



**New Mexico Environment Department
Liquid Waste Program
Annual Report
Fiscal Year 2009 (July 1, 2008 to June 30, 2009)**

October 1, 2009



Executive Summary

This report describes the history and current status of the New Mexico Environment Department (“NMED”), Environmental Health Division (“EHD”), Liquid Waste Program (“Program”) and summarizes Program budgets, fee revenues, expenditures, performance and direction.

The Legislature has set three performance measures for the Program:

- percent of new or modified liquid waste systems inspected (currently set at 85%);
- number of free well water tests provided (currently set at 1000); and
- number of compliance orders issued (no set number).

During Fiscal Year 2009 (“FY09”), 93% of new or modified liquid waste systems were inspected, exceeding the performance measure of 85% by 8%. A total of 1,687 free well water tests were provided, exceeding the performance standard of 1000 tests, and 22 Compliance Orders were issued, which is more than for any previous year.

The number of Liquid Waste Permits and Registrations issued is influenced by the rate of new home construction/expansion and property transfers. FY07 saw a peak in liquid waste permits and registrations at 7880; the number has been significantly declining with 4,836 permits and registrations approved 4,836 in FY09. The decline in permits issued has resulted in a concurrent decline in fee revenues collected. While liquid waste activities consume a major amount of staff time for EHD health programs (staff also performs Food and Pool safety and mosquito abatement activities), the liquid waste fee revenues provided only 6.3% of expenditures in FY09.

Program accomplishments during FY09 include:

- Issuance of 4,225 permits for new or modified systems and 611 registrations;
- Performance of 6,802 inspections, including 3,910 new or modified systems that received one or more inspection;
- Passage of Senate Bill 30 in the 2009 Legislature that creates infrastructure for a statewide program to provide assistance to indigent households served by substandard liquid waste systems;
- Review of fees charged by contiguous states for similar permits and services;
- Proposed amendments to the Liquid Waste Regulations and draft procedural regulations for the review and approval of liquid waste treatment and disposal technology;
- Continuation of an enforcement initiative, in coordination with the Construction Industries Division of the Regulation and Licensing Department, against unlicensed or improperly licensed contractors;
- Revisions to the Liquid Waste Permit Database improving efficiency for Program personnel and improved service to the public;
- Collection of 447 private domestic well water samples for rigorous inorganic chemical analysis by Los Alamos National Laboratory (LANL); and
- Provision of local training workshops for installers.

During FY10, the Program plans to:

- Continue to seek funding to provide assistance to indigent households served by substandard liquid waste systems;
- Propose amendments to the Liquid Waste regulations and take them to public hearing before the Environmental Improvement Board (EIB);
- Propose procedural regulations for review and approval of liquid waste technology and take them to public hearing before the NMED Secretary;
- Collaborate with LANL on water well testing events in Espanola and Farmington using the methodology developed in Santa Fe;
- Impose more stringent requirements for areas in fractured bedrock terrain pursuant to 20.7.3.201.M, NMAC; and
- Revise the Program operations manual.

Program Description

The NMED Environmental Health Division (EHD) administers several health-based programs including liquid waste, food, pools and mosquito abatement.

The Liquid Waste Program is responsible for the permitting and inspection of on-site wastewater treatment and disposal systems that are designed to receive and do receive less than 2000 gallons per day of domestic liquid waste. The history of the Program is summarized in Appendix A. The current Program operates under the authority of the Environmental Improvement Act, NMSA 1978, §§ 74-1-1 *et seq*, which created the Environmental Improvement Board (“EIB”) and authorized it to promulgate Liquid Waste Regulations. The EIB has promulgated the Liquid Waste Treatment and Disposal Regulations, 20.7.3 NMAC, and the Liquid Waste Treatment and Disposal Fees Regulations, 20.7.11 NMAC.

