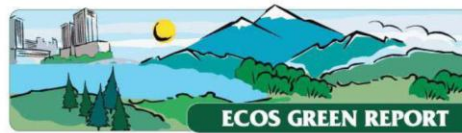


ECOS Green Report: State Experiences w/ NRDA at Nuclear Weapons Complex Sites



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STATE EXPERIENCES WITH NATURAL RESOURCE DAMAGE ASSESSMENT AT NUCLEAR WEAPONS COMPLEX SITES

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EXECUTIVE SUMMARY

More than a dozen States are host to federal nuclear weapons complex facilities (the “complex”) that are operated and maintained by the U.S. Department of Energy (DOE) and other federal agencies. Many of these facilities are contaminated with various types of radioactive, hazardous, and mixed wastes. A patchwork of federal and state laws determine how these sites may be remediated via federal facility cleanup agreements made between States and DOE.

A separate set of laws determine how States and Indian Tribes may calculate the value of natural resources they have lost due to contamination, and determine how they may seek compensation for these losses. This process of natural resources damage assessment (NRDA) is the focus of this report. The experiences of several state environmental agencies, as they attempt to determine and recoup natural resource damages at the sites they host, are profiled here.

The experiences of the Fernald site in Ohio and the Rocky Flats site in Colorado, as described here, are particularly revealing, as both processes have played out more completely than those at other sites in the complex where planning or negotiations have stalled, ceased, or not yet been initiated.

In 1986, the State of Ohio filed suit against DOE for \$260 million in NRD for the Fernald site. After years of litigation and negotiation, the case was settled in 2008. A consent decree was issued which required, among other things, implementation of a natural resource restoration plan; payment of \$13.75 million from the federal government to the State of Ohio for a restoration

Regulatory Framework

- ▣ CERCLA
 - Superfund
 - Response Liability for PRPs
 - NRD Liability for PRPs for (1) residual damages post-remediation and (2) “interim” losses incurred from the time of injury until the resource recovers to a condition where it provides pre-contamination level of ecological services

Regulatory Framework

- ▣ CERCLA > DOI > NRDA Regulations
- ▣ OPA > NOAA > NRDA Regulations
- ▣ State NRD Laws Not Compiled > See Reference
- ▣ CERCLA and OPA > National Contingency Plan
- ▣ EPA and Coast Guard Share Responsibility for Investigating and Responding to Contamination of Natural Resources by Hazardous Substances

Trusteeship

- ▣ CERCLA Authorizes the President, the States and Federally-recognized Indian Tribes to Assess and Recover Damages to Natural Resources Within their Jurisdiction
- ▣ DOE is the Lead Federal Trustee for All Natural Resources Located on DOE Property
- ▣ States Act on Behalf of the Public as Trustees for Natural Resources Belonging to, Controlled by, or Appertaining to the State
- ▣ Trustee Councils may be Established to Coordinate Overlapping Trusteeships

