

BEST PRACTICE 3

- **Brief outline of the asbestos related topic:**
 - **Activity:** Asbestos removal in power station
 - **Place:** municipalities of San Adrián de Besós and Badalona (Barcelona)
 - **Date:** 2012-2013
- **Background:** The owner, Endesa, decided the demolition and dismantling of the old power station located in Besós, built in the 70s and whose activity ceased in 2011.
- **Description:** The works were executed by the specialized company Demoliciones y Reciclados, and consisted basically of two phases; Phase 1 consisted of an inventory of materials which contained asbestos and work planning, and phase 2 was the removal of materials distinguishing non-friable and friable asbestos.

The presence of non-friable asbestos was detected: asbestos-cement roof, walls and tanks; asbestos-cardboard in joints without damage; vinyl-asbestos floor. Friable asbestos was also detected in insulation materials of hot spots related to the process of electricity generation (boiler, turbine, connections); cords or damaged asbestos joints; even stockpiles of asbestos containing materials were found.

For the removal of friable asbestos materials, bubbles in depression were installed (plastic structures confining the workspace), whose dimensions were calculated through innovative mathematical methods. Also an amalgamating liquid was injected onto friable materials to avoid the generation of fibres during removal.

For decontamination of workers, modules with 3 and 5 bodies were used. Asbestos waste were carefully packaged, labelled and delivered to an authorized waste company.

- **Comments:** The work had two special difficulties; on one hand the owner of the facility did not know the location of materials containing asbestos, and on the other the concurrence of demolition and dismantling works complicated its planning.
- **Conclusions:** Before working on facilities which are suspected to contain asbestos (due to their activity and year of manufacture/construction), is crucial to perform an exhaustive inventory in order to determine the location of these materials and their characterization.

Friable asbestos materials have a higher hazard due to their ease for releasing fibres. Therefore, their handling requires the implementation of special working methods.

- **Pictures**



- **Sources/links:**

http://www.adrp.es/cms/files/ADRP_Premio_Descontaminacion_2013_DYR.pdf