

## **FY2015 IT Plan Highlights**

### **667 NMED – New Mexico Environment Department**

#### **Executive Summary:**

1. The New Mexico Environment Department (NMED) has been given the authority to conduct US Environmental Protection Agency (USEPA) programs on behalf of the USEPA. Authorization delegates to the NMED the operation of all environmental programs and the implementation of regulations set forth by the USEPA, including those related to information technology (IT).
2. The department regulates air quality, ground and surface water, radiation control, workplace safety, retail food establishments and food processing operations, public swimming pools, community drinking water systems, solid waste facilities, petroleum storage tanks, hazardous waste, and liquid waste (septic) systems.
3. For FY15, the Office of IT is requesting an increase of budget to fund an additional five IT positions; those positions will be transferred in from positions vacant in other programs for more than two years.
4. The need for the increase is to modernize and support department information systems to better serve the public by providing increased access to environmental data for their safety and well-being and to provide better service to the regulated community by providing online access to meet reporting requirements, request permitting applications and make payments.
5. Analysis tools using advanced GIS (Geographic Information System) technology will be included to assist staff in environmental monitoring activities. The upgraded systems will also provide integration of the department's financial activities such as invoicing and grant management into the state's SHARE system. In addition to new and improved IT system functionality the modernization will also include improvements in computing runtime environments and data storage capacity by transferring current hardware platforms to services provided by the Department of IT.

#### **Agency Vision:**

Is to achieve a healthy, safe and prosperous New Mexico for future generations

#### **Agency Description:**

1. The NMED was created in 1991 as a cabinet level regulatory agency under the authority of the Governor. The Cabinet Secretary, who is appointed by the Governor and confirmed by the Senate, is the agency's senior executive. The Department's main office is located on the second and fourth floors of the Harold Runnels Building, 1190 St. Francis Drive, Santa Fe, New Mexico.
2. The NMED is subject to similar IT requirements of the Nuclear Regulatory Commission with respect to activities and regulations concerning the NMED Radiation Control Bureau and of the US Department of Labor/Occupational Safety and Health Administration with respect to activities of and regulations concerning the NMED Occupational Health and Safety Bureau.
3. NMED's core business processes include: permitting and certification, inspection, compliance, enforcement and oversight, environmental corrective action, and public outreach/education.

#### **Major IT Accomplishments of FY13:**

- Ported four disparate application runtime platforms including the legacy Tanks and CERTMAN Oracle Forms and Reports applications, Environmental Notification Tracking System and Reimbursement Travel application onto department standardized shared Linux platform
- Completed USEPA required OWIR-ATT (Office of Water Integrated Reporting) data flow and the UIC (Underground Injection Control) data flow ; applied for FY13 Exchange Network grant to develop a new flow (FacID flow)
- Integrated GIS capabilities into department web pages including fire perimeter maps
- 80% completion of upgrade of desktops and laptops to Windows 7
- Completed upgrade of all eight enterprise database instances from Oracle 9i to 11g
- Began mobile application development analysis; developed a pilot for mobile food inspections
- Secure Extranet Portal (SEP) modifications in support of EPA review of department's CROMERR certification application
- Installed video conferencing capabilities at following office locations: Roswell, Marquez Building, D1 Albuquerque, Silver City
- Installed secure wireless access to the network at following locations: Rodeo Road Plaza, Marquez Building and District 1 office in Albuquerque
- Deployed major upgrade of Altiris Helpdesk to Symantec Service Desk and Platform Management System
- Launched new external website design for the top level pages
- Developed and deployed of Greenhouse Gas Reporting application
- Liquid Waste Online Permitting (LWOP) application is 80% complete; the Air Quality Permit Application (AQPA) Phase I is in User Acceptance Testing
- Deployed GoNM –GIS Screening Tool of NM

- Launched DoIT cloud-hosted Digital Asset Management site using the Open source tool called Resource Space
- Documented Environment Department IT Disaster Recovery Plan
- Moodle - Online Training Platform
- Implemented MPLS network upgrade

**Infrastructure Services – Plans to Expand:**

- Secure wireless
- DoIT GIS virtual servers / physical server hosting
- Disaster recovery services

**Business Applications Services – Expand and Enhance:**

- Permits and inspections available online and on web maps
- Online permit applications
- Mobile inspections
- Electronic submission of analytical data by labs for upload to environmental information systems
- Publish public documents to the web for ease of access and search ability
- Document scan and archival
- Web maps to display environmental data directly from information systems
- Electronic submission of required reports by regulated community for upload to environmental information systems
- Retrieve data stored at EPA for display within department web applications

**Facility Improvements or Upgrades:**

- Runnels data center - FY15 reduced footprint at Runnels data center through virtualization and migration to DoIT data center
- DoIT data center - FY15 migrate majority of department servers as virtual machines and/or hardware to DoIT data center

**Changes in Federal or State of New Mexico Requirements with IT Impact:**

USEPA CROMERR - The USEPA published the Cross-Media Electronic Reporting Regulation (CROMERR; Title 40 CFR Part 3) in late 2005.

**Agency IT Strategic Goals:**

Goal 1: Enable and Maintain IT services to facilitate and transform the business processes of the department

**Joint Funding Opportunities:**

- Remote office IT services such as data circuits, phone lines and Xerox machines - Any agency that does not have restrictions for sharing with other state agencies; secure means for sharing services must be identified
- Travel application (record and submit travel reimbursements to DFA), NMED has an application - All agencies
- Legislative Tracking application, NMED has an application - All agencies
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- Federal Grants Tracking application, NMED needs an application- All agencies
- SHARE data extracts ( preferably web services ) for financial and HR data, NMED needs training and permissions for this - All agencies
- SHARE contracts module, NMED needs this - Agencies that manage contracts
- Project and Financial management against complex funding sources for out-sourced Construction projects for multiple customers, NMED needs this - Department of Transportation possibly

**Staffing Gaps and Recruitment:**

- PL/SQL development
- Service Oriented Application Architecture using Restful Web Services
- Java applications portfolio management and support model development
- Open Source tools administration
- Web development expertise

**IT Staff Training Plans:**

- Scrum – Agile Project Management
- Redhat – Linux OS
- Apache
- IT security - Nessus, SNORT, websense, network administration & desktop management best practices
- SHARE interfaces for data export

- Restful web services
- Mobile computing
- ITIL
- Oracle 11g – RMAN, PL/SQL, security best practices
- Web technologies such as HTML5, CSS, Ajax, javascript, XML
- Kohana - PHP development framework including application security
- Springs and Faces Java Development frameworks including application security
- Subversion
- Mediawiki
- Mantis BugTracker
- Open source GIS technologies such as open layers