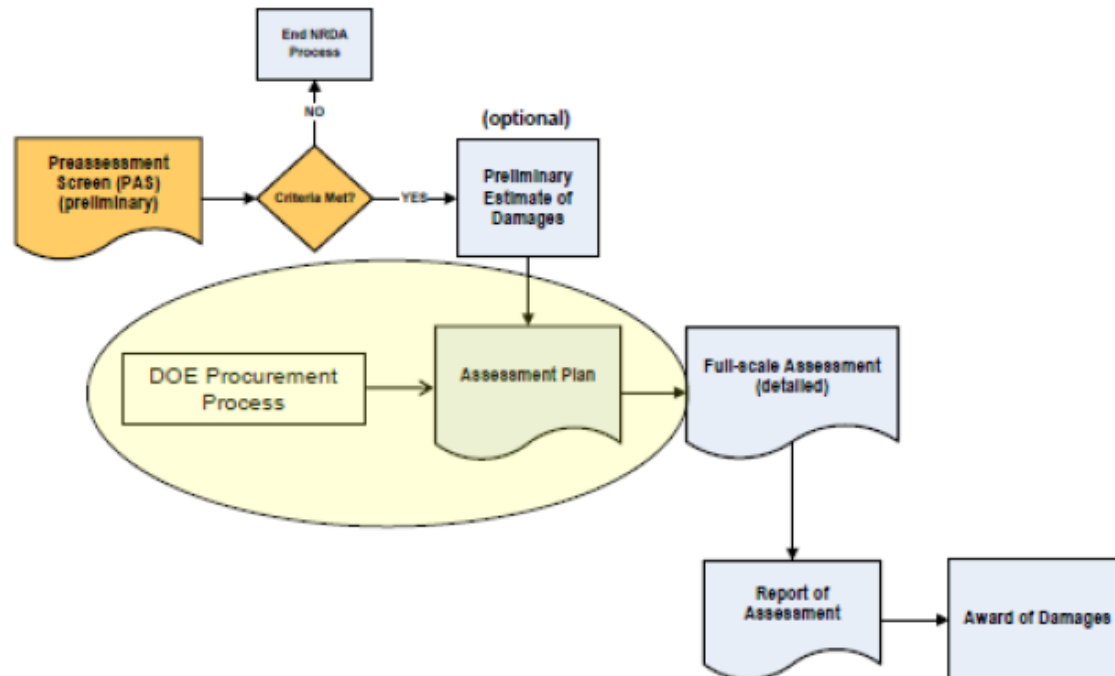
Assessment

- ▣ Multiple Steps Guide the Assessment Process under CERCLA
- ▣ If Injuries are Suspected, Various Methodologies to Monetize Damages and to Require Responsible Parties to Implement Restoration, Compensation and Monitoring
- ▣ Tolling Agreement may be Negotiated to Delay the Statue of Limiations

NRDA Process

Flow chart provided courtesy of Los Alamos National Lab (LANL 2010).

Natural Resources Damages Assessment Process



Case Studies

▣ Ohio – Fernald

- 22 years of Litigation > 2008 Settlement
- Consent decree requires (1) Restoration activities; (2) \$ 13.75 M payment from federal government to the State of Ohio for Restoration, Habitat Enhancements and Water Quality Improvement Projects; and (3) Payment to Ohio for past Trustee-related costs

Colorado – Rocky Flats

- Special congressional appropriation made funds available to assess and compensate Colorado for NRD at Rocky Flats

Case Studies

- ▣ Kentucky – Paducah
 - Preliminary discussions with DOE
 - Site is still operational > NRDA premature

Missouri – Weldon Spring

- NRD discussions held
- Tolling agreement reached
- Trustees have not yet secured funding

Ohio – Mound

- In 1985, Ohio sent letter to DOE demanding \$ 32 M for response costs and \$ 33 M for NRD at Mound
- No further action taken by the parties > remains open issue

Case Studies

▣ Washington – Hanford

- Trustee Council Poised to Award Contract for Injury Assessment (Assessment will take 2 years...)

Ohio – Portsmouth

- No formal process begun for NRDA
- Now that recent cleanup negotiations have completed, Ohio plans to re-engage DOE

Tennessee – Oak Ridge

- Tennessee plans to sign order with DOE this Wednesday to settle trustees' claims for NRD for the Lower Watts Bar Reservoir portion of Oak Ridge
- Federal funding committed for implementation of NRDA for the balance of the Oak Ridge site

NGA Status Chart

Status chart provided courtesy of the National Governors Association (NGA 2010).

Last Updated: August 10, 2010

Natural Resource Damage Assessment & Restoration Complex-Wide Status Chart — US Department of Energy Sites

The following chart represents an overview of Natural Resource Damage Assessment & Restoration (NRDAR) activities at major sites currently or previously under the auspices of the US Department of Energy Office of Environmental Management (DOE-EM). It is meant to serve as a resource for states and other parties interested in the status of the NRDAR process at DOE cleanup sites. Information for this chart was provided by the state NRDAR contacts listed on the second page as well as staff at DOE-EM. The chart was prepared by the National Governors Association Center for Best Practices and will be updated periodically. For general questions about the chart, please contact Andrew Kambour, NGA Center for Best Practices, at (202) 624-3628 or akambour@nga.org. For further information regarding specific sites listed in the chart, please contact the appropriate state NRDAR staff as listed on page two.

