|  |  |
| --- | --- |
| **Topic entry (tick boxes that are applicable) 1  2 X 3  4  5  6  7**  **8** | |
| **Entry number (MPA Ref)** | 22076 |
| **Title of Entry** | Knowledge retention & safe systems of work by filming non-routine inspection |
| **Name of Company** | Breedon Cement Ltd |
| **Location** | Hope Cement Works |
| **Video**  **(if yes, please include URL for video)** | No |
| **Other resource**  **(if yes, please include description)** | 3 images |
| **Fatal Theme (tick boxes that are applicable) 1 X 2  3**  **4**  **5**  **6** | |
| **BACKGROUND** | |
| The task involved an internal inspection and NDT testing of a 5000ltr pressure vessel containing liquid CO2 forming part of the deluge system on the PF (coal) system. The vessel is internally inspected on a 5 year cycle and NDT testing on a 10 year cycle.  The internal inspection on this occasion combined both the 5 yearly and 10 yearly programme of works.  In planning for the task, we identified that documented procedures were not suitable and sufficient, and did not adequately cover all planning considerations (e.g. location of equipment, and physical constraints).  Due to the infrequency of the inspection, it was identified that there was a potential for a loss of knowledge that could not be captured by documentation alone. It was therefore decided, that the entirety of the operation would be documented on film, which would support a newly revised detailed written procedure.  This would ensure that in the event of a change of personnel, the knowledge would be retained within the business. | |
| **MANAGEMENT OF PROCESS** | |
| The planning for the task was managed by the Compliance Manager who is new to the business and is responsible for managing compliance to routine inspections under PUWER, LOLER, PSSR regulations.  Upon review of the documentation and procedures associated with the task, it was identified that these had areas that were not adequately detailed enough, and had previously been completed using a combination of the documented procedure and knowledge and experience.  The idea for committing the task to film in addition to reviewing and updating the associated documentation was formed by the Compliance manager and the Reliability team, which was then presented and supported by the Site management.  The purpose of documenting the procedures is to improve safety by clearly detailing the planning considerations, physical constraints, associated safety considerations and ensuring that the full scope of the inspection and maintenance work is captured in both visual and written form, ensuring that knowledge is captured and retained.  The entry supports the following MPA values;   * Empowerment – The idea came from those responsible who identified the need, found a potential solution and worked through the solution. * Zero Tolerance of Unsafe Working Conditions – The finished product now ensures that all aspects of the task are documented covering both health & safety as well as technical execution. Therefore on the next cycle of inspection, the detail is captured so no areas are missed.   Compliance – The execution aspect ensures that all areas of the inspection work is recorded ensuring full compliance on previous inspections. | |
| **BENEFITS** | |
| The benefits of recording tasks such as this ensures that working knowledge is retained within the business and is not lost due to personnel movements.  This benefits the business, employees, and contractor personnel in ensuring efficiency, health & safety, and compliance by fully capturing all aspects of the operation.  This solution is now being developed to capture infrequent and high-risk tasks and will be further progressed to depict more routine tasks and inspections. This can be used, not only as knowledge retention, but for future training purposes.  The combination of renewed and detailed documentation alongside a filmed record creates a safer working environment by ensuring all aspects are fully documented, and increases competency of those responsible for and involved in the task | |
| **INNOVATION** | |
| Within the business, our process training and development programme uses video material extensively, together with a detailed library of SOP’s, however this idea has never been extended to routine maintenance and inspection tasks.  This solution represents innovation in developing this idea and extending it to other areas of operation to ensure that knowledge and learning is retained to ensure safe systems of work and risks are captured and minimised.  This represents a willingness to improve from a compliance, health & safety, and efficiency aspect of each task. | |
| **DEVELOPMENT & TRANSFERABILITY** | |
| As previously stated, there are currently plans being formulated to extend this solution to other non-routine & semi routine tasks, to enhance the documentation library and to retain knowledge within the business.  The idea also has some scope, but to a lower extent, of being extended across the wider cement business and across the Breedon Group, however, at this point, a risk based approach is being taken to capture high risk and infrequent operations. | |
| **NB if document has embedded images try and include these**  **If other documents provided say additional information available.** | |