A Case Study - Mine Site Hygiene and Compliance

TYPICAL MINE SITE ACCOMODATION

The Challenge

Mine site owners face many work place compliance challenges given the harsh operating condition in which they are established.

Ensuring all staff are accommodated in healthy surrounds provides a platform for improved culture and performance.

Aeris Environmental was asked to take on the project of providing a Deep Cycle Hygiene Maintenance on the split cycle air conditioning units in a remote site in far North Queensland.

The Goal

To provide a healthy living environment for all staff and to ensure compliance, and therefore minimise risk, for the company.

There is a need to ensure the Air Conditioning systems were maintained and serviced to meet the manufacturer's maintenance requirements. This ensures the product warranty would be upheld.

The specific regulatory requirements, while complying with work place code of practices, include:

- Australian Standard AS/NZS 1668.2-2012 and AS/NZS /3666.2.2011
- the person in control of the building has an obligation under Regulation 3.1 of the Occupational Safety and Health Regulations 1996 to (as far as practicable) identify the hazard, assess the risk of harm to health and consider suitable controls
- Code of practice 2011- A person conducting a business or undertaking who provides accommodation for workers and owns or manages the accommodation must, so far as is reasonably practicable, maintain the premises so that the worker occupying it is not exposed to health and safety risks
- WA Mines Safety and Inspection Act 1994-Under their general duty of care obligations, the employer providing accommodation for workers must maintain the premises, so the occupants are not exposed to hazards.

Breathing Easy with improved air quality and system performance

"I have been working on remote sites for – years IN HOT REGIONS THROUGHOUT AUSTRALIA and this is the first timethat I have seen such effective results from a room air conditioning service.

The freshness of the air in my room was noticeably different NOT TO MENTION THE PERFORMANCE OF AIR CONDITIONING UNIT. VERY IMPRESSIVE" – Steve

Remote sites have access challenges

Long travel distances and extended time away mean specialized people who need to be inducted and equipment needing to be tested and tagged should to be completed well in advance.

The Solution

A well-maintained Air Conditioner will provide a healthier environment for occupants who may suffer from allergies, asthma and sensitivity to odours.

The initial solution was to introduce the systematic method - Deep Cycle Hygiene Maintenance on the Split Air Conditioning units with an antimicrobial technology to safely remove all the visible dirt, debris and other contamination from the internal evaporator coils, fan scroll filters and outer casings.

The multi enzyme bio active cleaner thoroughly cleaned the unit.

To prevent premature recontamination a biostatic protective coating was applied. This is known as "treating" the unit.

Aeris partnered with Bechtel in the early stages of planning. Before the full deployment of the construction Fly Camp to introduce the Annual Deep Cycle Hygiene Maintenance on the Split Air Conditioning unit's for the long-term good of all parties involved in the project to ensure the continual wellbeing of all on site as well as maintaining a safe environment.

The Aeris site specific systems and work place health and safety protocols have been developed from decades of experience working with the mining and construction industry.

Due to the harsh conditions, and to maximize the air conditioning units' efficiency, the deep cycle maintenance of the outdoor compressor units was developed. This has been added and implemented to the program as part of the annual maintenance program.

The project teams were equipped with the latest technology in cleaning products and equipment.

Communication

- All project staff were fully inducted into the mine site ahead of time.
- All related cleaning and treatment products were risk assisted to ensure they met the sites environmental requirements.
- An Internal quality control system has been developed over many years to ensure the highest level service is delivered.
- Daily progress reports were submitted to the client's representatives to demonstrate the job would be delivered

  - **ON TIME**
  - **IN FULL**
  - **WITHIN SPECIFICATION**

The Results

The projects both Internal and External units, were completed with all KPIs being achieved

Oct 2017 18 days Deep Cycle Hygiene Maintenance of 532 Split Air Conditioning units – completed 2 days ahead of schedule.

Nov 2017 -22 days Deep Cycle Hygiene Maintenance of 876 Split Air Conditioning units – completed 4 days ahead of schedule

Dec 2017 8 days Deep Cycle Maintenance of 1317 Outdoor Condenser units

The project was completed without injuries, lost time or environmental issues. Aeris Environmental was committed to protecting the clients and staff from hazards while completing the project. All necessary health and safety regulations were strictly adhered to.

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