

# HOLDING TANKS

## DEFINITION

A **holding tank** is a watertight receptacle used to hold wastewater prior to being removed from a property. Permanent holding tanks are included in the 1985 regulations; they provide an alternative for property owners with lots recorded prior to April 8, 1984 who were denied on-site septic systems due to unsuitable soils or an inability to meet isolation distances from wells or shellfish waters. Temporary holding tanks are permitted to allow property owners in established sewer districts an alternative to installing on-site septic systems that will become abandoned when central sewer service became available.

The area has become saturated with holding tanks for two reasons.

1. The majority of the holding tank permits are being issued repeatedly in the same developments since many subdivisions have lots with poorly drained soils and inadequate lot sizes. Holding tanks do not deter potential buyers of these building lots, because they are cheaper to install than an elevated sand mound.
2. The holding tank regulations apply to any development recorded prior to April 8, 1984 regardless of when the subdivision is actually developed. Consequently, at least one person developed two prerecorded subdivisions and obtained a total of 81 holding tank permits. Both developments were sold off as land/home/septic system packages.

### *Examples of the use of holding tanks:*

- ◆ One subdivision, developed in 1987, consists of 48 lots. The developer obtained 36 permanent holding tank permits, due to poorly drained soils. Today, many of these tanks have structural problems and need to be replaced. Groundwater infiltration, grey water lines, illegal pumping and lack of maintenance are evident when evaluating annual pump-out records and performing inspections.
- ◆ Another subdivision, developed in 1989, consists of 88 lots. The developer obtained 45 permanent holding tank permits due to poorly drained soils. An investigation in 1992 revealed 28 grey water violations in the development. In addition, three years of water consumption records for 38 lots were compared with the pump-out records. Total water usage (including water used for watering lawns, etc.) was calculated at 2,787,000 gallons with pump-out records accounting for 648,275 gallons transported to a wastewater treatment plant for proper disposal. The figures indicate that less than 24% of the wastewater generated was transported to the facility.

## WATER QUALITY IMPACTS & TYPICAL LOADINGS

There are 278 holding tank permits, 244 permanent and 34 temporary, issued in the Inland Bays/Atlantic Ocean Basin. Of the permits, 257 are issued within the basin's shellfish waters, as defined by the Groundwater Management Section. Approximately 85 tanks will be eliminated when Sussex County's Ocean View and Cedar Neck sewer becomes available; however, the number of temporary tanks issued in the two districts is expected to increase before this happens. Projected sewer completion dates are January 2001, for Ocean View and December 2001 to January 2002, for Cedar Neck.

Holding tanks are designed to be watertight; however, it is evident from on-site inspections and complaints from property owners that they are not. Few homeowners replace a leaking tank until the toilet backs up.

## MANAGEMENT TECHNIQUES & TYPICAL REDUCTIONS

- Establish a large permitting or impact fee for holding tank permits. At this time, the cost of installing a holding tank is in the same range as a standard gravity system (\$3500) and far less than a typical elevated sand mound (\$6000 to \$8000). Some property owners and potential buyers actually request the holding tank and are unhappy if required to install an elevated sand mound.
- Require all holding tank permittees to record a notice on their deed that the property is served by a holding tank. Prior to settlement, the seller would be required to provide a copy of the valid holding tank permit to the potential buyer. All delinquent renewal fees would have to be paid prior to transfer. Immediately after settlement, the settlement attorney should notify the Department that a sale has taken place. The Department would then be provided with the name and address of the new owner and a copy of the notice placed on the new owner's deed.
- Require property owners to exhaust every option—alternative septic system, pre-treatment, building a smaller dwelling—before permitting a holding tank. If an alternative were available, then no holding tank permit would be approved.
- Place a moratorium on the issuance of permanent holding tanks in any subdivision not yet developed but meeting the recordation date. If the soils in the development are poorly drained or lot sizes too small for septic systems and wells, then a community system or central sewer would be required.
- Place a moratorium on the issuance of permanent holding tanks in developments that are being served by an increasing number of tanks. This would apply to developments that are physically close to a treatment plant.
- State Revolving Fund money and support should be targeted for existing developments to improve their current condition—including developments that have real or extreme environmental need due to poorly drained soils, non-conforming systems, and density issues.
- Plan a central sewer system or a large community septic system for the area being developed.

## TYPICAL COSTS

Pumping a holding tank costs as high as \$200 per 2000 gallons; homeowners find ways to limit the cost. A family of four using 200 gallons per day would fill a 2800-gallon tank in 14 days. Thus pumping costs are high and could cost over \$5000 per year.

## IMPLEMENTATION ISSUES

- ❑ Evidence has shown that many properties with holding tanks have grey water lines installed—sending effluent directly into the ground. Some owners purposely crack the bottom of the tank to facilitate drainage, while others illegally pump the tanks out onto the ground.
- ❑ When the properties are sold, such as in the case of the subdivision mentioned, many buyers are not given an accurate representation of the holding tank and the operation and maintenance conditions, specifically the annual renewal requirement.
- ❑ Additionally the Department is not notified of property transfers; therefore, the Department must do research each year in order to update the renewal list and contact the current property owners (who are usually unhappy with their purchase).

### INLAND BAYS WATERSHED

*This fact sheet was prepared by the Delaware Department of Natural Resources and Environmental Control's Whole Basin Team, at the request of the Inland Bays Tributary Action Teams, for citizens and stakeholders interested in one of Delaware's most environmentally and economically attractive areas—the Inland Bays and its surrounding lands, surface and ground waters.*

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