

Office of Surface Mining Reclamation and Enforcement

U.S. Department of the Interior

FY 2019 Annual Report



www.OSMRE.gov

An alternative to the print version (this version) of the Office of Surface Mining Reclamation and Enforcement's FY 2019 Annual Report is available to comply with Section 508 of the Rehabilitation Act for accessibility needs. The alternative version is available from <https://www.osmre.gov/resources/annual-reports> or by contacting:

Office of Communications
Mail Stop 4526
1849 C Street, NW
Washington, DC 20240
(202) 208-2565
getinfo@osmre.gov

Conflict of Interest Reporting under the Surface Mining Control and Reclamation Act of 1977

Federal and state employees who perform functions or duties under SMCRA are precluded from having financial interests in underground or surface coal mining operations. During FY 2019, OSMRE did not identify any, nor take any actions for, violations of these or related conflict of interest provisions.

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About the OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

The Office of Surface Mining Reclamation and Enforcement (OSMRE) is a bureau within the United States Department of the Interior. OSMRE is responsible for establishing a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations, under which OSMRE is charged with balancing the nation's need for continued domestic coal production with protection of society and the environment.

OSMRE was created when Congress enacted the Surface Mining Control and Reclamation Act of 1977 (SMCRA). OSMRE works with states and tribes to ensure that citizens and the environment are protected during coal mining and that the land is restored to beneficial use when mining is finished. OSMRE and its partners are also responsible for reclaiming and restoring lands and water degraded by mining operations before August 3, 1977.

In its beginning, OSMRE directly enforced mining laws and arranged cleanup of abandoned mine lands. Today, most coal states have developed their own programs to do those jobs themselves, as Congress envisioned. OSMRE focuses on overseeing the state programs and developing new tools to help the states and tribes get the job done.

OSMRE also works with colleges and universities and other state and federal agencies to further the science of reclaiming mined lands and protecting the environment, including initiatives to promote planting more trees and establishing much-needed wildlife habitat.

Mission Statement

The mission of OSMRE is to carry out the requirements of SMCRA in cooperation with states and tribes. OSMRE's primary objectives are to ensure that coal mines are operated in a manner that protects citizens and the environment during mining and assures that the land is restored to productive use following mining, and to mitigate the effects of past mining by aggressively pursuing reclamation of abandoned coal mines.

Fiscal Year 2019 Budget and Workforce at a Glance

- \$255.5 million in discretionary funds
- \$570.7 million in mandatory funds
- 376 full-time equivalent employees
- Headquartered in Washington with three regional offices

To learn more about OSMRE's historical budgets, please visit www.osmre.gov/resources/budget-and-planning.

Office of Surface Mining Reclamation and Enforcement OFFICE LOCATIONS

INTERIOR REGIONS 5, 7-11 REGIONAL OFFICE

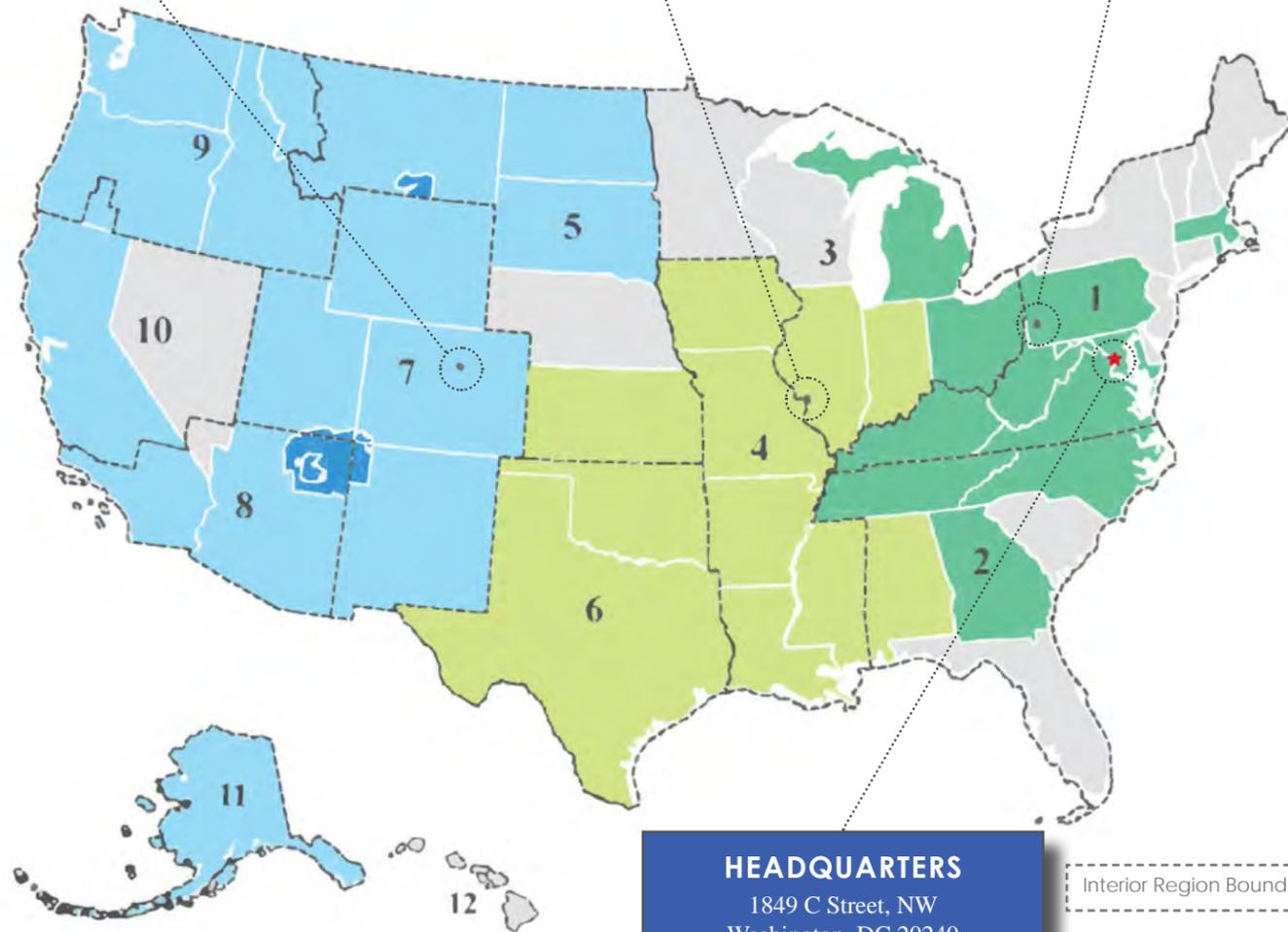
P. O. Box 25065
One Denver Federal Center,
Building 41
Lakewood, CO 80225
(303) 293-5000

INTERIOR REGIONS 3,4, AND 6 REGIONAL OFFICE

William L. Beatty Federal Bldg.
501 Belle Street, Room 216
Alton, IL 62002
(618) 463-6460

INTERIOR REGIONS 1 AND 2 REGIONAL OFFICE

Three Parkway Center
Pittsburgh, PA 15220
(412) 937-2828



HEADQUARTERS

1849 C Street, NW
Washington, DC 20240
(202) 208-2565
www.osmre.gov

Interior Region Boundary Lines

ADDITIONAL OSMRE REGIONAL OFFICES

Interior Regions 1 and 2

**PITTSBURGH FIELD
DIVISION**
(Maryland, Massachusetts,
Michigan, Ohio, Pennsylvania,
Rhode Island)

Three Parkway Center
Pittsburgh, PA 15220
(412) 937-2828

HARRISBURG AREA OFFICE

215 Limekiln Rd.
New Cumberland, PA 17070
(717) 730-6985

CHARLESTON FIELD OFFICE

(West Virginia)
1027 Virginia Street, East
Charleston, WV 25301
(304) 347-7158

BECKLEY AREA OFFICE

313 Harper Park Dr.
Beckley, WV 25801
(304) 255-5265

MORGANTOWN AREA OFFICE

604 Cheat Road, Suite 150
Morgantown, WV 26508
(304) 291-4004

LEXINGTON FIELD OFFICE

(Kentucky)
2675 Regency Road
Lexington, KY 40503-2922
(859) 260-3902

LONDON AREA OFFICE

421 West Highway 80
P.O. Box 1048
London, KY 40741
(606) 878-6440

KNOXVILLE FIELD OFFICE

(Georgia, North Carolina,
Tennessee, Virginia)
710 Locust Street, 2nd Floor
Knoxville, TN 37902
(865) 545-4103

Interior Regions 3, 4, and 6

ALTON FIELD DIVISION

(Illinois, Indiana, Iowa,
Missouri)
William L. Beatty Federal Bldg.
501 Belle Street, Room 216
Alton, IL 62002
(618) 463-6460

Birmingham Field Office

(Alabama, Louisiana,
Mississippi)
Barber Business Park
135 Gemini Circle, Suite 215
Homewood, AL 35209
(205) 290-7282

Tulsa Field Office

(Arkansas, Kansas, Oklahoma,
Texas)
1645 South 101st East Avenue
Suite 145
Tulsa, OK 74135-6548
(918) 581-6430

Interior Regions 5, 7-11

DENVER FIELD DIVISION

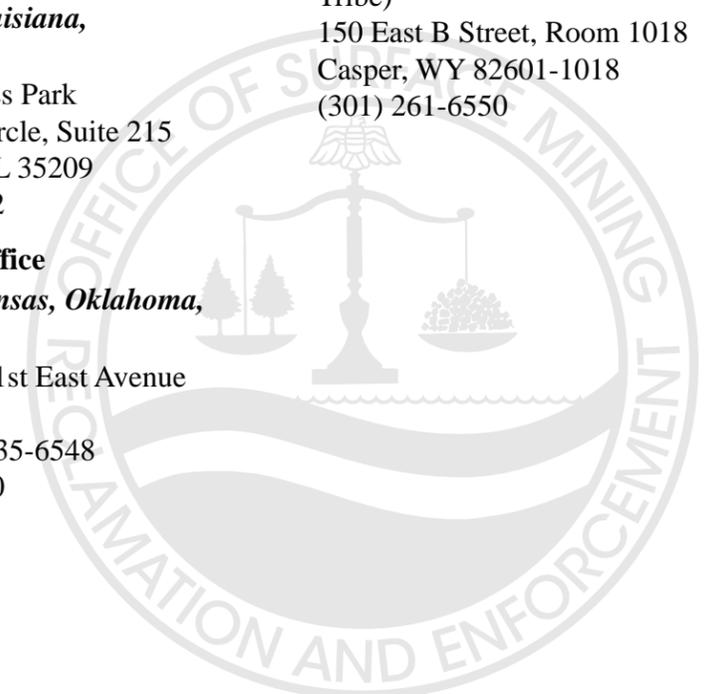
(Alaska, California, Colorado,
New Mexico, Oregon, Utah)
P.O. Box 25065
One Denver Federal Center,
Building 41
Lakewood, CO 80225
(303) 293-5026

OLYMPIA AREA OFFICE

(Washington)
Evergreen Plaza Bldg.
711 South Capitol Way,
Suite 703
Olympia, WA 98501
(360) 753-9538

CASPER FIELD OFFICE

(Idaho, Montana, North Dakota,
South Dakota, Wyoming, Crow
Tribe, Northern Cheyenne
Tribe, Cheyenne River Sioux
Tribe)
150 East B Street, Room 1018
Casper, WY 82601-1018
(301) 261-6550



HIGHLIGHTS

Fiscal Year 2019

Abandoned Mine Land Program

www.osmre.gov/programs/reclaiming-abandoned-mine-lands

The Abandoned Mine Land (AML) Program addresses environmental and public safety hazards on pre-SMCRA mine sites. In Fiscal Year (FY) 2019, the program made more than \$291.2 million in grants available to states and tribes.