State	DOE Site (includes link to site description)	DOE Landlord Office	DOE Office Conducting NRDAR Process	Trustee Council	Litigation	Preliminary Discussions	Phase I: Pre-Assessment	Process Stage				
								Phase II: Planning	Phase II: Injury assessment	Phase III: Damage Assessment	Phase IV: Restoration Planning	Implementation
CO	Rooky Flats	LM	LM	Yes	No	N/A	Informal assessment	None	None	Determined by Congress ¹	Underway	Underway
ID	Idaho National Laboratory	Nuclear Energy	EM	Yes/ Inactive	No	On hold						
KY	Paducah	EM	EM	Yes	No	Scheduled						
MO	Weldon Spring	LM	EM & LM	Forming	No	Underway						
MO	Kansas City Plant	NNSA	No activity	No	No							
NM	Los Alamos National Laboratory	NNSA	EM & NNSA	Yes	No	Complete	Complete (Jan. 2010)	Underway				
NY	Brookhaven National Laboratory	Science	EM & Science	No	No	Complete	N/A	N/A	N/A	Underway (not a formal NRDAR process)		
OH	Fernald	LM	LM	Yes	Settled 2008	N/A	N/A	Complete	Complete	Complete	Complete	Underway
OH	Mound	EMP	No activity	No	N.O.I. ²							
OH	Portsmouth	EM	EM	No	No	Underway						
SC	Savannah River Site	EM	EM	Yes/ inactive	No							
TN	Oak Ridge Lower Watts Bar Reservoir	Science	EM & Science	Yes	No	Complete	Complete	Complete	Complete	Complete	Underway ⁴	
TN	Oak Ridge Reservation (Balance of site)	Science	EM & Science	Yes	No	Complete	N/A	Underway				
WA & OR	Hanford	EM	EM	Yes	Yes	Complete	Complete ⁵	Underway			Underway	

EM — Office of Environmental Management

LM — Office of Legacy Management

NNSA — National Nuclear Security Administration

N.O.I. — Notice of Intent to Sue

¹ National Defense Authorization Act for 2006, Public Law 109-163, § 3112(b)(4). Under this act, any natural resource damage liability at Rooky Flats is considered satisfied by the purchase of mineral rights for \$10 million, or the payment of \$10 million to the natural resource trustee, or a combination of the two, for a total payment of \$10 million.

² The Mound Site is scheduled to transfer to LM on October 1, 2010.

³ The State of Ohio filed a notice of intent to sue the Department of Energy in 1985.

⁴ On June 18, 2009, public notice was released seeking comments regarding an analysis of the benefits provided by the proposed 3,000 acre Black Oak Ridge Conservation Easement vs. losses in Watts Bar Reservoir.

⁵ Pre-assessment screens have been done by the Yakama Nation and the Confederated Tribes of the Umatilla Indian Reservation.

List of Contacts

*List of contacts provided courtesy of the National Governors Association (NGA 2010).
For additional state contacts, see References.*

Last Updated: August 10, 2010

List of State Contacts Natural Resource Damage Assessment and Restoration at US Department of Energy Sites

State	DOE Site	State Contact Name	Organization	E-mail	Phone
CO	Rocky Flats	Dan Miller	Colorado Attorney General's Office	dan.miller@state.co.us	(303) 866-5014
		Carl Spreng	Colorado Department of Public Health and Environment	carl.spreng@state.co.us	(303) 692-3358
ID	Idaho National Laboratory	Susen Burke	Idaho Department of Environmental Quality	susen.burke@dec.idaho.gov	(208) 373-0428
KY	Paducah	Ed Winner	Kentucky Department of Environmental Protection	edward.winner@ky.gov	(502) 564-6716
MO	Weldon Spring, Kansas City Plant	Frances Klahr	Missouri Dept. of Natural Resources	frances.klahr@dnr.mo.gov	(573) 522-1347
NM	Los Alamos National Laboratory	Rebecca Neri Zagal	New Mexico Office of Natural Resources Trustee	rebecca.nerizagal@state.nm.us	(505)243-8087
NY	Brookhaven National Laboratory	Nathaniel H. Barber	Office of General Counsel, New York Department of Environmental Conservation	nhbarber@gw.dec.state.ny.us	(518) 402-9507
OH	Fernald	Tom Schneider	Ohio EPA	Tom.Schneider@epa.state.oh.us	(937) 285-6466
SC	Savannah River Site	Shelly Wilson	South Carolina Department of Health and Environmental Control	wilsonmd@dhec.sc.gov	(803) 896-8955
TN	Oak Ridge	Debbie Duren	Tennessee Department of Environment and Conservation	debbie.duren@tn.gov	(855) 481-0995
WA	Hanford Site	Larry Goldstein	Washington Department of Ecology	lgl461@ecy.wa.gov	(360) 407-6573
OR		Paul Shaffer	Oregon Department of Energy	paul.shaffer@state.or.us	(503) 378-4456

Upcoming Events

- ▣ October Webinar
- ▣ Intergovernmental Meeting with DOE on Nov 8- 10 in San Diego, California

Thank You

- ▣ For more information on this report, please contact:
- ▣ Matthew Jones (ECOS)
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 - mjones@ecos.org