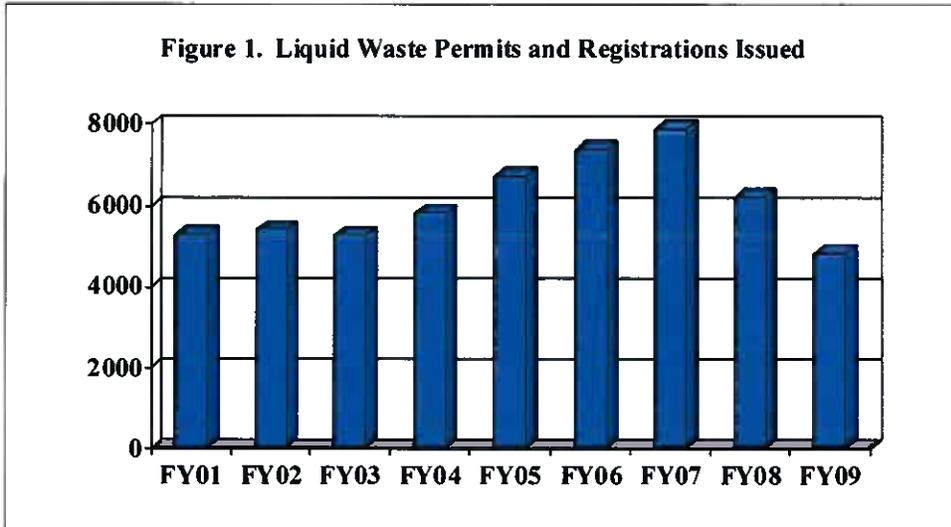
The Program is administered by ten core employees (Appendix B) whose duties are primarily liquid waste. Five of the core employees oversee statewide aspects of the Program; the remaining five are assigned to each of the Districts where they provide technical support to homeowners, installers and field office employees. Additionally, forty-five Environmental Scientists along with management and administrative support staff who have duties that include, but are not limited to liquid waste, are stationed in the twenty-two District and Field Offices statewide.

The Liquid Waste Program is funded by three sources:

1. general fund;
2. corrective action fund; and
3. liquid waste fee revenue.

The liquid waste permitting workload since FY01 is shown in Figure 1. The permit workload increased from FY03 through FY07. Part of this increase was due to the property transfer inspection regulations that became effective on September 1, 2005. As a result of these inspections, numerous un-permitted liquid waste systems were discovered and were either issued registrations or were replaced with modern permitted systems. The number of

liquid waste permits and registrations has declined since FY07. We believe this decline is due to reductions in new home construction, home expansions and property transfers related to national economic conditions.