Regulatory Program

www.osmre.gov/programs/regulating-active-coal-mines

OSMRE's Regulatory Program implements SMCRA and sets administrative and technical standards, performs oversight of and provides assistance to State Regulatory Programs (SRP) and administers regulatory programs in states that do not have a SRP. In FY 2019, the Bureau's Regulatory Program made available \$68.6 million in regulatory grant funding to state and tribal regulatory authorities.

Technology Development and Transfer Program

www.osmre.gov/programs/technology-and-transfer-program

OSMRE's Technology Development and Transfer Program (TDT) provides technical support, assistance, training, and technology transfer for OSMRE's AML and Regulatory Programs. In FY 2019, the Technology Development and Transfer Program received \$16.3 million of which \$12.8 million was provided in regulation and technology funds and \$3.5 million was allotted in AML funding.

Mine Drainage Technology Initiative

OSMRE, the Environmental Protection Agency, the U.S. Geological Survey, the Department of Energy, the National Mining Association, and the Interstate Mining Compact Commission created the Acid Drainage Technology Initiative (ADTI) in 1995. This program provides a forum for collaboration and information exchange through a cooperative agreement awarded by OSMRE annually to higher education institutions, non-profit organizations, federal and state and local governments, and Native American Tribes. Applicants for the cooperative agreement may request up to \$200,000. The program's primary goal is to develop an understanding of mine drainage to predict better, avoid, monitor, and remediate mine drainage.

The program name was changed to the Mine Drainage Technology Initiative (MDTI) in FY 2017 to more accurately reflect issues associated with both acid and toxic mine drainage.

In FY 2019, OSMRE awarded the MDTI cooperative agreement to the University of Pittsburgh titled, *Quantifying the geochemical evolution of water discharged from a flooded mine pool to optimize mine drainage treatment strategies*.

The study will:

- Provide a better understanding of the long-term evolution of mine drainage chemistry.
- Help to identify adaptive strategies for cost-effective remediation techniques and technology.
- Identify ways to manage long-term post-mining obligations.

For more information about the program, please visit: www.osmre.gov/programs/mine-drainage-technology-initiative.

National Technical Training Program (NTTP) NEPA Courses Enhanced

As part of introducing OSMRE management, staff, and our state and tribal partners to OSMRE's new NEPA Handbook, OSMRE facilitated multiple outreach opportunities. These included two NTTP NEPA training courses and presentations at the National Association of Abandoned Mine Land Programs and the Conference of Government Mining Attorneys. Also underway were efforts to develop the Bureau's first Advanced NEPA training course. These outreach opportunities reached over 200 NEPA practitioners and OSMRE managers.

OSMRE Emergency Project Work: South 23rd Street

The AML program plays a pivotal role in the restoration of the Nation's environment while improving public safety. During FY 2019, OSMRE responded to an emergency subsidence event in Renton, Washington. The pavement above the water line collapsed on South 23rd Street. The result of the collapse left a vital 72-inch-diameter water line exposed and in immediate danger of failure—a failure which would have been catastrophic for the City of Renton.

Multiple factors contributed to establishing this as one of the most challenging and complex problems OSMRE faced in Washington state.

- The main water line above the sinkhole is critical, and the pipe's failure would be catastrophic.
- The sinkhole and the construction were at the entrance to an elementary school, further increasing the importance of resolving the emergency. Our work considered school schedules, including days that school was in session and drop-off and pick-up times for students via car and bus.
- Mine maps of the underground workings were available, but inconsistencies between maps necessitated the further exploration of the event.
- OSMRE subcontracted exploratory drilling, geophysical, and downhole camera work, but the interpretation of the data required significant expertise and judgment.
- Plans and specifications drafted by OSMRE's contracted architecture and engineering firm, Hart Crowser, outlined a compaction and permeation grouting program. The team needed to monitor the amount of grout the underground workings were taking and be prepared to adjust the field's design as work progressed.
- There were six buried and multiple tiers of overhead utilities near the sinkhole, including a fuel line serving the Seattle Tacoma International Airport. Careful exploration and grout location selections avoided conflicts with those other utilities. It was critical that no buried utilities were affected by the grouting operation. The team required the construction contractor, Condon Johnson, to monitor 26 points on buried utilities and the pavement surface while reclamation work was underway.
- The involvement of multiple stakeholders, including the City of Renton, Seattle Public Utilities (SPU), Olympic Pipeline, and the Renton School District, proved helpful with establishing cooperation and community support for the project.

The reclamation consisted of drilling 17 vertical boreholes to inject compaction grouting to depths between 35 and 65 feet. Over three phases, a low mobility compaction grout was injected into the boreholes. The grout injections densified soils and filled potential subsurface voids beneath the SPU water pipeline. The contractor then drilled 15 shallower vertical boreholes for permeation grouting to fill any remaining gaps within the upper 20 feet of mine workings beneath the pipe.

Careful monitoring of the grouting program allowed OSMRE to adjust grout hole locations, pressures, and depths to mitigate the potential catastrophe and make the area safe again. The reclamation work was accomplished successfully through thorough planning, careful monitoring during construction, and sound judgment and decisive action in the field during construction.



Photo: Construction work to remediate the subsidence.



Photo: Construction workers drill bore holes for exploration and to inject filler materials.

Background image: An image of the finished emergency reclamation work on South 23rd Street in Renton, Washington.

COAL MINE IDLE

2392-17

ABANDONED MINE LAND PROGRAM

Restoring Our LANDS

Title IV of SMCRA requires OSMRE to address environmental, public health, and safety hazards posed by past mining practices, including water pollution, acid mine drainage, unstable or open mining areas, landslides, and subsidence of underground coal mines.

States and tribes may use Abandoned Mine Land (AML) funds to eliminate health, safety, and environmental problems caused by past mining practices and improve water quality by treating acid mine drainage.

Title IV provides the authority for OSMRE to assess a reclamation fee on coal production, and the fee provides most of the funding for the AML Program. SMCRA establishes the fee based on the type of mining used to produce the coal, and prescribes the formula by which AML funding is distributed. The authority to collect AML reclamation fees is slated to expire in 2021, unless it is reauthorized by Congress, as it was in 2006.

For complete information on the funding provided to states and tribes, the laws, regulations, and policies governing the AML Fund, OSMRE's projects and initiatives under the AML Program, and more, please visit www.osmre.gov/programs/reclaiming-abandoned-mine-lands.

Approximately \$10 billion worth of unfunded coal problems remain in the Abandoned Mine Land Inventory System's (e-AMLIS).

FY 2019 AML GRANTS TO STATES and TRIBES NATIONAL TOTAL \$291,295,810

State/Tribe	Amount Allocated
Alabama	\$ 5,139,869
Alaska	\$ 2,814,000
Arkansas	\$ 2,814,000
Colorado	\$ 3,117,101
Illinois	\$ 18,678,495
Indiana	\$ 8,072,975
Iowa	\$ 2,814,000
Kansas	\$ 2,814,000
Kentucky	\$ 18,296,295
Louisiana	\$ 177,816
Maryland	\$ 2,814,000
Mississippi	\$ 102,445
Missouri	\$ 2,814,000
Montana	\$ 7,747,222
New Mexico	\$ 2,814,000
North Dakota	\$ 2,814,000
Ohio	\$ 10,285,761
Oklahoma	\$ 2,814,000
Pennsylvania	\$ 53,846,935
Tennessee	\$ 2,814,000
Texas	\$ 2,515,463
Utah	\$ 1,362,163
Virginia	\$ 5,607,813
West Virginia	\$ 35,754,311
Wyoming	\$ 87,833,889
Crow Tribe	\$ 1,211,505
Hopi Tribe	\$ 588,522
Navajo Nation	\$ 2,817,230

State/Tribal allocations are rounded to the nearest dollar.

AMLER Program

Since FY 2016, Congress has funded the Abandoned Mine Land Economic Revitalization Program (AMLER, formerly known as the AML Pilot) through annual appropriations. In FY 2019, the AMLER program made \$115 million in funding available to three Tribal AML Programs (Crow Tribe, Hopi Tribe, and Navajo Nation) and six Appalachian states with the highest amount of unfunded high-priority coal problems (Alabama, Kentucky, Ohio, Pennsylvania, Virginia, and West Virginia).

Additional information on the AMLER program can be found in OSMRE's AMLER Program Report.

To read the most recent report, please visit www.osmre.gov/programs/reclaiming-abandoned-mine-lands.

FY 2019 Abandoned Mine Land Economic Revitalization Program

State/Tribe	Amount Allocated
Alabama	\$ 10,000,000
Kentucky	\$ 25,000,000
Ohio	\$ 10,000,000
Pennsylvania	\$ 25,000,000
Virginia	\$ 10,000,000
West Virginia	\$ 25,000,000
Crow Tribe	\$ 3,333,334
Hopi Tribe	\$ 3,333,333
Navajo Nation	\$ 3,333,333

TOTAL FY PROGRAM GRANT
\$115,000,000

OSMRE first recognized outstanding abandoned mine land reclamation and exemplary reclamation techniques in 1992, when it started the annual AML Reclamation Awards Program. The program mirrors one of the objectives of SMCRA to ensure that land mined for coal would be restored to beneficial use as part of the mining process and that lands abandoned without reclamation before the law would be reclaimed.



