

# Fossil Energy Environmental Restoration

## Funding Schedule by Subprogram

(dollars in thousands)

	FY 2003 Comparable Appropriation	FY 2004 Comparable Appropriation	FY 2005 Base	FY 2005 Request	FY 2005 Request vs Base	
					\$ Change	% Change
Fossil Energy Environmental Restoration .....	9,652	9,595	9,595	6,000	-3,595	-37.5%
Total, Fossil Energy Environmental Restoration .....	9,652	9,595	9,595	6,000	-3,595	-37.5%

### Mission

The objectives of the Fossil Energy (FE) Environmental Restoration activities are to ensure protection of workers, the public, and the environment in performing the mission of the National Energy Technology Laboratory (NETL) at the Morgantown (MGN), West Virginia, Pittsburgh (PGH), Pennsylvania, and Tulsa, Oklahoma sites, and the Albany Research Center (ARC) at Albany, Oregon.

### Benefits

Environment, Safety and Health activities include those necessary to protect workers and the public from exposure to hazardous conditions and materials (e.g., fires, carcinogens, asbestos, lead, etc.), identify and correct safety and health hazards, improve workplace monitoring and industrial safety programs, achieve compliance with Federal, state and local environment, safety, and health requirements, including Department of Energy (DOE) initiatives, and implement initiatives related to achieving best-in-class performance. Activities also include environmental protection, and cleanup activities on-site, and at several former off-site research and development locations. Groundwater and soil monitoring/remediation is also required at the NETL and ARC sites to ensure compliance with Federal, state and local requirements.

FY 2005 performance measures are listed below that support the overarching goal of making consistent and measurable progress in reducing and eliminating injuries, incidents and environmental releases.

- Maintain risk management programs and Federal permit compliance status at NETL.
- Conduct remediation activities at Rock Springs and Hoe Creek, WY sites.
- Conduct environmental monitoring and surveillance activities (air, water, wastewater) in support of permit maintenance.
- Conduct ES&H training according to job hazard analyses.
- Conduct a series of lead and asbestos abatement actions and remove hazardous materials at ARC.
- Maintain emergency response and security program capabilities at ARC.

- Continue with equipment/facility upgrades and infrastructure repairs, including facility evaluations at ARC.
- Complete lead and asbestos abatement actions at NETL as required by maintenance, construction, and projects.
- Conduct groundwater monitoring and remediation activities at ARC.
- Implement limited activities to meet waste minimization and energy efficiency goals.
- Implement continuity of operations program at NETL.
- Maintain programs for purchasing environmentally preferable products and services.
- Reduce sanitary waste from routine operations at ARC.

### Detailed Justification

(dollars in thousands)

	FY 2003	FY 2004	FY 2005
<b>CERCLA Remedial Actions</b> .....	<b>1,987</b>	<b>1,843</b>	<b>1,250</b>
<ul style="list-style-type: none"> <li>■ <b>Rock Springs Sites</b>.....</li> </ul> <p style="margin-left: 20px;">In FY 2005, operate and maintain the <i>In-Situ</i> Aeration Bioremediation Systems at Rock Spring Sites to remove BTEX compounds from Tipton aquifer ground water, as required by the WDEQ. Conduct periodic ground water sampling events to determine progress in removing contaminants from the Tipton aquifer. <i>Participants include: Army Corps of Engineers.</i></p> <p style="margin-left: 20px;">In FY 2004, continue second year of full-scale cleanup of Rock Springs sites (~7 year program). <i>Participants include: Army Corps of Engineers.</i></p> <p style="margin-left: 20px;">FY 2003 funding continued cleanup of the Rock Springs sites, with full-scale cleanup beginning in FY 2003. <i>Participants included: Army Corps of Engineers.</i></p>	<b>795</b>	<b>592</b>	<b>592</b>
<ul style="list-style-type: none"> <li>■ <b>Hoe Creek Site</b>.....</li> </ul> <p style="margin-left: 20px;">FY 2005, seal and abandon all wells, except long-term monitoring wells to be used in contaminant rebound evaluations, as required by the WDEQ. <i>Participants include: Army Corps of Engineers.</i></p> <p style="margin-left: 20px;">In FY 2004, continue third year of full-scale cleanup of Hoe Creek site (~7 year program). <i>Participants include: Army Corps of Engineers.</i></p> <p style="margin-left: 20px;">FY 2003 funding continued full-scale cleanup of the Hoe Creek site. <i>Participants included: Army Corps of Engineers.</i></p>	<b>298</b>	<b>306</b>	<b>306</b>
<ul style="list-style-type: none"> <li>■ <b>Hannah Site Revegetation</b>.....</li> </ul> <p style="margin-left: 20px;">In FY 2005, closeout active operations with respect to revegetation initiatives.</p> <p style="margin-left: 20px;">In FY 2004, continue Hannah Site revegetation (~10 year program).</p> <p style="margin-left: 20px;">FY 2003 funding continued Hannah Site revegetation.</p>	<b>70</b>	<b>25</b>	<b>25</b>