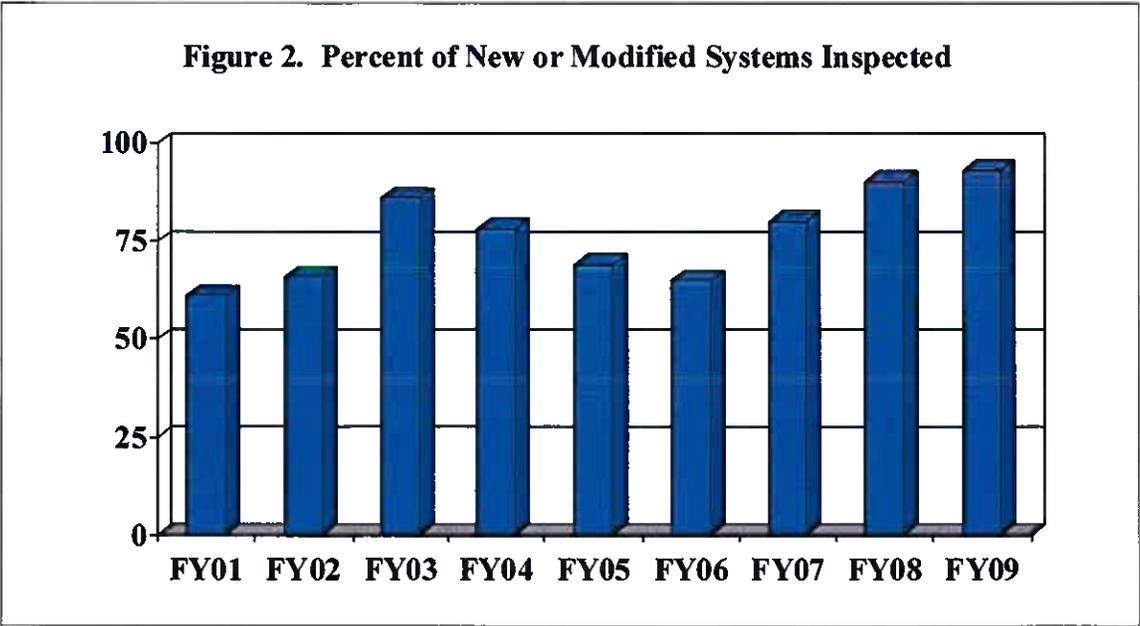
Program Performance Measures

The Legislative Finance Committee and the Office of the Governor have established performance measures for all programs in NMED. The Liquid Waste Program has three performance measures:

1. percent of new or modified liquid waste systems inspected (currently set at 85%);
2. number of free well tests provided (currently set at 1,000); and
3. number of compliance orders issued (no set number).

Percent of New or Modified Liquid Waste Systems Inspected

The primary public concern supporting imposition of liquid waste fees was the demand that a higher percentage of systems be inspected by NMED. This concern was raised both before the Legislature and the EIB. In FY01, NMED was only inspecting sixty-one percent of liquid waste system installations and modifications. Increasing the percentage of inspections increases the level of compliance with the Liquid Waste Regulations and provides installers, homebuilders, realtors and homeowners with documentation and a level of comfort that new or modified systems comply with the Regulations. The percentage of inspections (Figure 2), therefore, is a very important measure of Program performance.



After the EIB promulgated the Permit Fee Regulations, NMED created 5 new District Liquid Waste Specialist positions (Appendix B) in its five districts to increase the number of inspections. We believe that the substantial increase in inspections in FY03 (Figure 2) resulted largely from the new district staff positions that were created and filled in FY02 and FY03. The 2007 Legislature approved a general fund expansion request that created additional Field Office positions whose duties include liquid waste.

During FY09, NMED inspected 93% of new or modified liquid waste systems (Figure 2), an all-time high that exceeded the performance measure of 85% by 8%. We believe that two factors contributed to this high level of performance: the additional general fund positions for NMED Field Offices that were authorized by the 2007 Legislature and a decrease in permitting workload (Figure 1).

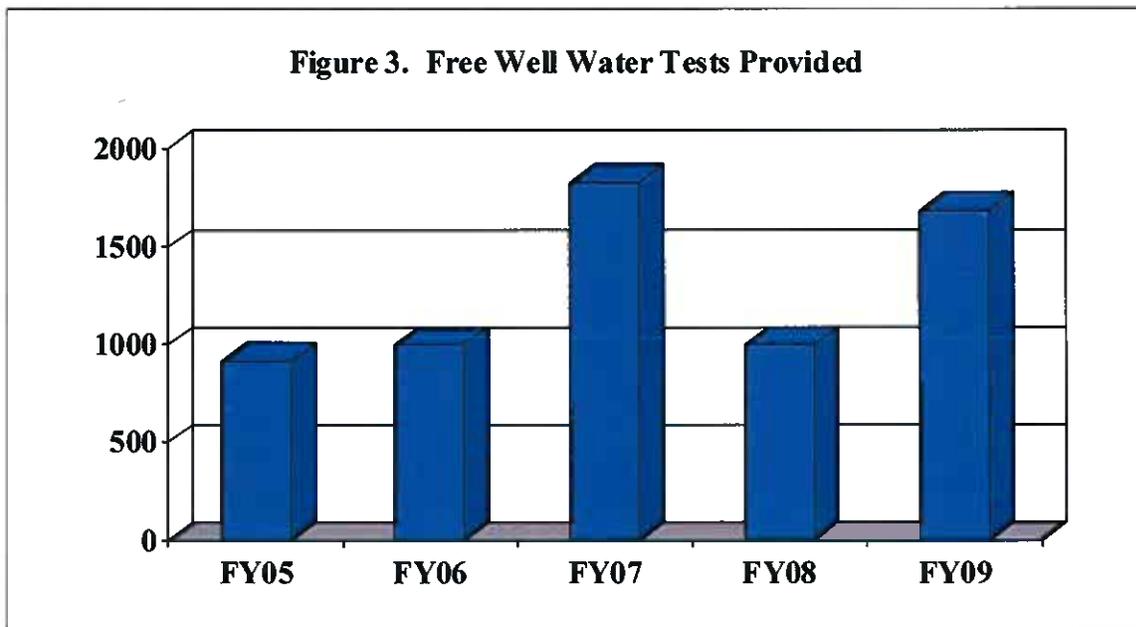
Since 2003, the twenty-two NMED Field Offices have been given a directive to get their inspection percentages as close to 100% as possible. Many offices are at or near 100%. However, since there is typically a lag time between permit approval and system construction, and since some permitted systems are never actually constructed, the performance measure will not reach 100% for any given year based on the current method of calculation approved by LFC and DFA.