Award Eligibility

AML projects funded wholly or in part and completed by approved state or tribal programs are eligible for an award, including coal, non-coal, high-priority, and emergency projects. Abandoned mine reclamation completed by citizen groups or other non-state/non-tribal organizations are not eligible for these awards. One project may be nominated by each state or tribal program each year.

Award Winners

Winning projects represent the nation's highest achievements in AML reclamation, demonstrating innovative reclamation techniques and completing reclamation that results in outstanding on-the-ground performance.

OSMRE has traditionally given five awards:

- One national award.
- One award for small projects (restricted to projects receiving less than \$1 million in a state or tribe that receives less than \$6 million annually in AML funding).
- Three regional awards.

Any entry is eligible for the national award. A list of eligible voters and organizations able to submit nominations is located at www.osmre.gov/programs/abandoned-mine-land-awards-program.

National Award

Dessecker Mine Project, Ohio

The land owned by the Camp Tuscazoar Foundation and the Boy Scouts contained a number of health, safety, property, and general welfare threats from historic mining operations, including acid mine drainage, open mine portals, and hazardous equipment left in the open. To address the hazards, Ohio's AML Program sealed the portals, eliminated a dangerous highwall, removed hundreds of tons of debris, and preserved historically significant mining assets. The state formed a partnership with the community to solve many of the AML problems. The result now allows scouts, visitors, and people living nearby to enjoy the former mine site safely.

Background image: An overhead view of the mining structures left at the Dessecker Mine in Ohio.



Photo: A collapsing portal to the Dessecker Mine in Ohio.



Photo: The old train engine that was used to move coal from inside in the underground mine at the Dessecker Mine in Ohio.



Photo: The old train engine restored and repainted on display at the Dessecker Mine in Ohio.

Regional Awards

Roger Cornett Slide, Kentucky

On a rainy Friday night in April 2018, Kentucky received a call from a resident concerned about a sudden landslide near his home, his rental properties, and a neighbor's house. The landslide brought down tons of mud, trees, and old coal, threatening people's lives and property. Kentucky's quick response abated the threats to the residents and the safety of their property.



Photo: An image of the Roger Cornett landslide in Kentucky.

Narrow Lake Abandoned Mine Land Site 1805, Indiana

A dangerous and large highwall loomed above a road and a lake in the Greene-Sullivan State Forest, posing a danger to anyone driving, hiking, or fishing near Narrow Lake. Indiana's AML program worked with two sister agencies in the Indiana Department of Natural Resources to address the AML hazard. The collaborative effort removed almost 4,000 linear feet of highwall, and the agencies created additional cabin areas, built a new boat ramp, constructed more than a mile of trails, and added new fish habitat, all of which improved recreational opportunities at the site.



Photo: An image of the remnants of a highwall at the Narrow Lake Abandoned Mine Land site in Indiana.

Wise Hill Underground Fire Mitigation, Colorado

One of the biggest underground mine fires in Colorado burned for more than 70 years, frustrating repeated efforts to contain or extinguish it. After several unsuccessful attempts to suffocate it, the fire migrated thousands of feet, grew in size, and threatened a nearby coal mine and a town. The fire also generated toxic gases and heat that could have ignited surface vegetation, potentially leading to wildfires. Colorado's program used methods learned from a previous underground mine fire project to mitigate the threat and contain the fire deep underground, minimizing the danger of wildfire and toxic fumes.

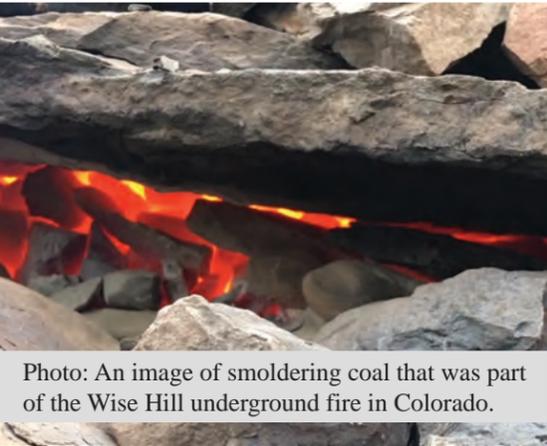


Photo: An image of smoldering coal that was part of the Wise Hill underground fire in Colorado.

Small Project Award

The award recognizes projects that used less than \$1 million in total cost and are carried out in states that receive \$6 million or less in AML funding annually.

Marvel Gob Fire, Alabama

An ongoing mine fire at Alabama's old Marvel mines caused havoc in a small community with surface temperatures reaching as high as 930 degrees Fahrenheit. More than an acre of gob material was burning, generating noxious odors, smoke, and fog. Alabama's AML program put out the fire and reclaimed the site in 50 working days. The project is considered small in scale by reclamation standards, but for people living nearby, Alabama's AML Program solved an important community concern.



Photo: A photo showing the gob pile at the Marvel Mine in Alabama engulfed in flames during the reclamation work of the site.

For project videos of past and present winners, please visit [osmre.gov/programs/abandoned-mine-land-award-winners](https://www.osmre.gov/programs/abandoned-mine-land-award-winners)



REGULATORY PROGRAM

Protecting the ENVIRONMENT

One of the purposes of SMCRA is to balance the Nation’s need to protect the environment from the adverse effects of coal mining with the Nation’s use of coal as an energy source. The law directs the Bureau to establish, maintain, and update federal standards that a state or tribe must meet to administer its coal mining regulatory program. The Bureau also provides states and tribes with assistance and consultation needed for them to assume primary responsibility—or “primacy”—for regulatory activities under SMCRA. When a state or tribe assumes primacy, OSMRE transitions to an oversight role, ensuring that the state or tribal agency properly implements its regulatory programs. The Bureau retains the ability to review regulatory actions and take direct action, including enforcement, where authorized and necessary to ensure the state or tribe is appropriately implementing its programs. OSMRE is the regulatory authority for Federal Program States as well as on Indian lands. To date, no Indian Tribe has assumed primacy.

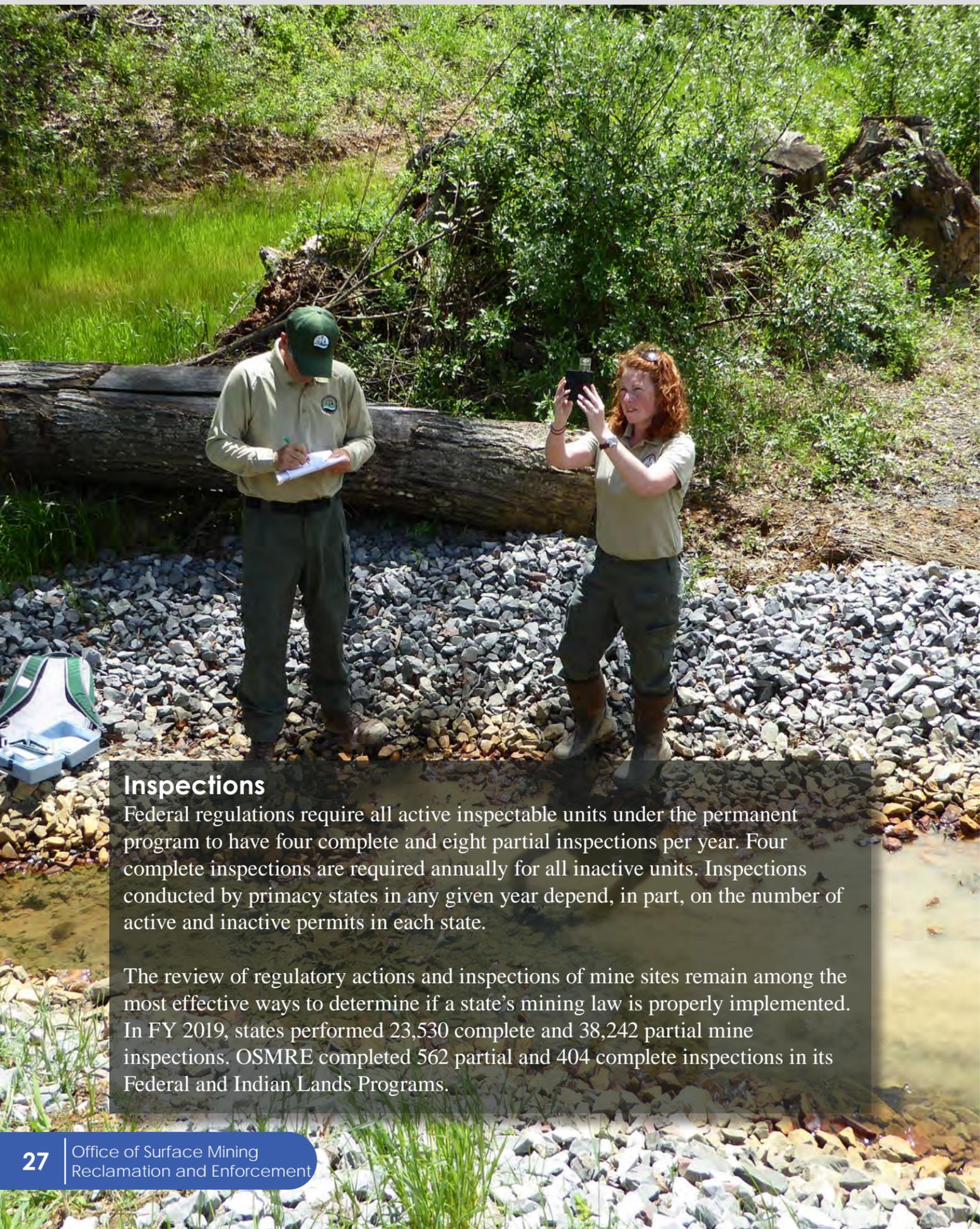
For more information on the array of programs, initiatives, projects, and actions under OSMRE’s Regulatory Program, please visit osmre.gov/programs/regulating-active-coal-mines.

