant is another example of a cost effective control that yields good results.



Effective controls continued

- Keeping dust out of buildings and operator cabins is another way to reduce exposures.
- Giving workers the ability to remove dust from their clothes and mud from their boots will help keep dust levels inside greatly reduced.



Effective controls continued

- RPE – Respiratory Protective Equipment is still a very important part of your control suite.
- RPE must be selected to match the application.
- RPE must be fit tested.
- Education for workers in how to select, wear and care for RPE is important.
- A clear policy must be implemented that directs when and where and in which circumstances RPE is worn.
- Supervisors must ensure



Summary

- Monitoring saves money and time as you can target controls and focus on the areas that will yield best results and cost benefit.
- Report any exceedances, it is your legal obligation.
- Review effectiveness of control measures. (reassess)
- Consult with workers, educate your workers and empower them to act as appropriate.
- Monitor controls for effectiveness and ensure that they are maintained.
- The Resources Regulator will not loose focus on this issue.