Number of Free Well Tests Provided

Free well testing is an important and mutually beneficial service that NMED provides to the public. Unlike public water supply systems, the quality of private domestic well water is not subject to the monitoring requirements and protection of the federal Safe Drinking Water Act and the N.M. Drinking Water Regulations. The free tests conducted by NMED inform domestic well owners about the quality of their drinking water, and provide the Liquid Waste Program with data about ground-water quality

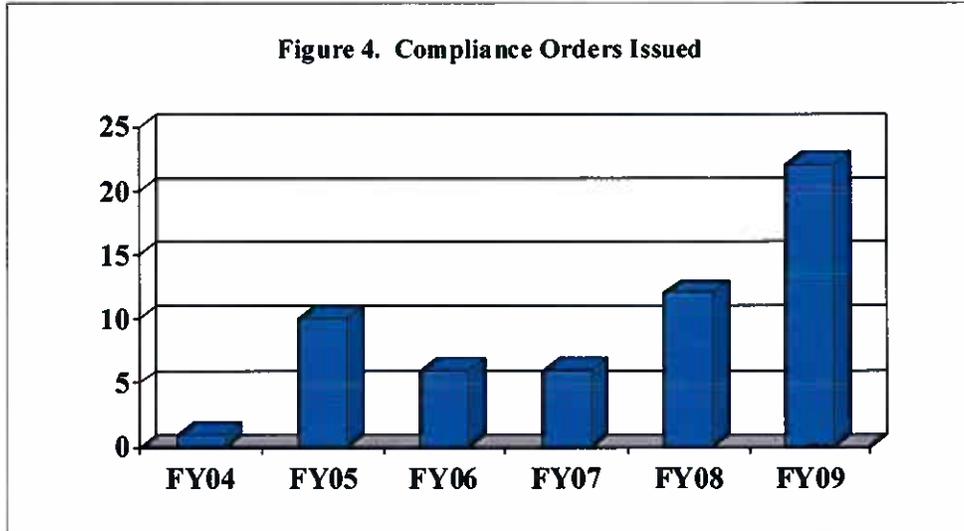
statewide. In fact, NMED has discovered many new cases of ground-water pollution through the free well testing program. When polluted wells are discovered, NMED experts counsel the well users and advise them of their options for water treatment, acquisition of alternative water sources or other ways to protect their health and property. Free well testing is available on a walk-in basis at all twenty-two NMED Field Offices statewide, and during Water Fairs that are scheduled throughout the state.

NMED provided 1,687 free well tests during FY09 (Figure 3), exceeding the performance standard of 1,000 tests. This performance measure is influenced by the number of Water Fairs NMED offers and on the public's request for testing.



Number of Compliance Orders Issued

NMED issues Compliance Orders (COs) to unlicensed contractors, to licensed contractors who violate the Liquid Waste Regulations and to property owners for serious violations that are not resolved through requests for voluntary compliance. The first CO in the history of the Program was issued in FY04. Since COs are issued on an as-needed basis, the performance measure does not specify a given number of COs that must be issued each year. In FY09, NMED issued 22 COs (Figure 4), which is more than in any previous year. This increase in COs for FY09 reflects an enforcement initiative that NMED has launched against unlicensed and improperly licensed contractors, in cooperation with parallel enforcement actions by the Construction Industries Division (CID) of the Regulation and Licensing Department.