FY 2019 REGULATORY GRANT AWARDS

NATIONAL TOTAL \$68,590,000

State/Tribe	Final Allocated	State/Tribe	Final Allocated
Alabama	\$ 1,339,397	Missouri	\$ 202,855
Alaska	\$ 373,008	Montana	\$ 2,037,656
Arkansas	\$ 112,652	Navajo Nation	\$ 1,800,000
Colorado	\$ 2,323,844	New Mexico	\$ 850,109
Crow Tribe	\$ 575,002	North Dakota	\$ 996,442
Hopi Tribe	\$ 403,382	Ohio	\$ 1,449,935
Illinois	\$ 3,327,409	Oklahoma	\$ 1,191,921
Indiana	\$ 1,607,189	Pennsylvania	\$ 13,174,069
Iowa	\$ 43,875	Texas	\$ 2,915,349
Kansas	\$ 77,542	Utah	\$ 2,544,453
Kentucky	\$ 13,497,278	Virginia	\$ 3,670,097
Louisiana	\$ 197,378	West Virginia	\$ 10,488,404
Maryland	\$ 901,705	Wyoming	\$ 2,267,784
Mississippi	\$ 221,265		

OSMRE provides matching funding in the form of regulatory grants to primacy states up to 50 percent of the cost of their regulatory programs. Indian Tribe’s can receive 100 percent of the funds necessary to develop a regulatory program.



Recognizing Exemplary Reclamation

The *Excellence in Surface Coal Mining Reclamation Awards* are presented to coal mining companies that achieve the most exemplary coal mine reclamation in the nation. Past winners have demonstrated a commitment to sound mining practices and effective reclamation plans that enhanced beneficial postmining use of the land. OSMRE has honored high-quality coal mine reclamation since 1986.

Award Eligibility

Surface coal mining and reclamation operations conducted under a Title V permit (1978 - present) are eligible for nomination. Also, non-permitted mining and reclamation completed using Government Financial Reclamation Contracts under the Enhanced Abandoned Mine Land (AML) regulations are also eligible for nomination. AML reclamation projects carried out exclusive of active mining are not included in this program. AML projects integrated with Title V permitted operations are eligible for an award.

Award Winners

Award winners are recognized for developing innovative reclamation techniques or have completed reclamation that resulted in outstanding on-the-ground performance. The awards program is designed to help state and federal regulators transfer exceptional reclamation methods and techniques from award-winning operations to other coal mine operators who work under SMCRA nationwide.



Inspections

Federal regulations require all active inspectable units under the permanent program to have four complete and eight partial inspections per year. Four complete inspections are required annually for all inactive units. Inspections conducted by primacy states in any given year depend, in part, on the number of active and inactive permits in each state.

The review of regulatory actions and inspections of mine sites remain among the most effective ways to determine if a state's mining law is properly implemented. In FY 2019, states performed 23,530 complete and 38,242 partial mine inspections. OSMRE completed 562 partial and 404 complete inspections in its Federal and Indian Lands Programs.

National Awards

Peabody Western Coal Company, Kayenta Mine, Black Mesa, Arizona

The judges cited Peabody's Kayenta mine for its utilization of geomorphic reclamation, sinuous drains, and multiple sub-watersheds to achieve postmining land uses of rangeland grazing, wildlife habitat, and cultural plant habitat. As part of the cultural planting, the reclamation team included a cultural seed mix for Navajo and Hopi medicine men.



Photo: A woman is examining plants at the Kayenta Mine.



Photo: Two men on horseback ride along the reclaimed area at the Kayenta Mine.

Peabody Midwest Mining, LLC, Vermilion Grove Mine, Ridge Farm, Illinois

The mine's use of a filter press to de-water slurry generated from a coal preparation plant allowed for increased compaction levels, a smaller footprint of refuse area reclamation, and allowed for recovery of water in the plant. Additionally, the company employed techniques such as layering clay, subsoil, and topsoil to total four feet of cover material. This method allowed for the successful implementation of postmining land uses of herbaceous wildlife cover and high-capability cropland adjacent to the slurry impoundment. These techniques can be transferred to other sites where water resources are limited and land is costly.



Photo: An overhead view of water features at the Vermilion Grove Mine.



Photo: A panoramic view of the reclaimed Vermilion Grove Mine.

Good Neighbor Awards

ICG Tygart Valley, Leer Mine Complex, Grafton, West Virginia

ICG nominated the Leer Mine Complex as a Good Neighbor for its efforts to reduce noise and visibility of the mining operations. Newly installed centrifugal fans inside sound-insulated buildings reduced noise levels to the extent that previously concerned patrons at an adjacent golf course did not know the new fans were in operation. Surrounding trees were left in place and a winding access road reduced visibility of



Photo: Volunteers serving food at a community event sponsored by ICG Tygart Valley in West Virginia.

the site. The company also practices good neighbor policies, providing sports scholarships, hosting Relay For Life events, giving away Christmas presents to school children, donating to food drives, and numerous other community outreach events. ICG Tygart Valley is owned by Arch Coal.

Navajo Transitional Energy Company, North American Coal Company – Bisti Fuels, Navajo Mine, Fruitland, New Mexico

This Navajo Nation owned mine was nominated for its commendable work within the Navajo community. Citing high unemployment and poverty, the company invested in the community in several ways, including:

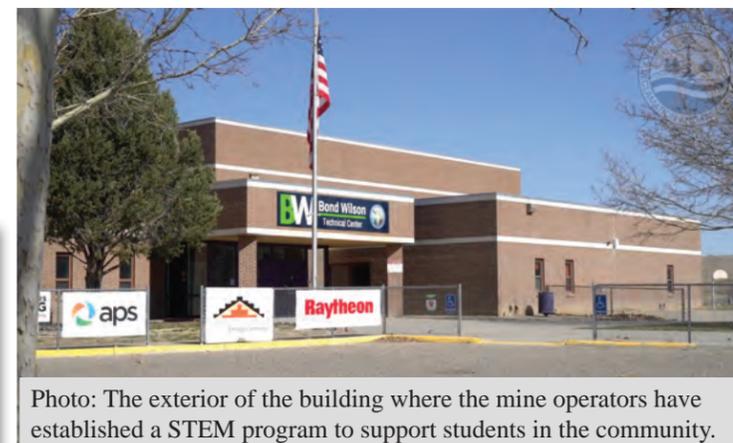


Photo: The exterior of the building where the mine operators have established a STEM program to support students in the community.

- Supporting a post-secondary education program at the Bond Wilson Technical Center.
- Developing a STEM career event at local schools.
- Creating a teacher workshop.
- Funding internship and scholarship programs.
- Creating a seminar series at a local college.
- Coordinating with academia to create a new species of plant that is adapted to harsh New Mexican deserts.
- Hosting tours and other educational outreach events.



TECHNOLOGY DEVELOPMENT and TRANSFER PROGRAM

As part of OSMRE's mandate under SMCRA, the Bureau provides technical support, assistance, and training to state and tribal surface coal mining programs. The Technology Development and Transfer Program covers a range of activities that promote and utilize technological innovations that better protect the environment during mining and in reclaiming active and abandoned mines.

OSMRE also provides training that ensures that states, tribes, and the Bureau's other partners continue to administer their surface mining programs efficiently and effectively. In FY 2019, the Technology Development and Transfer Program received \$16.345 million.

For more information on OSMRE's Technology Development and Transfer Program, visit www.osmre.gov/programs/technology-and-transfer-program.

National Technical Training Program

One of the ways that OSMRE balances coal production with environmental protection is by providing resources for technical assistance and training through the National Technical Training Program (NTTP).

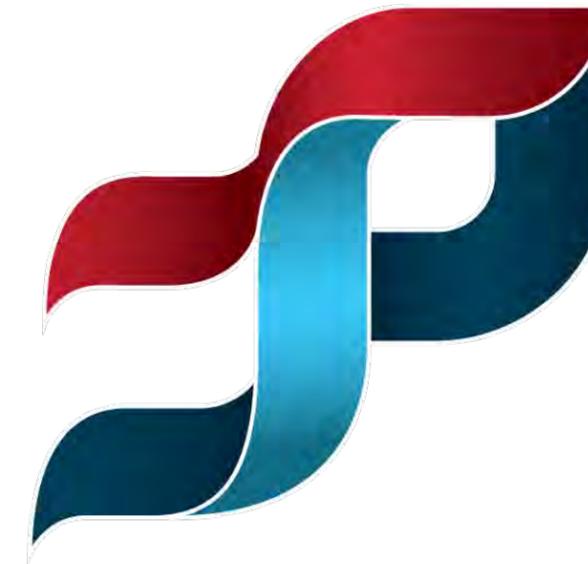
The NTTP provides training related to permit approval, bond release, reclamation, and enforcement within the technical disciplines of engineering, hydrology, blasting, agronomy, and botany. The NTTP may also advance technical solutions developed during benchmarking workshops. In total, NTTP provided training classes for 609 students during FY 2019 in 10 states and 23 locations.

For more information about NTTP courses, please visit www.osmre.gov/programs/national-technical-training-program



Photo: OSMRE staff demonstrates the use of new technology to perform inspections.

Technical Innovation and Professional Services



The Technical Innovation and Professional Services (TIPS) is a national service by OSMRE that provides off-the-shelf scientific and engineering modeling software to state, tribal, and federal offices that administer SMCRA. TIPS also delivers comprehensive instructor-led and online training courses in the use of those tools. The trainings developed in-house by state, tribal, and OSMRE experts are customized to mining and reclamation applications.

The goal of TIPS is to provide state, tribal, and OSMRE personnel with a comprehensive set of analytical tools to aid in technical decision-making related to regulatory and reclamation processes. The services provided are centered around commercial scientific and engineering computer hardware and software supported by OSMRE in partnership with the states and tribes. This technical assistance grew from a few applications available on a single specially designed shared workstation to a software suite available for use on desktop computers.

TIPS also provides commercial software applications to state, tribal, and OSMRE offices at considerable cost savings by sharing the commercial licenses for the software via the Internet and the OSMRE Wide Area Network. Thirty commercially available software applications cover a wide range of regulatory and abandoned mine land subjects. The customer base continues to include over 100 state, tribal, and OSMRE office locations throughout the country totaling nearly 2,000 users.

The TIPS suite of engineering, scientific, database, and mapping core software aids the technical decision-making associated with:

- Conducting reviews of permits.
- Performing cumulative hydrologic impact assessments.
- Quantifying potential effects of coal mining.
- Preventing acid mine drainage.
- Quantifying subsidence impacts.
- Measuring revegetation success.
- Assisting in the design of abandoned mine lands projects.
- Providing the scientific basis for environmental assessments and environmental impact statements.

