

## Reducing Expenditures From State Funds Through the Use of Cost Control Tools

### **Equipment Reuse – David Chambers, Nebraska**

NE – legislation to allow state to own equipment – big hurdle to overcome.

Leased space to store equipment.

Purchased warehouse to store equipment – challenge to convince management.

Consultants built portable systems.

State inventoried and photo – documents all equipment.

Website – [www.deq.state.ne.us](http://www.deq.state.ne.us)

Lessons learned:

-make equipment accessible – proximity and on website

-needed fork lift

-watch out for other programs wanted to use space.

Warranties? No Warranties (As is).

Cost to Repair? Fund covers

Comes back into fund? Yes

How do you manage all this equipment? Don't track all that well.

Project managers take care of all equipment.

Labor hours to take care of? Do not track, much less than cost of new equipment.

Incentive for consultants to use old equipment – more competitive proposals; State can mandate reuse.

Not mandated – staff/program developed cost to track – minimal

Contractors waiver of liability? Not required in NE.

Florida – tries to reuse equipment, Do not force contractors to use.

Old equipment may require increased consultant O & M costs.

Alabama – “Right of disposition” Do not own/or inventory. Do allow refurbish costs. Good investment.

Vermont – can sell old equipment

Used equipment under PFP? Not in Nebraska.

Florida- the longer it sits on site, the lesser the quality. We try to keep equipment in use at Active sites.

*Note: Below are the notes David used in his topic introduction. We thought including them here may be of interest to you.*

# History and Evolution of the Petroleum Remediation Equipment Reuse Program

## Nebraska DEQ Petroleum Remediation Section

- The State fund has reimbursed responsible parties the cost of equipment used in cleaning up LUST sites since the fund was created in 1989. At first the equipment was owned proportionally by the RP based on how much the RP had spent toward remediation. The used equipment law has changed over the years until 1998 when equipment became 100% owned by the State.
- Prior to 1995, after the cleanup at a LUST site was completed, all equipment was sold at surplus for pennies on the dollar or otherwise disposed.
- In 1995, NDEQ leased a 1,600 sq.ft. ammunition bunker at a National Guard training base (two hours from Lincoln) to store equipment until it could be reused. There was no electricity, heat or water at this location, but there were plenty of rodents! Prior to 9/11, this facility was acceptable, considering its remote location and lack of amenities, and hundreds of pieces of remedial equipment were stored and reused during the ten years NDEQ operated from this location. Post 9/11 access to the bunker became increasingly difficult, due to heightened security and live ammunition being stored and used during training at the base. In addition the bunker had become full of equipment, and there were many remedial sites waiting to be torn down so the equipment could be reused.
- By 2004, the Petroleum Remediation Section had proven that equipment reuse would work and expressed the need for a larger, more accessible storage building. In June 2005, equipment was moved to a warehouse in Lincoln, the same city as our offices.
- In the first 14 months of operation, NDEQ mobilized 168 items to be used on current remediation projects with a new value of **\$536,739**. This figure represents how much responsible parties would have had to spend (and the fund reimburse) to buy the remediation items they are now using at no cost. This represents a direct savings to the taxpayers in the State of Nebraska!
- Some creative consultants have even built out of the used equipment their own portable remediation trailers to be moved from site to site!
- Over 700 items have been inventoried, sorted, and shelved in the new warehouse. All items have been photographed, described, categorized, and posted on the agency website for prospective consultants to view. The web address is [www.deq.state.ne.us](http://www.deq.state.ne.us) then click on Water Division, Petroleum Remediation Program, and LUST Remedial Equipment Inventory.
- The new warehouse has a forklift rated to lift 5,000 pounds and a semi-truck loading dock, as well as water, heat, electricity and bathrooms.
- Low profile vehicles with trailers can drive into the warehouse for loading and unloading and then drive through the opposite side to exit allowing NDEQ to move equipment in almost any weather conditions.
- Recently, a significant effort was undertaken to reorganize the warehouse and recycle items that were no longer reusable. Close to 7.5 tons of metal were cleaned, stripped, and recycled, with a return of **\$2,605** and the knowledge that it didn't go to an area landfill.
- The warehouse also houses the ER van and equipment and a bio lab for NDEQ Surface Water. The equipment storage portion of the warehouse is about 9,000 sq.ft., and the rent is \$7,500+ a month for this space.

As of 5-31-07, 817 items have been inventoried.

As of 5-31-07, \$560,024 has been saved by reusing 199 items.

Based on our use of 47% of the entire building, our share of the rent should be less the \$5,000 a month.

- Hurdles: getting ownership authority; convincing upper management the reuse rate would justify the expenses of the warehouse.
- Lessons learned: make equipment accessible (location and web); buy a larger forklift; watch out for those who want to "borrow" your storage space.

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### **Source Removal – Kevin Beery, Utah**

Utah was driven by cost project out of actuary report

Utah also needed - How to reduce O&M time?

History of Utah's Remediation Systems vs. Source Removal Success (closure) rates

-20% effective rate active remediation

-80 % dig success rate

Tie in excavation and land farming with upgrade and construction

Land farm on average save Utah over %80 in cleanup costs

May require some Regulatory changes? -coordinate with sister agencies

Make Source removal part of overall plan for site

Try to be as extensive as required to address total risk.

How do you control how much is dug?

By using:

24 hr lab

Soil vs. GW

Must get to smear zone

Some pumping is required at sites to lower the Groundwater

Site changes in owner or use.

Ability to control

What happens whether digging, land farming, or trucking to a disposal facility

Coordinate land farm with Local health departments-solid waste agencies

How to prioritize excavation sites?

-risk

-“opportunity”-willing owner

Consider after LF uses - test for lead

Owner seek bids

-set area

-allow unit cost for overage

Allowance for backfill

-site/engineer determined

settling claims

No real negative effect on clean up numbers

Publication (Purdue study, Jt. Transportation research program.

Fhwa/in/jtrp-2005/25

www.deq.ut.gov

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### **Subrogation – Dennis Rounds, South Dakota**

Is subrogation a cost control method?

Do you recover cleanup costs for releases where there is human error?

SD - Enhanced legislation to allow subrogation against wrong doer.

This could be very important to your program.

We can recover both attorney fees and prejudgment interest (10%).

Discovered faulty pipe through forensics.

Try to preserve equipment where we suspect faults.

Not every case can we subrogate.

Statute of limitations.

Statute of repose (10 years) can't sue if in place for set period of time.

Contributory negligence, e.g., leak control systems that are shutoff due to alarms

Forensics → Key

Tool: ASTM Guide

How to preserve equipment?

What to look for?

Guide to finding the cause of the release

SD recovered > \$700,000

Sounds like “superfund” – our success is we just cleanup sites.

Encourages better installations. We don't want to pay for a cleanup the second time around.

Have you pursued third party causing releases? We haven't had any, but would.

Do you have a requirement for phase II at real estate transactions?

How do you find out causes of a release? Forensics.

Once notified of a release we can get a staff person out on site.

18 sites → pathology study – “peeled back the layers”. We found out there are all types of problems.

Cost of litigation vs return? We pursue only those we feel confident we can win.

We use all outside counsel.

Best candidates for subrogation are the new releases.

We have subrogated commingled plumes.

Have you hired investigators? No we have our staff. We hired forensics to look at causes of failure. \$5,000 is typical forensic review.

Do you only pursue when under active warranty? Don't limit ourselves to those under warranty. We look for fault!