

→ Reducing risks of dangerous industrial activities

Country Turkey

Project title Risk reduction of dangerous industrial activities in residential areas

Twinning Municipality of Amsterdam (the Netherlands)
Kocaeli Metropolitan Municipality (Turkey)

Project period 1 August 2008 to 30 October 2009

Project budget € 43.136,54

Project objective

To reduce risks of industrial activities on residential areas by improving the quality of services and capacity of the Kocaeli Fire Brigade in the field of hazardous materials.

Project summary

The problems of inadequate training of the Fire Brigade and a much needed risk assessment in a highly industrialized city was conducted.

Core information

Kocaeli Metropolitan Municipality has a population of about 1,500,000 people. It is one of the largest industrialized areas in Turkey, home to both local, and foreign investors. It is the location of Turkey's biggest oil refinery: Tüpras. Out of various industrial sectors, chemical plants are in the lead by 28%. Kocaeli is also a major centre for research and development activities. Kocaeli lies on a very active fault line and therefore is under serious risk. The Fire Department functions under Kocaeli Metropolitan Municipality.

Problem analysis

Although the Kocaeli Fire Brigade has much of the materials needed for incidents with hazardous materials at its disposal, it did not have any specialists on hazardous materials (hazmat). Hazmat training of both specialists and the firemen in general was needed. The staff had insufficient knowledge on industrial risks. Knowledge of environmental safety and risk assessment was urgently needed in Kocaeli because of the close proximity of residential areas to dangerous industrial installations. Information on life saving procedures in the case of chemical disasters needed to be conveyed to the public.

Project implementation

In the project preparation phase, an inventory of industrial activities and risks was created, including the existing information in Kocaeli. The second step was

to evaluate Turkish law and regulations on industrial safety, in comparison with their Dutch counterparts. Further, a safety inspection orientation was organized in the Netherlands. On return, a risk analysis for a number of high risk industrial installations in a pilot area of Kocaeli was carried out. The following step was the determination of the training and public awareness programs based on the outcome of the pilot area risk analyses. Training of the trainers on Hazmat was provided as well as training of the Kocaeli Fire Brigade. A public awareness campaign was organised to inform citizens in residential areas close to the industry in the pilot area on risks and life saving procedures in case of accidents. With the assistance of muhtars and school associations, housewives and school children were reached. In cooperation with the Turkish Association of All Firemen (TIB) and other Dutch and Turkish municipalities, a one-day seminar was conducted to share project results.

Process management

With this project, Kocaeli Fire Brigade has extended its fast improvement in the recent years. As the twinning partner, the municipality of Amsterdam took on the responsibilities of providing the required training for the firemen as well leading the effort in risk analysis in the pilot area. The public awareness campaign has been the responsibility of the Kocaeli Fire Brigade, with the assistance of muhtars.

Recommendations: do's and don'ts

- Determine the capabilities/weaknesses of the fire brigade.
- Identify the industrial activities and related risks in the area.
- Establish a safety inspection procedure in line with the law.
- Determine training needs.
- Run public awareness activities.