Demand for TIPS tools and support continues to increase each year, especially in the demand for geospatial data and mobile computing tools for field use. TIPS also offers training to accommodate the use of mobile computing devices by inspectors. Mobile computing allows inspectors to be more efficient, which, in turn, raises the quality and quantity of inspections. TIPS has also begun an effort to make satellite and aerial imagery available nationwide through a centralized server accessible from any state, tribal, or OSMRE office.

For more information on OSMRE's Technology Innovation and Technical Services, visit: www.osmre.gov/programs/technical-innovation-and-professional-services.



Photo: Applied science programs research plant growth in various soil conditions.

Protecting Endangered Bat Species

Three bat species protected under the Endangered Species Act may be potentially encountered at mine sites:

- Indiana bats.
- Northern long-eared bats.
- Gray bats.

To ensure the protection of endangered and threatened bat species, OSMRE works closely with our state regulatory agency partners and the U.S. Fish and Wildlife Service to ensure mining activities do not negatively impact federally listed bats that are present at a mine site. Through this work, and partnerships with other federal and state agencies, OSMRE helps develop guidelines and best practices for protecting threatened and endangered bats on mine lands.

Explore the interactive map of the U.S. coal fields and species ranges and learn more about how OSMRE works to protect bats here: www.osmre.gov/programs/bat-conservation-and-mining.



Photo: A cluster of Gray bats.





FISCAL YEAR 2019 TABLES

Rhinos and deer at The Wilds in Ohio. The project sits on reclaimed abandoned mine lands, and through the efforts of the Columbus Zoo, is home to several endangered or threatened species. OSMRE and The Wilds collaborated on several mining and reclamation related research projects to help enhance conservancy efforts.

Table 1: FY 2019 Abandoned Mine Land Funding (Cash Basis)

State/Tribe	AML Collections ¹	State Share Distribution	Historic Coal Distribution	Minimum Program Distribution	Certified In Lieu Distribution ²	Total Mandatory Distribution	Emergency Distribution ³
Alabama	\$1,938,661	\$909,232	\$4,230,637	\$0	\$0	\$5,139,869	\$0
Alaska	\$242,808	\$113,877	\$45,651	\$2,654,472	\$0	\$2,814,000	\$0
Arkansas	\$0	\$0	\$351,742	\$2,462,258	\$0	\$2,814,000	\$0
Colorado	\$2,250,119	\$1,055,306	\$2,061,795	\$0	\$0	\$3,117,101	\$0
Illinois	\$6,408,279	\$3,005,483	\$15,673,012	\$0	\$0	\$18,678,495	\$0
Indiana	\$6,333,333	\$2,970,333	\$5,102,642	\$0	\$0	\$8,072,975	\$0
Iowa	\$0	\$0	\$1,238,828	\$1,575,172	\$0	\$2,814,000	\$0
Kansas	\$0	\$0	\$1,004,269	\$1,809,731	\$0	\$2,814,000	\$0
Kentucky	\$6,259,597	\$2,935,751	\$15,360,544	\$0	\$0	\$18,296,295	\$0
Louisiana	\$119,820	\$0	\$0	\$0	\$177,816	\$177,816	\$0
Maryland	\$310,809	\$145,770	\$995,359	\$1,672,871	\$0	\$2,814,000	\$0
Mississippi	\$218,431	\$0	\$0	\$0	\$102,445	\$102,445	\$0
Missouri	\$71,063	\$33,328	\$1,212,586	\$1,568,086	\$0	\$2,814,000	\$0
Montana	\$8,114,981	\$0	\$0	\$0	\$7,747,222	\$7,747,222	\$0
New Mexico	\$1,894,862	\$888,691	\$501,249	\$1,424,060	\$0	\$2,814,000	\$0
North Dakota	\$2,406,587	\$1,128,689	\$641,645	\$1,043,666	\$0	\$2,814,000	\$0
Ohio	\$1,445,635	\$678,002	\$9,607,759	\$0	\$0	\$10,285,761	\$0
Oklahoma	\$146,708	\$68,806	\$722,309	\$2,022,885	\$0	\$2,814,000	\$0
Pennsylvania	\$6,788,880	\$3,183,985	\$50,662,950	\$0	\$0	\$53,846,935	\$0
Tennessee	\$30,021	\$14,079	\$1,774,574	\$1,025,347	\$0	\$2,814,000	\$0
Texas	\$2,767,958	\$0	\$0	\$0	\$2,515,463	\$2,515,463	\$0
Utah	\$1,833,536	\$859,928	\$502,235	\$0	\$0	\$1,362,163	\$0
Virginia	\$1,904,438	\$893,181	\$4,714,632	\$0	\$0	\$5,607,813	\$0
Washington	\$0	\$0	\$0	\$0	\$0	\$0	\$0
West Virginia	\$14,151,941	\$6,637,260	\$29,117,051	\$0	\$0	\$35,754,311	\$0
Wyoming	\$81,593,588	\$0	\$0	\$0	\$87,833,889	\$87,833,889	\$0
Crow Tribe	\$1,085,379	\$0	\$0	\$0	\$1,211,505	\$1,211,505	\$0
Hopi Tribe	\$656,205	\$0	\$0	\$0	\$588,522	\$588,522	\$0
Navajo Nation	\$2,154,209	\$0	\$0	\$0	\$2,817,230	\$2,817,230	\$0
Total	\$151,127,846	\$25,521,701	\$145,521,469	\$17,258,548	\$102,994,093	\$291,295,811	\$0

Total figures above have been adjusted for rounding.

AML Fee Collections in Table 1 are reported on a cash basis (recognition of revenue when received) and may not tie to OSMRE's financial statement as these include other amounts.

AML fees are allocated to "pools" upon collection for later distribution. Annual distributions, are calculated based on SMCRA, except for the Emergency Distribution, which is based on state estimates approved by the OSMRE Director. The distribution above is after sequestration.

¹ This column represents AML fees collected during the AML FY 2018 (Dec 1st to Nov 30th), regardless of when they were reported to OSMRE. These amounts are the basis for the FY 2019 Distribution.

² The Certified In Lieu Distribution is also funded by the U.S. Treasury for the certified states' "state share balance."

³ The Emergency Distribution amounts are distributed from AML appropriated funds; therefore, they are not included as part of the Total Mandatory Distribution.

Data Source: Financial Business Management System (FBMS) and the Grant Distribution

Table 2: FY 2019 AML Fund Status

<i>(dollars in thousands)</i>	FY 2019	FY 2018
Balance, Start of Year	\$ 2,971,842	\$ 2,937,670
AML Appropriated Pilot Funds	115,000	115,000
Fees, debts, and interest collected	147,513	155,523
Net Investment Activity	59,335	49,236
Total Earnings	321,849	319,759
Less:		
Disbursements/Recission	218,369	239,329
Transfers to the Combined Benefit Fund	54,321	46,257
Total Disbursements and Transfers	272,690	285,586
Balance, End of the Year	3,021,001	2,971,842

Total figures above have been adjusted for rounding.

Note: The information presented in this table is on a cash basis, and therefore, will not reconcile to accrual based financial data presented elsewhere in this report.

Data Source: Financial Business Management System (FBMS)

Table 3: Abandoned Mine Land Inventory Costs

FY 2019		
Completed	\$4.32 billion	28%
Funded	\$0.63 billion	4%
Unfunded	\$10.6 billion	68%
TOTAL	\$15.55 billion	100%

This table includes all coal and non-coal problems (Priority 1, 2, 3, 4, 5, B, F, and H) as well as non-mining activities. It does not include AML Pilot Program projects.

Data Source: eAMLIS

Table 4: FY 2019 Abandoned Mine Land Grants¹ to Primacy States and Indian Tribes

State/Tribe	Administration ²	Project Costs ³	AMD Set-Aside ⁴	Non-Reclamation Activity Costs ⁵	2019 Total	2018 Total
Alabama	830,947	3,075,336	1,541,961	-	5,448,244	12,287,884
Alaska	306,965	2,518,014	-	-	2,824,979	2,827,377
Arkansas	199,155	4,586,655	-	-	4,785,810	5,383,005
Colorado	1,426,798	1,690,303	-	-	3,117,101	6,945,231
Illinois	1,573,611	35,600,694	5,600,000	-	42,774,305	18,425,724
Indiana	944,004	7,304,835	2,421,893	-	10,670,732	10,962,341
Iowa	299,636	2,514,364	-	-	2,814,000	2,802,000
Kansas	465,520	2,348,480	-	-	2,814,000	2,802,000
Kentucky	1,824,300	16,540,458	-	-	18,364,758	19,089,856
Louisiana	142,258	-	-	35,000	177,258	261,188
Maryland	628,171	1,365,784	1,000,000	-	2,993,955	3,554,822
Mississippi	233,285	211,632	-	-	444,917	0
Missouri	223,100	2,631,126	124,592	-	2,978,818	6,576,618
Montana	502,914	7,469,154	-	-	7,972,068	7,876,613
New Mexico	1,780,371	7,776,620	-	-	9,556,991	2,802,000
North Dakota	402,186	2,411,814	-	-	2,814,000	2,934,881
Ohio	3,547,982	7,761,351	-	-	11,309,333	11,916,396
Oklahoma	400,000	3,009,293	-	-	3,409,293	2,802,000
Pennsylvania	2,562,378	54,246,908	6,000,000	-	62,809,286	69,471,485
Tennessee	399,322	2,034,511	536,595	-	2,970,428	5,032,500
Texas	489,534	2,825,929	-	-	3,315,463	2,287,150
Utah	619,142	743,021	-	-	1,362,163	2,802,000
Virginia	1,033,278	4,949,355	-	-	5,982,633	6,269,452
West Virginia	6,497,408	18,530,610	10,726,293	-	35,754,311	58,970,817
Wyoming	2,099,867	87,814,661	-	-	89,984,528	91,532,184
Crow Tribe	255,316	94,186	-	862,003	1,211,505	1,160,946
Hopi Tribe	588,522	-	-	-	588,522	551,961
Navajo Nation	1,490,276	1,326,953	-	-	2,817,229	2,955,998
TOTAL	\$31,766,246	\$281,382,047	\$27,951,333	\$897,003	\$342,066,630	\$361,284,430

The figures in Table 4 have been adjusted for rounding.

No emergency funding was provided among these states during FY 2019.

Wyoming was the only state to receive funding for subsidence insurance during FY 2019 in the amount of \$70,000.

¹ Grants awarded were funded using the FY 2019 Distribution, carryover, and/or funds recovered from prior years. Decreases of prior year awards are not included. Therefore, these numbers will not tie to the FY 2019 Mandatory Distribution in Table 1.

