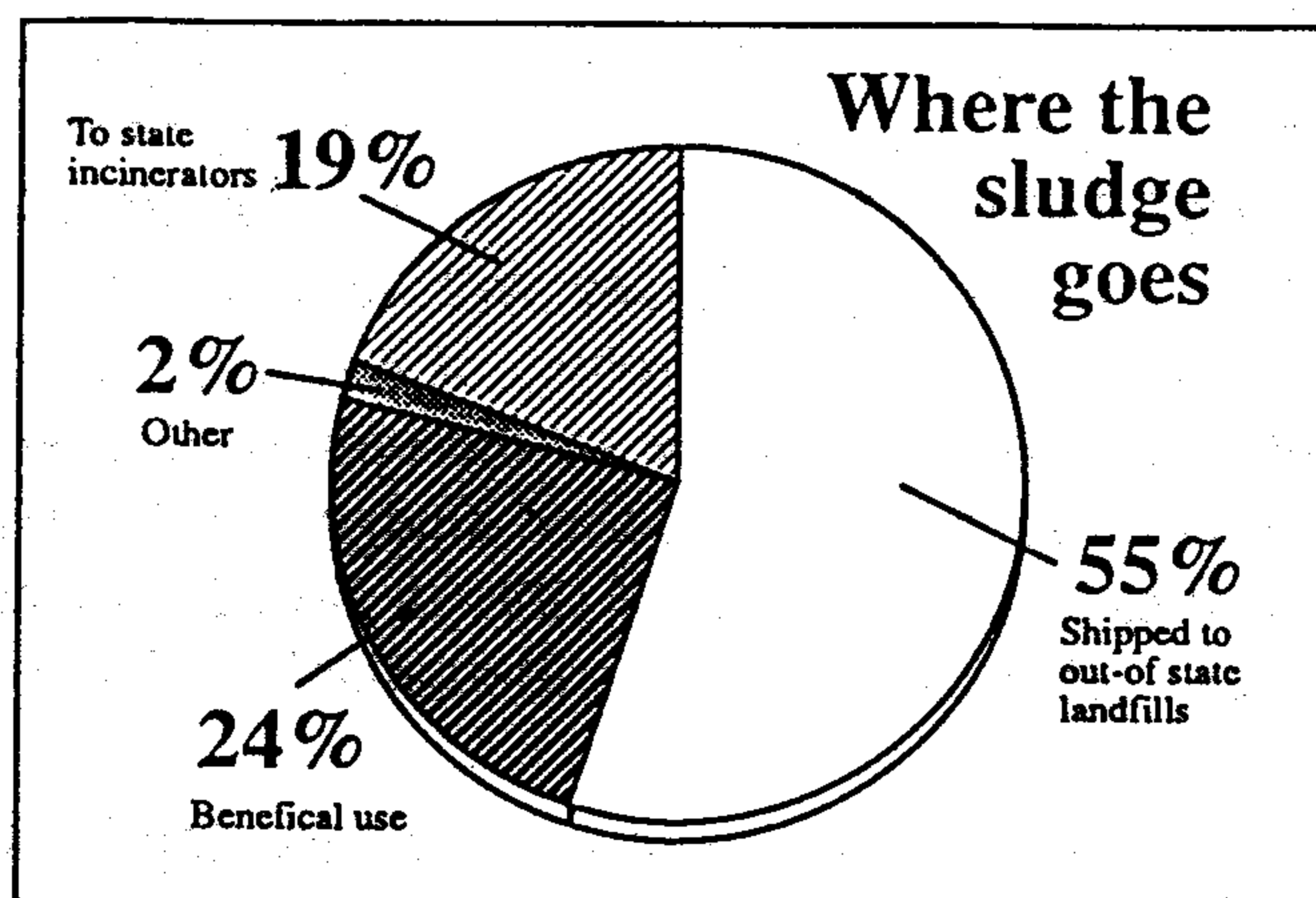


- **Incineration** of sludge reduces the volume of the biosolids and may allow for recovering energy. Incinerators must be properly designed and operated to avoid odors or air pollution.

In 1993 New Jersey uses the following methods in these proportions: 57.1% of the sludge is shipped out of state to landfills, 19.4% of the sludge is reduced in incinerators, 23% is beneficially used as soil conditioning products and directly land applied and .5% is disposed of in other ways (see pie chart). There are 451 wastewater treatment plants in New Jersey which generate 330 thousand dry tons of sludge per year.



#### D. Regulation of the Wastewater Treatment and Sludge Treatment Process

Wastewater treatment plants in New Jersey are regulated by the **New Jersey Pollution Discharge Elimination System (NJPDDES)**. The NJPDDES Program is designed to prevent, control and correct water pollution by limiting the type and quality of pollutants that can be discharged. The quality parameters are established by the state. Under the NJPDDES program each discharger must have a permit to operate from the New Jersey Department of Environmental Protection and Energy which has the responsibility to oversee the operation. The permit is a legal document agreement between the State of New Jersey and the permittee. It outlines the kinds and the amounts of the pollutants that can be discharged. The permittee agrees to protect the waterway by complying with the terms of the permit. The permit limits are based on two things:

1. Limits are calculated based on the kind of treatment plant used to process the wastewater. Modern secondary plants remove about 90% of the Bio-chemical Oxygen Demand (the biodegradable organic material) and 90% of the Suspended Solids (the solids that can be filtered from the wastewater) that are found in the wastewater.