

ENVIRONMENTAL, HEALTH, AND ECONOMIC EFFECTS OF ILLEGAL DUMPING

Environmental.

Illegal dumping can disrupt natural processes on land and in the water. Dumping can interfere with proper drainage of runoff. Areas are more susceptible to flooding when waste blocks ravines, creeks, culverts, and drainage basins. In rural areas, burning at dump sites can cause forest fires and severe erosion as fires burn away trees and undergrowth. The run-off from improper disposal of toxic substances such as motor oil or household cleansers can contaminate lakes, streams, and drinking water supplies.

Dumping also has a negative impact on plants and wildlife. Many birds and small animals die after ingesting or becoming entangled in debris. Fish and other aquatic species are killed when decomposing litter and food wastes in streams deplete oxygen supplies in the water. Refuse in a stream can also clog fish spawning areas.

Dumped appliances are not only an eyesore, but can also release toxic chemicals. Refrigerators and freezers may release chlorofluorocarbon (CFC) into the air, harming the earth's protective ozone layer. Improperly discarded appliances built before 1979 may also leak polychlorinated biphenyls (PCBs) into the soil. According to the EPA, PCBs can cause cancer, reproductive failure and hormone imbalances in animals and humans.

Health.

Appliances are a special danger for small children. Older refrigerators and freezers may look like fun forts or houses to kids, but they can easily become trapped inside. Other physical hazards to both children and adults include the risk of cuts and infections from protruding nails and sharp edges. There may also be less noticeable chemical hazards from toxic fluids or dust.

Sites which include scrap tires are ideal breeding grounds for mosquitoes. The insects can breed 100 times faster than normal in the warm, stagnant water which collects inside the tires. Some of the mosquitoes can carry life-threatening diseases such as Dengue Fever, Yellow Fever, and Encephalitis. Other insects, rodents, and additional animals attracted to dumps may also pose health risks.

As mentioned previously, illegal dumps are also frequent sites for fire, either by spontaneous combustion or arson. The fires are extremely dangerous for those living in the area and especially for the fire fighters responsible for putting out the flames. Dumps can contain old aerosol cans or gas cans which can explode. Discarded chemicals from households and farms can also give off toxic smoke.

Economic.

The presence of illegal dumps results in a decrease of neighborhood property values. The community as a whole also becomes unattractive to prospective commercial and residential developers. The loss of commercial development is especially damaging in poor counties where the unemployment rate is high and new employment opportunities desperately needed. Also, without the tax revenues that accompany development, the funding available to establish and maintain effective illegal dumping prevention programs is limited.

The costs faced by local governments to continually clean up illegal dump sites are significant. Some areas have spent up to several million dollars each year for clean up, hauling, and

disposal activities. The expense can then be passed to residents in the form of higher service fees or property taxes.

Information for this fact sheet was compiled by Project Green Sweep using documents from the EPA (www.epa.gov/region5/dmpguide.htm), Keep America Beautiful (www.kab.org), and the Athens City-County Health Department (www.seorf.ohiou.edu/~xx100/mosquito.htm).

Project Green Sweep, funded by the Ohio EPA Environmental Education Fund, is a citizen's campaign against illegal dumping in Scioto County. To find out how you can get involved with Project Green Sweep, call Rachael Hoy at 740-597-2507. For more information on illegal dumping and what you can do to keep your own neighborhood clean, call the Scioto County Health Department at 740-354-3241.