² Included in this category are costs for program support (personnel, budgeting, procurement, etc.), AML inventory management, and program policy development. Indirect costs associated with the administration of the program may also be included.

³ The term "Project Costs" is now used instead of "Construction." This category contains non-water supply, water supply, and non-coal projects.

⁴ Acid Mine Drainage set-aside are funds set aside in a trust account for use towards Acid Mine Drainage abatement and treatment.

⁵ This category contains non-reclamation activity costs that certified states can use from U.S. Treasury funds.

Data Source: Financial Business Management System (FBMS)

Table 5a: Abandoned Mine Land Reclamation (1978-2019)

Priority 1 and 2 (Protection of Public Health and Safety) and Emergency Projects																		Elevated Priority 3 Projects ¹										
State/Indian Lands	Clogged Streams	Clogged Stream Lands	Dangerous Highwalls	Dangerous Impoundments	Dangerous Piles & Embankments	Dangerous Slides	Dangerous Gases	Hazardous Equipment & Facilities	Hazardous Water Bodies	Industrial/ Residential Waste	Portals	Polluted Water: Agriculture & Industrial	Polluted Water: Human Consumption	Subsidence	Surface Burning	Underground Mine Fires	Vertical Openings	Bench*	Equipment / Facility*	Gobs*	Highwall*	Haul Road*	Mine Opening*	Pits*	Slump*	Slurry*	Spoil Area*	Water Problems*
Alabama	2	198	370198	1	137	21	1	491	90	26	1094	11	15	97	49	0	430	0	0	28	7919	10	4	87	0	0	1919	51
Alaska	0	0	12770	4	8	0	0	1655	2	4	8	0	0	1	67	0	18	0	0	0	0	0	0	0	0	0	0	0
Arkansas	2	0	77283	1	414	0	0	3	95	45	25	2	0	25	4	0	98	0	0	0	0	0	0	0	0	0	87	0
California	0	0	0	0	0	0	0	0	0	0	34	0	0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	0
CERT Tribes ²	0	0	7675	0	519	0	0	6	32	9	74	0	0	44	0	3	18	0	0	0	0	0	0	0	0	0	22	0
Colorado	600	0	57402	0	175	17	1	3	698	31	581	7	0	946	28	291	422	0	0	31	0	0	2	12	0	0	4	8
Crow Tribe	0	1	1915	1	55	22	0	32	1	0	15	3	0	16	0	0	5	0	0	0	0	0	0	0	0	0	0	0
Georgia	0	0	13200	2	0	0	0	0	0	0	112	0	1	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0
Hopi Tribe	0	0	11662	0	0	0	0	8	0	0	9	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
Illinois	27	1879	86126	8	618	5	27	470	17	79	182	49	58	266	123	0	1427	0	6	391	10	36	2	46	3	136	35	256
Indiana	11	39	214986	8	377	5	5	111	2	42	66	14	45	131	15	0	1433	0	3	453	0	44	0	10	0	253	381	571
Iowa	24	1304	112357	10	1100	1	0	5	38	531	1	20	4	39	0	0	26	0	1	0	16351	4	0	33	0	0	167	747
Kansas	0	29	245311	3	111	8	0	2	1	31	0	3	0	51	13	0	2306	0	0	0	0	0	0	0	0	0	482	0
Kentucky	50	8156	39759	127	784	2655	1	289	61	27	3042	6	19039	63	251	63	230	0	0	0	0	0	0	0	0	0	0	0
Maryland	264	72	44680	6	274	114	1	27	21	35	53	140	127	15	1	2	9	0	0	0	0	0	0	0	0	0	0	442
Michigan	0	0	950	0	0	0	0	7	2	0	0	0	1	0	7	0	89	0	1	0	0	0	0	0	0	0	0	0
Mississippi	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Missouri	11	1567	104664	6	893	0	0	28	44	74	36	66	15	6	19	7	138	2	9	152	22644	2	1	79	0	69	1062	73
Montana	10	12	7910	3	83	0	0	198	0	20	729	19	291	875	307	82	435	0	0	0	0	0	0	0	0	0	0	0
Navajo Nation	0	0	3955	1	1	7	0	4	0	0	193	0	0	14	3	7	8	0	0	0	0	0	0	0	0	0	0	0
New Mexico	2	2	0	0	46	0	0	16	0	0	265	3	1	71	35	32	85	0	1	48	0	28	9	0	0	0	0	0
North Dakota	0	0	192503	4	317	35	0	14	18	2	13	6	0	1366	21	0	17	0	0	0	0	0	0	0	0	0	0	0
Ohio	38	5665	111000	15	123	582	5	86	34	34	491	53	342	231	173	3	309	0	0	0	1330	0	1	3	0	0	17	0
Oklahoma	15	1	319243	0	0	0	0	18	260	27	200	6	3	28	4	0	187	0	11	0	0	0	1	2	0	0	632	0
Oregon	0	0	0	0	0	0	0	3	0	0	16	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
Pennsylvania	149	300	1385202	22	1069	170	7	420	141	42	392	29	3300	2860	216	8396	1374	0	0	0	0	0	0	0	0	0	0	0
South Dakota	0	0	135	0	0	0	0	4	0	0	5	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Tennessee	2	147	123453	3	534	50	0	31	140	17	193	7	210	5	28	0	12	0	0	0	15329	0	0	19	0	0	198	1
Texas	0	0	3285	0	1074	0	0	0	10	0	5	0	0	17	0	0	6	0	0	0	0	0	0	0	0	0	0	0
Utah	14	10	3425	1	147	3	19	163	0	2	544	3	0	7	44	23	24	0	1	18	0	0	3	0	0	0	0	0
Virginia	76	913	34871	84	272	422	1	270	2	2	1255	0	7554	21	58	0	162	0	3	35	4000	0	5	0	3	0	0	1
Washington	0	0	0	0	3	0	0	7	0	0	37	0	0	24	15	0	208	0	0	0	0	0	0	0	0	0	0	0
West Virginia	1247	173	392906	1956	5518	715	11	748	30	45	3493	88	26265	613	552	37	221	39	1	28	11678	0	10	1	24	0	64	481
Wyoming	14	458	36909	6	870	25	0	143	3	12	494	3	0	1416	39	156	296	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2556	20924	4015734	2272	15518	4856	79	5261	1742	1137	13658	538	57270	9255	2071	9102	10060	41	37	1183	79261	123	38	291	31	458	5069	2631

Idaho and Rhode Island do not have any reported Priority 1, 2, or 3 projects during this timeframe. North Carolina reported five vertical openings during the reporting timeframe.

¹ Denotes Priority 3 AML problems (restoration of land and water resources and the environment) that were treated as higher priorities because of associations with Priority 1 or 2 problems areas.

² CERT is the Council of Energy Resources Tribes: Blackfeet, Cheyenne River Sioux, Fort Berthold (Mandan, Hidatsa, Arikira), Fort Peck (Assiniboine and Sioux), Northern Cheyenne, Jicarilla Apache, Laguna Pueblo, Rocky Boys (Chippewa and Cree), San Carlos Apache, Southern Ute, Uintah and Ouray, Ute Mountain Ute, White Mountain Apache, and Wind River (Arapaho and Shoshone).

Statistics include State, but not OSMRE, emergency AML project accomplishments.

Table includes AML projects funded through Coal Interim Site Funding, Clean Streams Initiatives, Coal Insolvent Surety Site Funding, Federal Reclamation Program Funding, Non-Coal, Pre-SMCRA Grants Funding, State Acid Mine Drainage Set-Aside, State Emergencies, State Future Reclamation Set-Aside Funding, and Watershed Cooperative Agreements projects.

Data Source: eAMLIS

Table 5b: Abandoned Mine Land Reclamation Accomplishments (1978-2019)

Priority 3 Coal and Non-Coal Problems (Environmental Restoration)												
State/Indian Lands	Bench	Equipment/Facility	Gobs	Haul Road	Highwalls	Industrial/Residential Waste	Mine Openings	Pits	Slump	Slurry	Spoil Area	Water Problems
Alabama	23	8	219	2	30,235	15	48	0	9	9	8,307	328
Alaska	-	2	2	-	-	-	-	3	25	-	51	-
Arkansas	-	-	-	-	-	-	22	8	-	-	202	165
California	-	-	2	-	-	-	-	-	-	-	-	50
CERT Tribes ¹	-	2	4	-	1,500	-	1	7	-	-	80	-
Colorado	3	7	155	-	2,028	34	12	106	-	-	177	-
Crow	6	-	37	12	2,245	-	2	38	4	0	55,199	-
Georgia	3	-	3	-	1,400	-	-	5	-	-	7	-
Hopi Tribe	-	-	25	15	51	-	-	10	-	-	10	-
Illinois	1	171	2,317	210	11,520	6	75	586	2	963	1,940	2,690
Indiana	-	253	1,599	284	8,646	67	10	563	238	1,122	1,929	461
Iowa	-	-	1	6	6,022	2	2	42	-	-	511	5
Kansas	-	1	89	-	3,200	-	-	23	-	10	79	-
Kentucky	562	61	251	0	2,240	-	71	4	5	66	836	60
Maryland	10	2	46	2	6,085	3	19	22	1	-	254	205
Michigan	-	1	23	1	-	1	-	13	-	-	10	-
Missouri	-	-	1	-	900	-	-	17	-	-	604	13
Montana	1	58	165	1	1,170	105	230	34	19	-	869	2,741
Navajo Nation	41	3	147	203	890	1	81	148	-	-	265	26
New Mexico	3	27	62	15	-	-	29	2	-	2	335	-
North Dakota	-	-	-	-	-	-	-	-	-	-	1,389	-
Ohio	2	3	206	-	14,220	-	19	43	-	-	447	150
Oklahoma	-	-	-	-	-	-	-	-	-	-	-	-
Oregon	-	-	-	-	-	-	1	-	-	-	-	-
Pennsylvania	-	38	215	-	19,018	-	49	441	52	4	9,121	10,493
Tennessee	76	15	67	8	32,557	3	3	171	4	-	977	360
Texas	-	-	8	-	1,825	-	-	-	-	-	153	-
Utah	4	64	255	3	550	7	-	8	16	1	55	20
Virginia	1	35	26	1	14,031	2	132	3	4	-	12	125
West Virginia	6	19	104	11	36,285	7	6	5	-	2	347	760
Wyoming	-	34	88	395	670	0	419	7,305	359	199	11,993	76
TOTAL	741	803	6,113	1,167	197,288	252	1,231	9,607	737	2,377	96,154	18,727