Liquid Waste Fee Revenues

The Legislature amended the Environmental Improvement Act in 2000 to authorize the collection of “on-site liquid waste system fees that are no more than the average charged by the contiguous states to New Mexico for similar permits and services...” NMSA 1978, § 74-1-7.A(3). The EIB promulgated Liquid Waste Treatment and Disposal Fees regulations, 20.7.11 NMAC, which became effective on February 1, 2002.

Liquid Waste Fund revenues, expenditures and end-of-year fund balances carried into the next fiscal year are listed in Table 1 and shown in Figure 5. An unobligated fund balance of \$69,800 (unaudited) is to be carried over from FY09 into FY10 (Table 1).

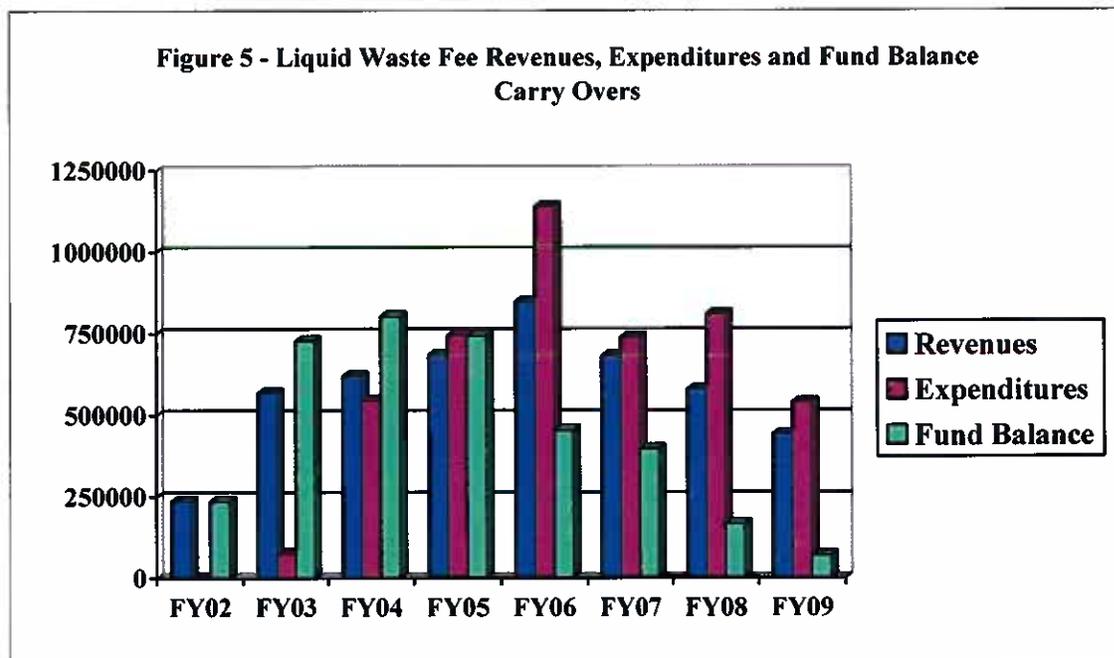
Table 1. Liquid Waste Fee Revenues, Expenditures and End-of-Year Fund Balances and Carryover.

Fiscal Year	Revenues Collected	Expenditures	End-of-Year Fund Balance and Carryover (Adjusted*)
FY02	235,900	0	235,900
FY03	567,200	74,900	728,100
FY04	619,700	545,200	802,700
FY05	684,700	744,900	742,400
FY06	847,700	1,139,100	454,500
FY07	680,900	738,300	397,100
FY08	578,500	809,500	166,000
FY09**	442,300	538,500	69,800

* Actual carryover amounts sometimes differ slightly from the sum of revenues minus expenditures after post-audit adjustments are made to incorporate all revenues collected and all expenditure payments made.

