Background

The safeguarding of low-activated radioactive waste must be guaranteed during storage in a nuclear power plant (NPP) or interim storage.

Normally the protected area of a NPP or interim storage fulfills the plant security requirements on safeguarding. Low radioactive waste is stored on the site of a nuclear power plant in simple storage facilities, such as standard containers.

Unauthorized persons are denied access to the radioactive waste by ensuring that the storage device is arranged within the protected area of the nuclear power plant. The protected area fulfills the security requirements and regulations as prescribed by the respective legislator.

If the protected area is reduced during the dismantling of a nuclear power plant, the radioactive waste needs to be separately protected if they are being stored outside the protected area.

Description

The MoniCon system transforms a standard container with various detection components into a monitored container for storage.

The walls and doors of the container are monitored for opening and penetration. In addition, the interior can also be monitored by means of motion detectors.

The container is connected to an on-site distributor by a standard industrial connector home area network (HAN).

In this distributor, the monitoring components can be connected on an existing burglar alarm system.

If more than one container is needed, multiple industrial connector HANs can be connected to the on-site distributor.
Benefits

- Storage areas for other radioactive substances can be created in the short term.
- In principle, the MoniCon can be connected to any intruder alarm system.
- By means of an industrial connector HAN, several MoniCons can be connected to an on-site distributor and connected to the burglar alarm system.

Deliverables

MoniCon is a flexible monitoring system which can be adapted for any container size. The following components are included:

- Technical detection of
  a. walls
  b. doors and
  c. interior space
- On-site distribution box
- Industrial connector between MoniCon and distribution box
- Increased resistance class of container (optional)

Experience

The Westinghouse Plant Security group, with more than 30 years of experience, provides periodic verification of plant security by utilizing combined safety and security competencies as a one-stop shop to decrease customer efforts and costs.