

# TACKLING THE ASBESTOS PROBLEM – IN WAR AND PEACE

At least 30 buildings - industrial, agricultural and residential - were hit by rockets during the Second Lebanon War, from mid-July to mid-August 2006. The total area of the asbestos buildings damaged is estimated at 25,000 square meters. Without doubt, these hits carried a high financial and personal price, but they carried an additional cost as well: health impacts which may only become evident decades from today. The destruction of cement-asbestos buildings released asbestos fibers into the air which, if inhaled, carry the risk of lung disease, mesothelioma and other cancers.

## Measurements and Costs

Samples tested during the war for the presence of asbestos fibers in buildings destroyed by direct or nearby missile hits indicated high concentrations of asbestos in the air. For example, in a bedroom in Moshav Tel Al, 2300 asbestos fibers/m<sup>3</sup> were measured (in comparison to a current guideline value of 1400 fibers/m<sup>3</sup> for ambient exposure to asbestos, scheduled to be reduced to 1000 fibers/m<sup>3</sup> in the near future).

The financial costs of professionally treating every damaged asbestos building, including disposal of the waste material, pumping, burying the waste material and destroying contaminated equipment, were also far from negligible – running into many tens of thousands of shekels. For example, the cost of treating asbestos damages caused to the asbestos roof of a carpentry shop in Kiryat Ata, in a 1000 square meter area, was 250,000 shekels (\$60,000), with the cost of installing a replacement roof reaching one million shekels (\$240,000).

### Asbestos Training Course in Israel

*On March 11-15, 2007, two EPA asbestos experts participated in meetings and site visits and conducted a two-day workshop on asbestos in Israel. The aims of the workshop were to share technical knowledge regarding investigating and evaluating the potential for asbestos contamination in the environment and within buildings and to learn how asbestos is investigated and evaluated within Israel. The workshop highlighted that Israel is on par with the US on asbestos related issues – including procedures, regulations, work methods, sampling and more.*



## What did the Ministry of Environmental Protection Do?

With the outbreak of the war in July 2006, the Ministry of Environmental Protection organized quickly with guidelines to Israel's emergency and rescue services (Police and Firefighters) on safe asbestos treatment, designed to minimize the potential dispersion of asbestos fibers and the exposure of professionals and residents. Among requirements:

1. Asbestos contractors were equipped with protective equipment.
2. Damaged buildings were demarcated and closed off, with entrance prohibited to residents or to anyone not adequately protected.
3. A certified asbestos expert was appointed to implement immediate actions aimed at minimizing fiber dispersion, treating and disposing of the waste, pumping fibers from the structure, and more.



Encapsulation to prevent asbestos release/photo: Shai Pe'er

In parallel, the Ministry of Environmental Protection published newspaper ads (in both Hebrew and Arabic) calling on anyone whose asbestos property was damaged by rocket hits to apply to the Property Tax office and to treat the structure according to stringent asbestos



Missile hit of carpentry with asbestos roof/photo: Shai Pe'er

treatment and removal guidelines. The State of Israel, by means of the Property Tax bureau, fully funded the treatment of damaged asbestos structures.

## Tackling the Asbestos Cement Problem in Israel

Alongside funds for the treatment of asbestos-containing buildings which were damaged during the recent war, the risks associated with some 100 million square meters of asbestos cement in industrial buildings, agricultural structures, roofs of private buildings, educational institutions, parking areas and army camps throughout the country cannot be underestimated.

Therefore, in December 2006, the Ministry of Environmental Protection issued a call for proposals to local authorities for the removal of asbestos cement roofs from public buildings throughout Israel (one million shekels).

Out of 51 proposals which were submitted, the Ministry of Environmental Protection approved the requests of 27 local authorities to remove asbestos cement roofs from 114 public buildings throughout Israel, spanning an area of 40,857 square meters.

But that's not all. The Ministry of Environmental Protection will allocate additional funds to local authorities for removing asbestos cement roofs from public buildings, especially educational institutions, within the framework of another call for proposals in 2007. The aim, according to Tamar Bar-On, director of the Hazardous Dust Division, is to further reduce the potential for exposure, especially among children.



Direct missile hit of asbestos roof/photo: Zeev Varga