** Unaudited amounts

Figure 5 - Liquid Waste Fee Revenues, Expenditures and Fund Balance Carry Overs



FY09 EHD expenditures for the Liquid Waste, Food, Pool and Environmental Health Bureau Core Programs and for the twenty-two NMED Field Offices (grouped in the five districts) are listed in Table 2 and illustrated in Figure 6. While liquid waste activities are a major use of staff time, liquid waste fee revenues provided only 6.3% of expenditures (Figure 6).

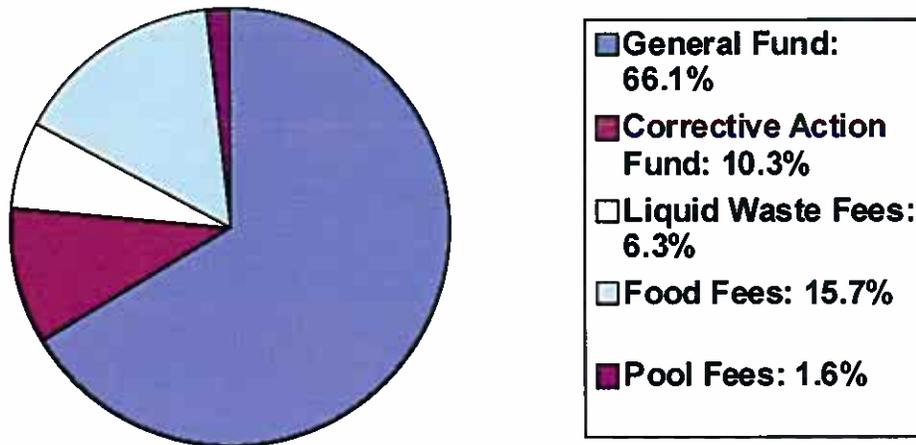
Table 2. FY09 EHD Expenditures for District Offices and Liquid Waste, Food and Pool Core Programs.

FY09 Expenditures						
	GF	CAF	LW Fees	Food Fees	Pool	Total
LW Core	\$0	\$0	\$351,811	\$0	\$0	\$351,811
Food Core	\$0	\$0	\$0	\$274,705	\$0	\$274,705
Pools Core	\$0	\$0	\$0	\$0	\$105,606	\$105,606
EHB Bureau	\$231,007	\$0	\$7,853	\$54,765	\$10,206	\$303,831
D1	\$781,813	\$176,771	\$21,352	\$160,730	\$0	\$1,140,666
D2	\$1,510,652	\$202,695	\$0	\$191,730	\$0	\$1,905,077
D3	\$1,182,520	\$216,283	\$19,361	\$153,915	\$0	\$1,572,079
D4	\$1,004,988	\$166,995	\$38,402	\$194,208	\$0	\$1,404,593
D5	\$933,243	\$114,780	\$28,073	\$130,497	\$0	\$1,206,593
Indirect	\$0	\$0	\$71,631	\$179,884	\$19,533	\$271,048
Total	\$5,644,223	\$877,524	\$538,483	\$1,340,434	\$135,345	\$8,536,009

GF – General Fund

CAF – Corrective Action Fund

**Figure 6. FY09 EHD Program Expenditures
\$8,536,009**



Expenditures from the Liquid Waste Fee Fund during FY09 are categorized in Table 3.

Table 3. FY09 Expenditures for Liquid Waste Fee Fund.

Category	Amount
Salary and Benefits	\$380,004
Contracts	14,290
Operating Expenses	72,558
Indirect	71,631
Total Expenditures	\$538,483

Program Highlights in FY09

Work continued on the pilot project for Dona Ana County, in coordination with the Construction Programs Bureau. NMED worked with the Espanola Basin Regional Issues Forum, and with the Professional Onsite Wastewater Reuse Association of New Mexico to support the passage of Senate Bill 30 (SB-30) during the 2009 Legislative Session. SB-30 was signed into law by Governor Richardson and creates the infrastructure for a statewide assistance program.

NMED performed a review of fees charged by contiguous states for similar permits and services. The average of the fees charged by contiguous is \$281 for a conventional residential system and \$440 for an advanced system.

NMED filed a petition with the EIB for proposed amendments to the Certification regulation 20.7.3.904 NMAC. A public hearing has been scheduled to consider the proposed amendments has been scheduled for November 2, 2009.

