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| **Topic** | Safer maintenance and housekeeping |
| **Entry number (MPA Ref)** | 2024134 |
| **Title of Entry** | OB30 Bi fold guarding |
| **Name of Company** | Blue Phoenix Ltd |
| **Location** | Cleveland |
| **Video**  **(if yes, please include URL for video)** | No |
| **Other resource X (if yes, please include description)** | 2 images |
| **Fatal 6 Theme** | 1. Contact with moving machinery and isolation |
| **BACKGROUND** | |
| The processing of incinerator bottom ash creates a challenging environment due to its high humidity levels. The stringent standards of housekeeping enforced on site, necessitate regular jet washing and cleaning procedures to maintain safety and efficiency.  Concerns arose regarding the guarding system's complexity during maintenance tasks, particularly its removal when changing the belt. The original framework exacerbated the issue, especially with corroded and seized bolts and tabs, necessitating cutting. Additionally, the various-sized panels posed further challenges and prolonged maintenance timescales.  To address these concerns, discussions were held with all site operatives to devise a solution that would streamline the task and ensure safety and practicality. Various design options were considered, and after careful evaluation, the decision was made to adopt bi-folding guarding.  The design features continuous guarding around the entire unit, eliminating the need for removal. It can be easily opened when necessary and securely fastened after completion of work. This approach not only simplifies maintenance tasks but also enhances safety by providing uninterrupted protection. | |
| **MANAGEMENT OF PROCESS** | |
| The guarding system had been a significant topic of discussion for some time, and efforts had been made to address issues and improve the situation. However, despite these attempts, problems persisted with the removal of guards and their durability in the challenging environment.  Due to concerns regarding the integrity of some guards, it became evident that a more robust solution was needed to ensure the safety of workers and the efficiency of maintenance tasks.  Recognizing the need for a comprehensive solution, the site team leader proposed a design that addressed the issues raised. This proposal was discussed with site management, and it was agreed that it presented a viable solution to the ongoing challenges.  The matter was escalated to senior management, who provided invaluable support and guidance. Extensive research was conducted to explore alternative options and find the most suitable approach to resolving the issue.  The recommended design was communicated to a fabrication company and translated into a detailed design. Fabrication took place off-site to ensure precision and efficiency.  Meticulous planning and execution ensured that the new guarding system would meet the site's specific requirements and effectively address the identified issues. By utilising a fabrication company, it was guaranteed that the design would be implemented with the highest quality materials and craftsmanship.  Throughout the process, safety remained a primary focus, with careful consideration given to the durability and effectiveness of the new guarding system. By addressing safety concerns and improving the efficiency of maintenance tasks, a safer working environment was created whilst minimizing downtime and optimizing operational efficiency. | |
| **BENEFITS** | |
| The bi-fold guarding system offers several significant benefits, primarily its ease of use during maintenance tasks. The design allows for effortless opening and securing, streamlining the process and reducing downtime.  The nature of the design allows for full access to the overband magnet and hard to get to areas. The guarding mitigates any risk and contact with moving parts and is a vital section in process plant safety. This enhanced accessibility facilitates maintenance procedures and improves overall operational efficiency.  By effectively mitigating the risk of contact with moving parts, it helps create a safer working environment for all personnel. This is particularly vital in ensuring compliance with health and safety regulations and reducing the likelihood of workplace accidents.  The implementation of the new guarding system demonstrates to site staff that their concerns are taken seriously and acted upon. By addressing their feedback and implementing practical solutions, we enhance safety and foster a culture of open communication and continuous improvement. Overall, the bi-fold guarding system significantly contributes to the efficiency, safety, and well-being of the workforce. | |
| **INNOVATION** | |
| The introduction of the new guarding design exemplifies innovation and adaptability in addressing health and safety challenges on site. It showcases a willingness to listen to colleagues and explore new designs aimed at making tasks easier and safer for staff.  It demonstrates a commitment to innovate, improve, and share ideas with other sites within the organization, fostering a culture of collaboration and continuous improvement across all locations. This enhances safety on site and drives positive change throughout the company. | |
| **DEVELOPMENT & TRANSFERABILITY** | |
| We are pleased with the significant improvement achieved through the implementation of the new guarding system and intend to extend its use to other overband magnets within our facility.  Guarding plays a pivotal role in controlling the "fatal 6" hazards, and innovation is crucial in reviewing and enhancing existing guarding systems.  Furthermore, the success of this new guarding design has been shared throughout company, both nationally and globally. This sharing of ideas and best practices ensures that all sites in the organization benefit from innovative solutions to similar challenges. It demonstrates a commitment to fostering innovation and collaboration in the company. | |
| **NB if document has embedded images try and include these**  **If other documents provided say additional information available.** | |