BEST PRACTICE

LOCATION: Company-wide
ACTIVITY: Occupational Health
SUB ACTIVITY: Air and dust
BEST PRACTICE No: BP2068

ARTICLE YEAR
COMPANY:
COMPANY LOCATION:
COMPANY TEL:

2019 Hanson Aggregates Companywide 0000

TITLE



RCS reduction - WINNER

COUNTRY OF ORIGIN:

ARTICLE

DESCRIPTION

One of the key health and safety priorities for Hanson is the effective management of RCS. A cross divisional working group was set up to focus on RCS reduction, they worked with RCS Steer Company, a specialist in this area. Over an 18 month period, they developed a comprehensive set of procedures to assist managers with the control systems to reduce exposure to RCS. The holistic approach adopted included investment in engineering solutions, training, occupational health monitoring and live real-time RCS monitoring.

Engineer Controls

Hanson invested £3 million as part of its programme to reduce RCS exposure, this included the following investments:

- Installation of a clean side/dirty side changing facilities
- Upgraded welfare facilities
- Installation of boot cleaners
- Installation of PPE/overall cleaning vacuum pods
- Personal air flow masks
- Processing plant misting and foaming systems
- Plant encapsulation and mobile plant mini vacuum cleaners
- Installing misting / foaming systems in primary crusher buildings
- Elimination of the potential exposure of RCS during the overall cleaning collection service by bagging all dirty
 overalls in dissolvable bags.

Training and Development

The majority of Hanson's managers and supervisors have been trained in the industry recognised MPQC Management of RCS, and all employees received internal awareness training.

Occupational Health Monitoring

750 employees were given a chest X-Ray. Identification of silicosis at an early stage significantly improves the prognosis for employees. In addition to detecting silicosis, 105 cases of other abnormalities were identified from the chest X-ray and were referred on to an appropriate medical professional for advice.

Live RCS Monitoring

Following the installation of the engineering controls and the evidence from the occupational health services, Hanson felt reasonably confident that the management controls for RCS were relatively effective.

However, RCS Steer Co, were concerned that the existing monitoring of the RCS levels was very retrospective, based on analysis of exposure over an extended period, the analysis of which often adding further delay. To effectively monitor actual exposure to RCS, a better monitoring standard was required.

In 2018, Hanson engaged in a trial of the world's first 'real time' Respirable Crystalline Silica monitoring device designed, patented and manufactured by Trolex Ltd.

The live RCS monitoring enables personnel to establish the levels of airborne RCS within a building prior to entering. Individuals can therefore determine the level of risk control required prior to entry or any tasks being completed.

The system also assists with the evolution of the engineering controls installed across the business, for example the misting/ foaming systems. Very accurate information can be gathered about the effectiveness of the control measures put in place.

BENEFITS

- Significantly enhanced control of RCS
- High level of employee awareness of RCS
- Early identification of health issues through X-Ray programme
- Real time data enables impact of investment to be accurately measured
- Management able to quickly identify and rectify any RCS black spots
- Employees know RCS levels in real time can select appropriate PPE before entry
- Providing gold standard for industry
- Improved health and wellbeing for all employees

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