NMED drafted procedural regulations for the review and approval of liquid waste treatment and disposal technology. The draft regulations were distributed for a public comment, and two parties submitted written comments.

The Liquid Waste Compliance Officer continued the enforcement initiative that was launched in FY08. A record number of 22 Compliance Orders were issued during FY09.

The following improvements were made to the Liquid Waste Permit Database:

- Related work processes were streamlined by automating some data entry and rearranging data entry screens and removing unneeded entries.
- Reporting capability was developed to create a reliable tool for tracking/generating the liquid waste performance measures.
- All program data management requirements can now be met with one application, including tracking inspections.
- Data entry was made simpler and more user friendly.
- The ability to reconcile program's accounting of program fees with the department's financial system was established.
- The capability of tracking advanced treatment system monitoring, including reporting of monitoring compliance, and results was established.
- Licensed contractor information was updated.
- A system for the efficient entry of historical permit information was created.

A special Water Fair was conducted in collaboration with the City of Santa Fe, Santa Fe County, and Los Alamos National Laboratory (LANL). Private domestic well owners were encouraged through a news release and fliers posted around Santa Fe to call and request a free test of their well water. Sampling teams collected samples from the wells and performed field measurements of temperature, specific conductance, pH, latitude, longitude and elevation. The water samples were delivered to LANL for analysis of major ions, trace elements and heavy metals. A total of 447 private domestic wells were sampled, and the groundwater quality of the Santa Fe region will be mapped with greater detail than ever before. The sampling results show groundwater quality impacts from onsite liquid waste systems. Based on the success of this effort in the Santa Fe region, NMED and LANL intend to conduct similar well testing in the Espanola and Farmington areas.

NMED District employees continue to host periodic local training workshops around the state that have been very well received by the industry. The workshops address advanced treatment systems and other issues of local concern as raised by NMED and the industry.

In accordance with the Health and Safety Plan for liquid waste operations, Division supervisors presented four in-house 8 hour HAZWOPER refresher classes. The classes were held in Albuquerque, Las Cruces, Roswell and Santa Fe and were conducted under the supervision of the NMED Occupational Health and Safety Bureau.

Strategic Plan for FY10

The Liquid Waste Program plans to accomplish the following tasks during FY10:

1. **Assistance Program for Indigent Households Served by Substandard Liquid Waste Systems** – NMED will continue to pursue funding options to provide assistance on a statewide basis.
2. **Liquid Waste Regulation Amendments** – NMED will present proposed regulation amendments in public hearings before the EIB in November 2009 and in March 2010.
3. **Liquid Waste Treatment and Disposal Technology Procedural Regulation Development** – NMED will present proposed regulations in a public hearing before the NMED Secretary at a date that has not yet been determined.
4. **Private Well Testing in Espanola and Farmington** – NMED will collaborate with LANL on water well testing events in Espanola and Farmington using the methodology developed in Santa Fe.
5. **More Stringent Requirements for Fractured Bedrock Terrain** – NMED will continue to conduct hydrogeologic studies and explore the feasibility of using Liquid Waste Regulation 20.7.3.201.M NMAC to impose more stringent requirements for permitting LW systems in fractured bedrock terrain that will adequately protect underlying ground water resources.
6. **Liquid Waste Operations Manual** – NMED will continue to review guidance and policies, and update them as needed. Scanned images of these documents as well as historical Liquid Waste Regulations will be incorporated into an updated program operations manual.