¹ CERT is the Council of Energy Resources Tribes: Blackfeet, Cheyenne River Sioux, Fort Berthold (Mandan, Hidatsa, Arikira), Fort Peck (Assiniboine and Sioux), Northern Cheyenne, Jicarilla Apache, Laguna Pueblo, Rocky Boys (Chippewa and Cree), San Carlos Apache, Southern Ute, Ute Mountain Ute, White Mountain Apache, and Wind River (Arapaho and Shoshone).
Table includes AML projects funded by the Federal Reclamation Program, Non-Coal project funding, and Pre-SMCRA Grants.
Data Source: eAMLIS

Table 6: FY 2019 Appropriations

Appropriations (in thousands)		
	2018	2019
Discretionary Appropriations		
Regulation & Technology		
Environmental Restoration	\$4	\$20
Environmental Protection	\$88,602	\$88,602
Technology Dev. & Transfer	\$12,801	\$12,801
Financial Management	\$505	\$505
Executive Dir. & Admin	\$13,936	\$13,936
Subtotal	\$115,848	\$115,864
Abandoned Mine Reclamation		
Environmental Restoration	\$9,480	\$9,480
Technology Dev. & Transfer	\$3,544	\$3,544
Financial Management	\$5,182	\$5,182
Executive Dir. & Admin	\$6,466	\$6,466
AML Economic Development Pilot Program	\$115,000	\$115,000
Subtotal	\$139,672	\$132,672
Total Discretionary Appropriations	\$255,520	\$255,536
Mandatory Appropriations		
Payments to States in Lieu of Coal Fee Receipts (Treasury Funds)	\$106,678	\$102,994
Grants to States and Tribes (AML Fund)	\$194,052	\$188,302
Transfer to United Mine Workers Fund	\$331,459	\$279,397
Total Mandatory Appropriations	\$632,189	\$570,693
Total OSMRE	\$887,709	\$826,229¹

¹ Amount includes Civil Penalty collections of \$20,000 for FY 2019 (figures rounded).
Data Source: FY 2019 Congressional appropriations

Table 7: Regulatory Grant Funding FY 2019 Obligations

State/Tribe	FY 2019 Federal Funding	Total FY 2018 Federal Funding	Cumulative Through FY 2019 Federal Funding ¹
Alabama	\$1,330,276	\$1,290,153	\$45,183,361
Alaska	373,008	372,448	\$10,122,936
Arkansas	112,652	111,384	\$5,724,844
Colorado	2,323,844	2,324,635	\$66,685,898
Illinois	3,327,409	3,223,305	\$99,351,456
Indiana	1,607,189	1,648,573	\$61,319,665
Iowa	43,875	43,733	\$3,825,841
Kansas	77,542	73,850	\$4,282,150
Kentucky	13,497,278	13,400,000	\$455,404,979
Louisiana	186,586	186,586	\$5,935,309
Maryland	901,705	899,525	\$23,409,319
Michigan	0	0	\$135,458
Mississippi	220,324	183,002	\$3,502,013
Missouri	202,855	204,899	\$11,282,272
Montana	2,037,656	2,025,990	\$41,417,812
New Mexico	850,109	862,150	\$26,016,200
North Dakota	996,442	994,638	\$23,650,137
Ohio	1,776,000	1,635,010	\$95,211,254
Oklahoma	1,187,009	1,187,009	\$35,607,544
Pennsylvania	13,174,069	12,959,156	\$401,297,998
Rhode Island	0	0	\$158,453
Tennessee	0	0	\$5,340,085
Texas	2,915,349	2,632,728	\$53,300,432
Utah	2,544,453	2,532,165	\$60,072,596
Virginia	3,670,097	3,661,287	\$123,525,219
Washington	0	0	\$4,893
West Virginia	10,476,486	11,320,305	\$308,662,583
Wyoming	2,267,784	2,273,345	\$67,922,602
Crow Tribe	575,002	571,955	\$6,134,157
Hopi Tribe	403,382	402,285	\$7,065,390
Navajo Nation	1,800,000	1,800,000	\$19,253,166
N. Cheyenne Tribe	0	0	\$86,888
Total	\$68,878,381	\$68,820,116	\$2,070,892,911

Figures shown above have been adjusted for rounding

¹ OSMRE also uses these federal appropriations to fund its regulatory activities, such as the Applicant/Violator System, Technical Innovation and Professional Services, Kentucky Settlement, and other Title V cooperative agreements. Cumulative figures are net of all prior-year adjustments.

Data Source: Financial Business Management System

Table 8: Oversight of State Programs¹

State	Oversight Inspections ²	Ten-Day Notices for Observed Violations ³	Ten-Day Notices for Citizen Complaints ⁴	Notices of Violations (NOVs) ⁵	Failure-To-Abate Cessation Orders (FTACOs) ⁶	Imminent Harm Cessation Orders (IHCOs) ⁷
Alabama	38	0	0	0	0	0
Alaska	6	0	0	0	0	0
Arkansas	3	0	0	0	0	0
Colorado	14	0	0	0	0	0
Illinois	40	0	0	0	0	0
Indiana	21	0	0	0	0	0
Iowa	0	0	0	0	0	0
Kansas	2	0	0	0	0	0
Kentucky	262	2	0	0	0	2
Louisiana	4	0	0	0	0	0
Maryland	11	0	0	0	0	0
Mississippi	6	0	0	0	0	0
Missouri	3	0	0	0	0	0
Montana	4	0	0	0	0	0
New Mexico	3	0	0	0	0	0
North Dakota	12	0	0	0	0	0
Ohio	37	0	0	0	0	0
Oklahoma	17	0	0	0	0	0
Pennsylvania	237	9	1	0	0	0
Texas	10	0	0	0	0	0
Utah	8	0	0	0	0	0
Virginia	55	0	0	0	0	0
West Virginia	122	0	0	0	0	0
Wyoming	9	0	0	0	0	0
TOTAL	924	11	1	0	0	2

¹ Table displays inspection and enforcement actions taken and cited by OSMRE in states with approved regulatory programs during FY 2019.

² "Oversight Inspections" are those conducted solely by OSMRE and reported in the Inspection and Enforcement Tracking (INE) system using "Table 3-Field Office Visits and Inspections." Assisted inspections and field visits performed jointly with states are not included.

³ OSMRE issues a "Ten-Day Notice for an Observed Violation" to the state regulatory authority when OSMRE observes a non-imminent harm violation. The state has ten days to take enforcement or other action to cause the violation to be corrected or to demonstrate good cause for not taking such an action.

⁴ OSMRE issues a "Ten-Day Notice for a Citizen Complaint" to the state regulatory authority when a citizen complaint gives OSMRE reason to believe a non-imminent harm violation exists. The State has ten days to take enforcement or other action to cause the violation to be corrected or to demonstrate good cause for not taking such an action.

⁵ OSMRE issues a Federal "Notice of Violation" to a coal mine operator when performance standards or permit conditions are not being met, and the state regulatory authority has not resolved an issue raised by OSMRE in a Ten-Day Notice.

⁶ OSMRE issues a "Failure to Abate Cessation Order" when a violation has not been abated within the established abatement period.

⁷ OSMRE issues an "Imminent Harm Cessation Order" requiring cessation of surface coal mining and reclamation operations if an OSMRE inspector finds, on the basis of any Federal inspection, that there is an imminent danger to the health or safety of the public or the threat of significant, imminent environmental harm to land, air, or water resources.

Data Source: OSMRE Inspection & Enforcement Tracking (INE) System

Table 9: Regulatory Program Statistics for FY 2019

State/Tribe	Regulatory Staffing ¹	New Permits	New Acreage Permitted ²	Total Acreage Permitted	Inspectable Units	Complete Inspections	Partial Inspections	Notices of Violation	Failure-To-Abate CO's	Imminent Harm CO's	Bond Forfeitures	Acreage of Phase I Bond Released	Acreage of Phase II Bond Released	Acreage of Phase III Bond Released
Alaska	5	0	0	12,365	12	33	44	1	0	0	0	21	15	0
Alabama	23	5	1,376	77,141	166	1,936	21	55	7	0	3	925	2,438	2,534
Arkansas	3	0	0	1,675	6	24	54	25	14	0	0	0	0	0
Colorado	17	0	0	165,618	29	115	184	0	0	0	1	123	622	664
Crow Tribe	5	0	0	9,787	2	8	14	0	0	0	0	0	0	0
Georgia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hopi Tribe	4	0	0	6,237	2	1	0	0	0	0	0	0	0	0
Iowa	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Illinois	42	3	2,245	86,435	167	315	636	41	11	3	2	1,015	2,301	2,062
Indiana	28	0	0	157,595	73	302	553	20	0	0	0	2,440	3,257	2,918
Kansas	3	0	0	2,721	6	28	52	0	0	0	0	0	0	120
Kentucky	203	21	4,903	1,432,703	1,433	6,104	11,259	1,327	322	29	10	9,490	4,223	10,502
Louisiana	4	0	0	37,611	3	12	24	2	0	0	0	0	0	13
Maryland	12	1	5	4,690	48	256	542	7	0	0	0	263	356	403
Missouri	4	0	0	2,957	11	31	58	0	0	0	0	0	0	73
Mississippi	3	0	4,143	11,899	2	8	16	0	0	0	0	0	0	0
Montana	18	1	6,746	80,927	13	80	92	3	0	0	0	127	166	0
North Dakota	10	0	5,272	134,168	25	100	596	1	0	0	0	0	0	338
New Mexico	9	0	0	79,748	6	23	24	0	0	0	0	0	0	34
Navajo Nation	8	0	0	87,031	10	26	34	1	0	0	0	1,459	0	1,384
Ohio	21	0	0	49,167	164	657	1,354	17	1	0	0	426	198	1,878
Oklahoma	18	0	0	19,660	52	247	235	42	7	1	0	842	629	813
Pennsylvania	179	17	2,387	288,866	1,194	4,511	6,853	747	47	17	3	2,020	2,224	2,910
Tennessee	23	0	0	21,634	102	360	493	25	11	2	0	19	41	175
Texas	38	0	0	318,061	29	128	256	6	1	0	0	2,130	806	5,598
Ute Tribe	3	0	0	182	2	3	5	0	0	0	0	116	175	175
Utah	13	1	49	2,830	29	109	159	4	3	0	0	29	0	3
Virginia	54	7	606	74,113	306	1,330	2,045	210	28	15	1	461	1,232	724
Washington	5	0	0	14,821	2	6	16	10	0	0	0	105	0	0
West Virginia	190	19	4,626	357,896	1,983	7,452	13,001	813	99	17	10	2,420	1,391	3,609
Wyoming	19	0	0	416,586	27	111	184	3	0	0	0	4,156	6,462	3,549
TOTAL	962	75	32,358	3,955,124	5,904	24,316	38,804	3,360	551	84	30	28,587	26,536	40,479

¹ Staffing rounded to nearest whole number.