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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■ **NETL Preliminary Site Investigations** ..... **298**      **439**      **77**

In FY 2005, initiate the discovery and investigation of one former FE Research and Development (R&D) site. Conduct preliminary assessments (PA) if necessary to determine environmental risk prior to contract closeout.

In FY 2004 implement three additional off-site investigations and remediations related to project closeouts, based on results of risk analyses.

FY 2003 funding continued implementation of ne CERCLA site investigations and project closeouts.

■ **NETL Site Remediation** ..... **30**      **30**      **0**

In FY 2005, no funding is requested for this activity.

In FY 2004 perform on-site building and soil type remediation assessments at NETL (re-assessment).

FY 2003 funding provided for on-site CERCLA-type remediation assessments at NETL.

■ **CERCLA PRP Response Activities** ..... **496**      **451**      **250**

In FY 2005, conduct remedial investigations and feasibility studies on sites found to be contaminated and requiring cleanup under Federal CERCLA and State cleanup standards.

In FY 2004, implement CERCLA PRP Response Activities.

FY 2003 funding continued implementation of CERCLA PRP Response Activities.

**RCRA Remedial Actions** ..... **2,285**      **2,039**      **1,758**

■ **NETL On-Site Remediation** ..... **1,540**      **1,398**      **1,208**

In FY 2005, continue NETL on-site regulatory and corrective, activities such as: lead and asbestos abatement; waste minimization and pollution prevention activities including managing residual wastes; achieving/maintaining compliant wastewater treatment plant operations, and site support contractor RCRA-related maintenance activities.

In FY 2004, continue NETL on-site corrective, preventive, and improvement activities such as; lead and asbestos abatement; upgrading chemical handling facilities; waste minimization and pollution prevention activities including managing residual wastes; environmental management plan implementation required for maintenance of ISO 14001 certifications; surface water compliance; and site support contractor RCRA related maintenance activities.

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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FY 2003 funding continued NETL on-site corrective, preventive, and improvement activities such as; lead and asbestos abatement; hazardous material and waste compliance; waste minimization and pollution prevention activities including managing residual wastes; environmental management plan implementation required for maintenance of ISO 14001 certifications; surface water compliance; and site support contractor RCRA related maintenance activities.

■ **Albany Research Center RCRA** ..... **745**                      **641**                      **550**

In FY 2005, continue ARC RCRA cleanup actions including abating lead and asbestos exposures; resolving chemical storage and labeling; monitoring soil and groundwater; upgrading ventilation and air pollution systems; and improving air emission management, materials handling, and waste disposal activities.

In FY 2004, continue ARC RCRA cleanup actions including abating lead and asbestos exposures; resolving chemical storage and labeling issues; monitoring soil and groundwater; upgrading ventilation and air pollution control system; implementing environmental management system plan required for ISO 14001 certification; and improving air emission management, materials handling, and waste disposal activities.

FY 2003 funding continued ARC RCRA cleanup actions including abating lead and asbestos exposures; characterizing and resolving chemical storage and labeling; monitoring soil and groundwater; upgrading ventilation and air pollution control system; and improving air emission management, materials handling, and waste disposal activities.

**Other ES&H Actions** ..... **5,380**                      **5,713**                      **2,992**

■ **Other ES&H Actions at NETL** ..... **4,282**                      **4,494**                      **2,224**

In FY 2005, implement baseline regulatory and Integrated Safety Management/ISO 14001 programs (emergency management, occupational medicine and health, safety, environmental management, ergonomics, training, and fire protection) at NETL. Implement limited actions in support of achieving DOE's pollution prevention and energy management goals.