Appendix A - Liquid Waste Program History

Year	Program Milestone	Description
1937	Regulations Prohibiting Insanitary Toilets in Certain Places	Regulations adopted by the N.M. Board of Public Health (BPH).
1959	Policy for Individual Water Supplies and Sewage Disposal Systems	BPH policy includes first lot size requirements.
1971	Environmental Improvement Act	Provided the statutory authority for the Environmental Improvement Board (EIB) and the Liquid Waste regulations promulgated by the EIB.
1973	Liquid Waste Regulations adopted by EIB	
1979	Amendments to Liquid Waste Regulations	
1985	Amendments to Liquid Waste Regulations	
1989	Amendments to Liquid Waste Regulations	Established ¾ acre minimum lot size, but included "Grandfather" provision for previously platted lots.
1991	Department of Environment Act	Created NMED as a cabinet-level agency.
1997	Amendments to Environmental Improvement Act and Liquid Waste Regulations	Provided NMED with exclusive authority for permitting and inspection of liquid waste systems. Prior to this, NMED and the Construction Industries Division (CID) had dual jurisdiction.
2000	Liquid Waste Permit Fees and Fund	Fees authorized and Fund created by amendment of the Environmental Improvement Act.
2002	Liquid Waste Fees	Permit fees began to be collected.
2003	Technical Advisory Committee (TAC)	TAC created by amendment of the Department of Environment Act.
2003	Amendments to Liquid Waste Regulations	Gray water regulations.
2005	Amendments to Liquid Waste Regulations	Comprehensive re-write of the regulations included sunset of small lot "Grandfather" rule, new requirements for property transfer inspections, professional certification, and standards for advanced treatment.
2007	Amendments to Liquid Waste Regulations	

Appendix B - Liquid Waste Core Program Personnel

Position	Incumbent	Duties	Contact Information
Program Manager	Dennis McQuillan	Overall program management and development, regulation amendments, policy direction, budgets, support to field office staff	NMED Liquid Waste Program 525 Camino de los Marquez Santa Fe, NM 87505 505-476-8607 (desk) / 505-660-1592 (cell) dennis.mcquillan@state.nm.us
Program Engineer	Tom Brandt	Engineering review of wastewater treatment and disposal technologies, Technical Advisory Committee coordinator, program webmaster, permit database manger, engineering review	NMED Liquid Waste Program 525 Camino de los Marquez Santa Fe, NM 87505 505-476-8609 (desk) / 505-670-3708 (cell) tom.brandt@state.nm.us
Statewide Program Specialist	Brian Schall	Technical support to homeowner, installers and NMED field offices	NMED Liquid Waste Program 5500 San Antonio Dr. NE Albuquerque, NM 87109 505-222-9513 (desk) brian.schall@state.nm.us
Compliance Officer	Gloria Miller	Coordination, preparation, follow-up and tracking of Compliance Orders in accordance with the LW regulations	NMED Liquid Waste Program 525 Camino de los Marquez Santa Fe, NM 87505 505-476-8601 (desk) gloria.miller@state.nm.us
Financial Analyst	Jessica Tapia	Tracking liquid waste fee payments, entry of fee information in financial database	NMED Liquid Waste Program 525 Camino de los Marquez Santa Fe, NM 87505 505-476-8602 (desk) jessica.tapia@state.nm.us
District 1 Program Specialist	Steven Walker	Technical support to homeowner, installers and NMED field offices	NMED Liquid Waste Program 5500 San Antonio Dr. NE Albuquerque, NM 87109 505-222-9546 (desk) 505-362-8860 (cell) steven.walker@state.nm.us
District 2 Program Specialist	James Vincent	Technical support to homeowner, installers and NMED field offices	NMED Liquid Waste Program # 2540 Camino Ortiz Santa Fe, NM 87505 505-827-1840 james.vincent@state.nm.us
District 3 Program Specialist	Michael Montoya	Technical support to homeowner, installers and NMED field offices	NMED Liquid Waste Program 1170 S. Solano Dr., Ste. M Las Cruces, NM 88001 575-524-6300 (desk) / 575-647-7971 (cell) michael.montoya2@state.nm.us
District 4 Program Specialist	John Wells	Technical support to homeowner, installers and NMED field offices	NMED Liquid Waste Program 1914 W. Second St. Roswell, NM 88201 575-624-6046 (desk) / 575-629-9713 (cell) john.wells@state.nm.us
District 5 Program Specialist	David Torres	Technical support to homeowner, installers and NMED field offices	NMED Liquid Waste Program 1000 Main Burroughs Bldg. 16B Los Lunas, NM 87031 505-841-5306 (desk) / 505-469-5318 (cell) david.torres@state.nm.us