F I S C A L I M P A C T R E P O R T

SPONSOR Trujillo **ORIGINAL DATE** 2/14/07 **LAST UPDATED** **HB** 802

SHORT TITLE Liquid Waste Disposal System Tax Credit **SB**

ANALYST Francis

REVENUE (dollars in thousands)

Estimated Revenue			Recurring or Non-Rec	Fund Affected
FY07	FY08	FY09		
		(525.0)	Recurring	General Fund

(Parenthesis ( ) Indicate Revenue Decreases)

SOURCES OF INFORMATION
LFC Files

Responses Received From
Taxation and Revenue Department (TRD)
New Mexico Environment Department

SUMMARY

Synopsis of Bill

House Bill 802 enacts a credit against personal income tax liability for the purchase and installation of advanced treatment on-site liquid waste disposal systems. The credit cannot exceed $1,500 and can be carried forward for up to three years if the credit exceeds tax liability. The system must comply with NM Department of Environment (NMED) regulations and be installed by an NMED qualified contractor. The Taxation and Revenue Department (TRD) will require a certificate issued by the NMED.

The effective date is January 1, 2008.

FISCAL IMPLICATIONS

Fiscal impacts were calculated by TRD:

Representatives of the NMED estimate that approximately 300 of the types of systems affected by the proposed measure are purchased annually, but also state that 300 may be a

conservative estimate. The $525,000 figure above assumes credits for 350 of the units are claimed annually. NMED representatives also state that 1) the types of systems likely to qualify for the proposed credits typically cost in the neighborhood of $8,000 to $10,000, but sometimes cost as much as $20,000; 2) the units are usually installed on rural residential lots that make use of leaching fields when disposing waste; and 3) systems are often required by local regulations.

SIGNIFICANT ISSUES

NMED:

Septic systems are the leading source of groundwater pollution and have impaired 355 river miles in New Mexico. Advanced liquid waste treatment systems must be installed in order to protect water quality and public health at sites that have limitations such as inadequate lot size, set back to wells or streams and clearance to bedrock or ground water. The purchase and installation costs for advanced treatment systems are approximately two to three times more than conventional (septic tank) liquid waste systems. NMED issues approximately 400 Liquid Waste Permits each year for advanced treatment systems.

PERFORMANCE IMPLICATIONS

NMED reports that the credit should increase compliance with the Liquid Waste Regulations which will protect the water supply in the state.

ADMINISTRATIVE IMPLICATIONS

NMED reports that there should be no significant administrative costs associated with certifying the credits. TRD reports that they would need a quarter-FTE to create/modify the necessary forms and instructions and collaborate with NMED on the certification process.

OTHER SUBSTANTIVE ISSUES

TRD has provided excellent background for the issues revolving around the provision of this credit:

The proposed tax credit provides $1 in tax relief for every $1 spent – up to $1,500 -- on wastewater treatment systems. This $1,500 is provided at no cost to the taxpayer. In contrast, benefits of a tax deduction, which reduces taxable income and therefore reduces liabilities only by an amount equal to the tax rate times the amount of the deduction. For this reason, tax credits are usually set at a rate of less than 100 percent of the associated expenditure. This approach requires the taxpayer to commit some portion of the costs, which reflects the fact that most of the benefits will accrue to the taxpayer. Benefits to the state are usually expected to be only a fraction of the benefits to the taxpayer.

Illustration: Sewer Treatment Systems[1]

Preliminary Treatment:
Preliminary treatment to screen out, grind up, or separate debris is the first step in

[1] Source: http://ohioline.osu.edu/aex-fact/0768.html

wastewater treatment. Sticks, rags, large food particles, sand, gravel, toys, etc., are removed at this stage to protect the pumping and other equipment in the treatment plant. Treatment equipment such as bar screens, comminutors (a large version of a garbage disposal), and grit chambers are used as the wastewater first enters a treatment plant. The collected debris is usually disposed of in a landfill.

Primary Treatment: Primary treatment is the second step in treatment and separates suspended solids and greases from wastewater. Wastewater is held in a quiet tank for several hours allowing the particles to settle to the bottom and the greases to float to the top. The solids drawn off the bottom and skimmed off the top receive further treatment as sludge. The clarified wastewater flows on to the next stage of wastewater treatment. Clarifiers and septic tanks are usually used to provide primary treatment.

Secondary Treatment: Secondary treatment is a biological treatment process to remove dissolved organic matter from wastewater. Sewage microorganisms are cultivated and added to the wastewater. The microorganisms absorb organic matter from sewage as their food supply. Three approaches are used to accomplish secondary treatment, fixed film, suspended film and lagoon systems.

