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ENVIRONMENTAL ISSUES
VOLCANIC VS. WATER, LAND AND AIR POLLUTION RISKS

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The 2001 municipal solid waste (MSW) disposal problem evidenced another risk in the Vesuvius area. As the MSW landfills at Tufino (near Naples) and Parapoti (near Salerno) closed, two million people of 152 local communities had nowhere to dispose 3,000 tons of household and commercial waste produced each day and by late March the 100,000 tons of accumulated garbage on city streets became a public health concern. Even the local organized crime could not dispose this much waste into illegal dumps surrounding Vesuvius and several mayors come under legal investigations.

The population opposed opening of incinerators in fear of contaminating the polluted air even more and the public health problem reached a critical stage. A temporary solution came from Germany which allowed its highly efficient incinerators to burn the waste from Campania and thus a risky health problem was avoided for the time being. By transporting MSW to Germany by trains is expensive and there is always a risk that the local organized crime will not be happy of loosing a significant economic benefit associated with poor environmental risk management.

Like the volcanic risk, the risk to public health from municipal and chemical wastes contaminating the water, land, and air ecosystems has the potential of producing unprecedented crises in the Vesuvius area. The shear volume of volcanic material erupted from a large-scale eruption (5-10 km^3 in 20 hours) and high concentrations of hazardous chemicals (lead, hydrocarbons, and nitrogen oxides associated with vehicle exhausts and industrial processes; pesticides and herbicides associated with agricultural applications to food and crops; heavy metals arsenic, aluminum, and mercury in soil and water contaminated with industrial processes; lead in household paints; carbon monoxide from incomplete combustion of fossil fuels; dioxins, PCB's, and other persistent organic chemicals associated with industrial operations) that can pose serious public health problem call for an effective environmental policy for the territory. In a security conscious environment such risk problems are minimized and the VESUVIUS 2000 project has the potential of producing such an environment for the Vesuvius area.