OSART Good Practices MAINTENANCE Material condition

Tihange, Belgium

Mission Date; 17 Apr. - 4 May., 2023

The plant had developed a system called 'WESTI' to track mobile equipment and low-level radioactive waste and to aid the management of storage areas and associated fire loads.

Purpose

The purpose of the system was to track the storage of low-level radioactive waste and mobile equipment and to manage the build-up of combustible material in storage areas.

Description

The system was composed of a mobile scanner supported by a user-friendly application, barcode stickers, and a docking station to synchronize the device and desktop interface to set up the application. One of the goals of the application was to easily locate mobile equipment. Different properties can be assigned to the mobile equipment to provide more relevant information, such as the owner, type of equipment, maintenance requirements etc. The device can also record important information for the storage of low-level radioactive waste and the storage of combustible material at designated storage locations.

An important feature was the provision of up to three pictures for every item of equipment, which aided the assessment of any hazards. This feature was particularly valuable in the case of containers or closed boxes. The use of this device had improved safety, enhanced fire protection and radiation protection measures.

Supporting details and examples:







Benefits:

- Easy to use mobile interface with a high-quality barcode scanner.
- The system can be developed to meet the needs of the plant.
- Mobile devices are available for all teams and also in the tool stores (about 150 devices on site).
- The desktop interface offers flexibility so that the application can be adapted to each user's needs due to the versatility of the software.
- Photographs can be taken with the device and then linked to the profile created in the system.
- For fire protection, the fire load at any particular storage location can be estimated and then compared with the admissible load.
- For radiation protection, the dose is estimated and assigned to each waste bag. If a waste bag is incorrectly classified, the owner of the waste bag is given coaching.
- For safety, the accurate location of mobile equipment supports effective configuration management.
- In addition, the use of these devices has resulted in an overall improvement in plant housekeeping.