Fixed Film Systems: Fixed film systems grow microorganisms on substrates such as rocks, sand or plastic. The wastewater is spread over the substrate, allowing the wastewater to flow past the film of microorganisms fixed to the substrate. As organic matter and nutrients are absorbed from the wastewater, the film of microorganisms grows and thickens. Trickling filters, rotating biological contactors, and sand filters are examples of fixed film systems.

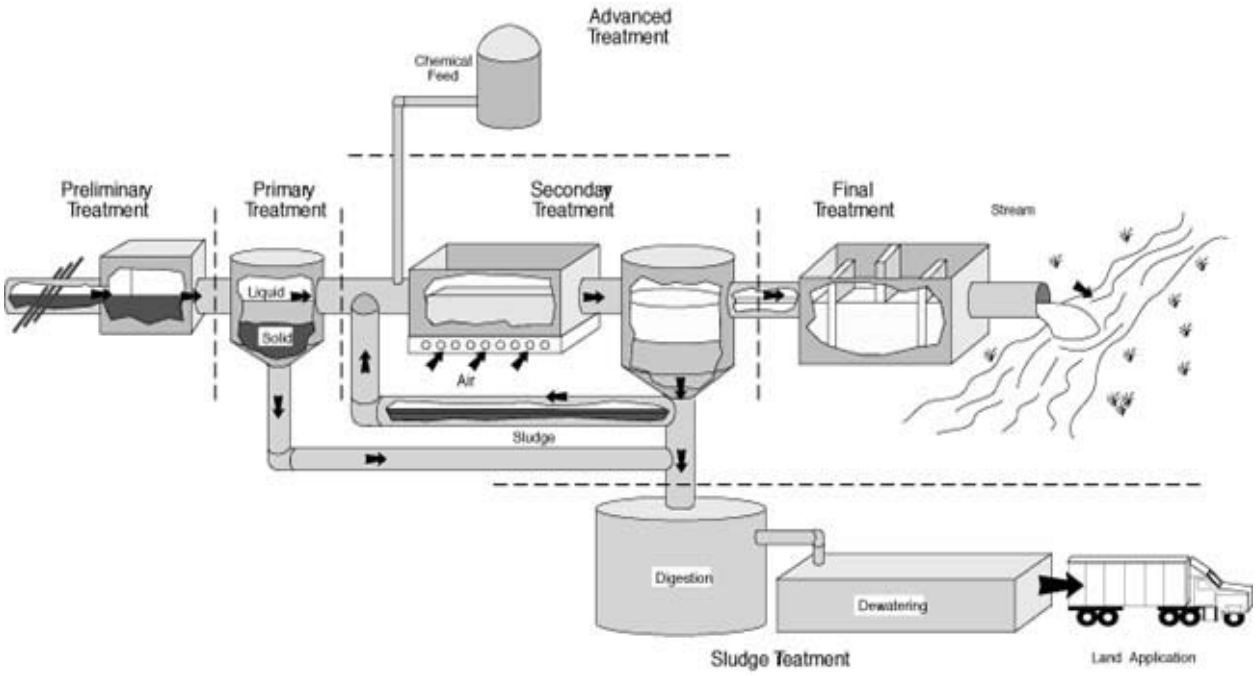
Suspended Film Systems: Suspended film systems stir and suspend microorganisms in wastewater. As the microorganisms absorb organic matter and nutrients from the wastewater they grow in size and number. After the microorganisms have been suspended in the wastewater for several hours, they are settled out as sludge. Some of the sludge is pumped back into the incoming wastewater to provide "seed" microorganisms. The remainder is wasted and sent on to a sludge treatment process. Activated sludge, extended aeration, oxidation ditch, and sequential batch reactor systems are all examples of suspended film systems.

Lagoon Systems: Lagoon systems are shallow basins that hold the wastewater for several months to allow for the natural degradation of sewage. These systems take advantage of natural aeration and microorganisms in the wastewater to renovate sewage.

Final Treatment: Final treatment focuses on removal of disease-causing organisms from wastewater. Treated wastewater can be disinfected by adding chlorine or by using ultraviolet light. High levels of chlorine may be harmful to aquatic life in receiving streams. Treatment systems often add a chlorine-neutralizing chemical to the treated wastewater before stream discharge.

Advanced Treatment: Advanced treatment is necessary in some treatment systems to remove nutrients from wastewater. Chemicals are sometimes added during the treatment

process to help settle out or strip out phosphorus or nitrogen. Some examples of nutrient removal systems include coagulant addition for phosphorus removal and air stripping for ammonia removal.



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