In FY 2004, maintain regulatory and Integrated Safety Management/ISO 14001 programs (emergency management, occupational medicine and health, safety, environmental management, ergonomics, training, and fire protection) at NETL. Identify safety improvements required to achieve external OSHA-type certifications. Identify and implement safety-related security improvements. Continue to execute environmental objectives and targets under NETL's ISO 14001 programs, including incremental and continued achievement of DOE's pollution prevention and energy leadership goals. Conduct highest priority indoor and CFC-related air quality fixes.

FY 2003 funding maintained regulatory and Integrated Safety Management/ISO 14001 programs (emergency management, occupational medicine and health, safety, environmental management, ergonomics, training, and fire protection) at NETL. . Continued to execute environmental objectives and targets under NETL's ISO 14001 programs, including incremental and continued

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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achievement of DOE's pollution prevention and energy leadership goals. Conducted highest priority indoor and CFC-related air quality fixes.

- **ES&H Corrective Action at NETL Tulsa Site** ..... 15 25 10

In FY 2005, perform ES&H-related training and an ergonomics review to determine personnel at risk of ergonomic injury. Perform testing of and maintenance on fixed fire protection systems. Conduct emergency management drills.

In FY 2004, continue ES&H program activities at NPTO including inspections, emergency management and drills, training, etc. Expand environmental management system to Tulsa site.

FY 2003 funding continued ES&H program activities at NETL Tulsa site including inspections, emergency management and drills, training, etc.

- **ES&H Corrective Action at ARC** ..... 984 1,098 698

In FY 2005, continue ARC safety and health programs and corrective actions including monitoring and surveillance, emergency preparedness and drills, and security improvements. Maintain indoor air quality and ventilation systems, walking surfaces, personal protective equipment maintenance, facility seismic evaluations, and training. Continue incremental progress toward DOE's pollution prevention and energy management goals. Costs also include contracted security, ISM, and ISO 14001 support.

In FY 2004, continue ARC safety and health programs and corrective actions including monitoring and surveillance; emergency preparedness and drills; and security improvements. Upgrade indoor air quality and ventilation systems; medical and industrial hygiene services; fire detection and suppression systems; walking surfaces; personal protective equipment maintenance; facility seismic evaluations; and training. Continue to execute revised environmental objectives and targets under ARC's ISO 14001 programs, including incremental and continued achievement of DOE's pollution prevention and energy leadership goals. Costs also include contracted security, ISM, and ISO 14001 support.

FY 2003 funding continued ARC safety and health programs and corrective actions including monitoring and surveillance; emergency preparedness and drills; security improvements; and contracted security support. Upgrade indoor air quality and ventilation systems; medical and industrial hygiene services; fire detection and suppression systems; walking surfaces; personal protective equipment maintenance; and training.

- **Program Support**..... 99 96 60

Fund technical and program management support.

- Total, Fossil Energy Environmental Restoration** ..... 9,652 9,595 6,000

## Explanation of Funding Changes

FY 2005 vs. FY 2004 (\$000)
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<ul style="list-style-type: none"> <li>■ Decrease in CERCLA Remedial Actions will defer actions including the conduct of remedial investigations and feasibility studies and Treatability studies on sites found to be contaminated and requiring cleanup under CERCLA and State Standards; risk assessments of on-site inactive waste sites; and on-site sampling and analysis to determine the need for site cleanup .....</li> <li>■ Decrease in RCRA funding will defer actions including the decontamination/ decommissioning of selected NETL-PGH R&amp;D buildings; upgrading chemical handling and dispensing facilities and environmental management plan implementation required for maintenance of ISO 14001 certification at NETL and ARC .....</li> <li>■ Decrease in Other ES&amp;H funding will defer actions including the monitoring and cleanup of environmental contamination at ARC; the upgrade of gas alarm systems in NETL buildings; execution of environmental plans, objective and targets under NETL's and ARC;s ISO 4001 programs; identification and implementation of safety-related security and infrastructure improvements; conduct of high priority air quality fixes including CFC-elimination and ventilation improvement activities; enhancement of energy management program including metering of individual facilities/projects for energy use; indoor air quality/ventilation fixes at NETL R&amp;D buildings; implementation emergency power systems for NETL's ES&amp;H critical operations; and the retrofit of chillers grater than 150 tons of cooling capacity manufactured before 1984 using Class I refrigerants.....</li> </ul>	-593  -281  -2,721
<b>Total Funding Change, Fossil Energy Environmental Restoration.....</b>	<b>-3,595</b>