

# GOOD PRACTICES FOR QUARRY MOBILE PROCESSING PLANT

This sheet provides advice on the design and use of mobile processing plant in a quarry. Following the key points of this task guidance sheet will prevent personal exposure to the dust released into the air during quarry mobile plant processing, including rock crushing, screening, or the utilisation of conveyor belts.

## ACCESS

Restrict access to the work area to authorised personnel only.

## DESIGN AND EQUIPMENT

- If the mobile processing plant has a cabin, please refer to the task guidance sheet on 'Quarry mobile machine and equipment – excavation and haulage' (2.2.43).
- Please refer to the task guidance sheets **2.1.8**, **2.2.6**, **2.2.28**, which outline good practices for outdoor stockpiling, crushing and screening.
- Transfer points, screens and conveyors should be enclosed as far as possible and served with water suppression systems (check task guidance sheet **2.2.35**) and dust collectors (extraction systems).
- Where possible, timing of extraction and processing operations should coincide with the wetter seasons of the year, this will help to reduce airborne dust generation.
- Ensure that the equipment is designed and installed so as to be easily accessible for maintenance work.
- The control system of the mobile plant should allow to minimise presence of the workers in the exposed areas.
- Select appropriate mobile processing plants that are designed for optimal efficiency in the crushing operations in order to minimise dust generation.
- Where possible, the mobile processing plant should be placed in a position where dust generation is minimised.
- Where water-fed systems are used, take precautions to ensure the control of legionella and other biological agents in water storage and delivery systems.



## MAINTENANCE

- Ensure equipment used in the task is maintained as advised by the supplier/installer in efficient working order and in good repair.
- Replace consumables (filters etc.) in accordance with the manufacturer's recommendations.

## EXAMINATION AND TESTING

- Visually check the equipment at least once per week for signs of damage or, if it is in constant use, check it more frequently. If used infrequently, then check it before each use.
- Obtain information on the design performance of the dust suppression and/or extraction equipment from the supplier. Keep this information to compare with future test results.
- Keep records of inspections for a suitable period of time which complies with national laws (minimum five years).
- Check on a regular basis that extraction ducting and flexible hoses are not obstructed or damaged.

## CLEANING AND HOUSEKEEPING

- Clean your workplace on a regular basis (check task guidance sheet **2.1.1**).
- Use vacuum or wet cleaning methods.
- **DO NOT clean up with a dry brush or using compressed air.**

## TRAINING

- Give your employees information on the health effects associated with respirable crystalline silica dust.
- Provide employees with training on: dust exposure prevention; checking controls are working and using them; when and how to use any respiratory protective equipment provided and what to do if something goes wrong. Refer to task guidance sheet **2.3.4** (Training) and part 1 of the Good Practice Guide.

## SUPERVISION

- Have a system to check that control measures are in place and that they are being followed. Refer to task guidance sheet **2.3.3** (Supervision).
- Employers should make sure that employees have all the means to perform the checklist given below.

## PERSONAL PROTECTIVE EQUIPMENT

- Refer to task guidance sheet **2.1.15** dedicated to Personal Protective Equipment.
- Risk assessment must be carried out to determine whether existing controls are adequate. If necessary, respiratory protective equipment (with the appropriate protection factor) should be provided and worn.
- Provide storage facilities to keep personal protective equipment clean when not in use.
- Replace respiratory protective equipment at intervals recommended by its suppliers.

## EMPLOYEE CHECKLIST

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| <input type="checkbox"/> Make sure the equipment is working properly.  | <input type="checkbox"/> Look for signs of damage, wear or poor operation of any equipment used. If you find any problems, tell your supervisor.  | <input type="checkbox"/> Use handling aids when available.                                  | <input type="checkbox"/> Use, maintain and store any respiratory protective equipment provided in accordance with instructions. |
| <input type="checkbox"/> Make sure the dust extraction or water suppression systems is switched on and is working correctly. | <input type="checkbox"/> If you think there is a problem with your dust control equipment, ensure additional control measures are taken to reduce exposure to RCS while the problem persists. | <input type="checkbox"/> Clean up spills straight away. Use vacuum or wet cleaning methods. |   |
| <input type="checkbox"/> Check that the flexible hoses are in good condition.  |   | <input type="checkbox"/> Clean up the cabin using vacuum cleaning methods.                  |   |

This guidance sheet is aimed at employers to help them comply with the requirements of workplace health and safety legislation, by controlling exposure to respirable crystalline silica.

Following the key points of this task guidance sheet will help reduce exposure.

Depending on the specific circumstances of each case, it may not be necessary to apply all of the control measures identified in this sheet in order to minimise exposure

to respirable crystalline silica. i.e. to apply appropriate protection and prevention measures. This document should also be made available to persons who may be exposed to respirable crystalline silica in the workplace, in order that they may make the best use of the control measures which are implemented.

This sheet forms part of the Good Practices Guide on silica dust prevention, which is aimed specifically at the control of personal exposure to respirable crystalline silica in the workplace.