² New acreage includes acreage for new permits, incidental boundary revisions, and any other permit revisions that add acreage.

State statistics based on 2019 State Program evaluation year (July 1, 2018 to June 30, 2019); Federal statistics, for Federal Program States and Indian Tribes, based on 2019 Federal fiscal year (October 1, 2018 to September 30, 2019).

Data Source: 2019 Data for States and Tribes (DST)

Table 10: Watershed Assistance - OSMRE/VISTAs and Interns FY 2019

State	Year-Long Positions (OSMRE/VISTA)	Year-Long Positions (OSMRE/AmeriCorps)	Short-Term Positions (Interns)	Short-Term Positions (OSMRE/VISTA)
Alabama				
Alaska				
Arizona				
California				
Colorado	6			
D.C.			1	
Florida				
Georgia				
Illinois				
Indiana				
Iowa				
Kentucky				
Maryland				
Missouri				
Montana				
New Mexico	2			
New York				
North Carolina				
Ohio				
Oklahoma		1		
Oregon	1			
Pennsylvania			2	
South Carolina				
Tennessee	4			
Texas				
Virginia	2			
West Virginia				
Wyoming				
TOTALS	15	1	3	0

Table 11: NTP Courses and Enrollment FY 2019

Course Name	Students
Coalfield Communications (CCOM-92)	24
Underground Mining Technology (UMT-91)	12
Forensic Hydrologic Investigations (FHI-92)	14
Passive Treatment (PAS-91)	17
Subsidence (SUB-91)	18
Blasting and Inspection (BLI-92)	11
Bonding: Cost Estimation Special Session (BNC-SS-91)	19
Enforcement Procedures (ENF-91)	11
Erosion and Sediment Control (ERS-91)	20
NEPA Procedures (NEPA-91)	13
AML Realty (AMLR-91)	12
Introduction to SMCRA Inspections (SMCRA-91)	12
AML Reclamation Projects (AREC-91)	14
Advanced Blasting: Investigations and Analysis (BLIA-91)	0
Erosion and Sediment Control (ERS-92)	32
Excess Spoil Handling and Disposal (ESHD-91)	17
Bonding: Cost Estimation (BNC-91)	25
AML Design Workshop: Dangerous Highwalls (AMLDH-91)	12
Surface and Groundwater Hydrology (SGW-91)	25
Passive Treatment (PAS-92)	25
Mine Gas Safety and Investigations (MGSI-91)	10
Coalfield Communications (CCOM-91)	11
Soils and Re-vegetation (SOI-91)	20
Surface and Groundwater Hydrology (SGW-92)	15
Instructor Training Course (ITC-91)	17
AML Design Workshop: Fires (AMLF-91)	12
Bonding: Administrative and Legal Aspects (BNA-91)	21
Applied Engineering Principles (AENG-91)	13
AML Design Workshop: Subsidence (AMLS-91)	14
NEPA Procedures (NEPA-92)	24
Historical and Archaeological Resources (HAR-91)	18
Enforcement Procedures (ENF-92)	23
Applied Engineering Principles (AENG-92)	16
Evidence Preparation and Testimony (EVI-91)	0
Soils and Re-vegetation (SOI-92)	12
Geology and Geochemistry of AFM (GGCA-91)	13
AML Design Workshop: Dangerous Openings (AMLDO-91)	12
Acid-Forming Materials: Fund. & App. (ACF-91)	25
TOTAL	609

Data Source: National Technical Training Program (NTP)

Table 12: Significant Court Decisions FY 2019

Case Name	Citation	Summary of Decision
<i>Powder River Basin Res. Council v. Jewell</i>	358 F. Supp. 3d 1238 (D. Wyo. 2018)	Petitioners Powder River Basin Resource Council and Western Organization of Resource Councils challenged the Office of Surface Mining Reclamation and Enforcement’s (OSMRE) recommendation for, and the Department of the Interior’s (Department) approval of, a mining plan modification for the North Antelope Rochelle Mine in Wyoming pursuant to the Mineral Leasing Act of 1920 (MLA), as amended, 30 U.S.C. § 207(c). Among other things, petitioners alleged that, in approving the mining plan modification, the Department violated the MLA and the Surface Mining Control and Reclamation Act of 1977 (SMCRA) by failing to ensure that operations will adhere to SMCRA performance standards for contemporaneous reclamation. On December 6, 2018, the court ruled in the government’s favor on all claims. Regarding a public participation claim, the court ruled that 30 C.F.R. § 746.13 only requires consideration of existing public comment provided at the coal leasing and State SMCRA permitting stages. Next, the court rejected petitioners’ argument that SMCRA’s contemporaneous reclamation requirements may only be measured by final bond release. Finally, the court found that there was ample evidence in the administrative record to show that the State permitting authority and the Department adequately considered SMCRA requirements for hydrologic protection and reclamation bonding. The court found that the Department’s decision regarding reclamation was based on relevant factors. Petitioners did not appeal.
<i>M.L. Johnson Family Props., LLC v. Bernhardt (Johnson Family II)</i>	924 F.3d 842 (6th Cir. 2019)	M.L. Johnson Family Properties (Johnson Family) appealed a March 21, 2018, decision of the U.S. District Court for the Eastern District of Kentucky. Johnson Family and another company own the surface estate of a large plot of land as tenants in common. The other company owns the coal below the surface and wants to mine that coal using surface mining methods; Johnson Family objects to surface mining. The district court affirmed an administrative law judge’s (ALJ) decision that upheld OSMRE’s decision to terminate a cessation order that prohibited surface mining based upon the conclusion that an amended permit that the Kentucky Energy and Environment Cabinet (Kentucky) issued to Premier Elkhorn Coal LLC complied with Federal law. On May 15, 2019, the appellate court issued a decision affirming the District Court. First, the appellate court found that Johnson Family “exhausted its administrative remedies to the extent required by SMCRA.” Next, the court agreed with OSMRE that 30 U.S.C. §1260(b)(6)(C) allowed Kentucky to rely on any State law, including the law of cotenancy, when making its permitting decision. The court held that “when a conveyance does not expressly grant the right to surface mine, the regulatory authority may rely on any state law to determine whether the documents describing the surface-subsurface legal relationship of the severed estate grant such a right.” In this regard, the court found that the ALJ’s application of cotenancy law was not arbitrary, capricious, or contrary to law. The court also found that neither Kentucky nor OSMRE adjudicated a property rights dispute in contravention of 30 U.S.C. § 1260(b)(6)(C), and, if it was a mistake for Premier Elkhorn not to list the ongoing Johnson I litigation in its permit application, it was harmless error because Kentucky and OSMRE had actual knowledge of the case. Finally, Kentucky raised additional arguments that allegedly went to the court’s subject matter jurisdiction over the case; the court rejected these arguments.

Case Name	Citation	Summary of Decision
<i>Diné Citizens Against Ruining Our Env’t v. Bureau of Indian Affairs</i>	932 F.3d 843 (9th Cir. 2019)	Diné Citizens Against Ruining Our Environment and other environmental groups challenge the decisions of the Fish and Wildlife Service (FWS), OSMRE, the Bureau of Indian Affairs, and the Bureau of Land Management associated with the 25-year extension of operations for the Four Corners Power Plant and Navajo Mine. The coal mine and adjacent coal-fired power plant are located on Navajo Nation lands. The mine operates under a SMCRA surface mining permit issued by OSMRE. The federal agencies, led by OSMRE, completed an environmental impact statement (EIS) under the National Environmental Policy Act (NEPA) evaluating the effects of various permitting actions necessary to continue operations of the projects until 2041. The analysis of the projects included formal consultation with FWS regarding the effects of the projects on multiple endangered and threatened species. The complaint alleges violations of the Endangered Species Act and NEPA. The mine owner, Navajo Transitional Energy Company (NTEC), a corporation wholly owned by the Navajo Nation, intervened for the limited purpose of seeking to dismiss the case under Federal Rules of Civil Procedure 19 and 12(b)(7). NTEC argued that it was a required party but that it could not be joined in the case due to tribal sovereign immunity, and the lawsuit could not proceed in its absence. The district court agreed with NTEC and dismissed the case with prejudice. Plaintiffs appealed to the U.S. Court of Appeals for the Ninth Circuit. The United States did not directly join in the appeal, but it did file an amicus brief arguing that the case could proceed without NTEC’s participation. On July 29, 2019, the Ninth Circuit affirmed the district court’s dismissal of the case. The appellate court agreed with NTEC’s argument that it is a required party that must be joined if feasible because it has a legally protected interest in the litigation and proceeding with the lawsuit in NTEC’s absence would impair that interest. The court held that, under Rule 19, NTEC could not be feasibly joined due to tribal sovereign immunity. Further, the appellate court affirmed the district court’s conclusion that the litigation could not, in good conscience, continue in NTEC’s absence. On September 12, 2019, appellants filed a petition for rehearing.
<i>M.L. Johnson Family Props., LLC v. Bernhardt (Johnson Family I)</i>	2019 WL 3841905 (E.D. Ky. Aug. 14, 2019)	This case is related to <i>Johnson Family II</i> , in this table. On April 11, 2018, after prior proceedings, the court dismissed this case because of a final judgment in a related case. The court then reopened the case at the request of Johnson Family. Johnson Family sought to amend its complaint. The government opposed the motion to amend and filed a motion to dismiss. Johnson Family’s proposed amended complaint raised two claims. Count I asked for a declaration upholding the validity of the cessation order that OSMRE had issued to Premier Elkhorn, and Count II was a damages claim against Premier Elkhorn. In an August 14, 2019, decision, with regard to Count I, the court noted that Johnson Family failed to exhaust its administrative remedies because it had a pending appeal with the Department’s Interior Board of Land Appeals (IBLA); as such, the court refused to hear the claim until the IBLA appeal is complete. While the court denied Johnson Family’s motion to amend its complaint to add revised Count I based upon failure to exhaust administrative remedies, the court also noted other potential justiciability problems with the claim. The court also denied Johnson Family’s request to amend its complaint to add proposed Count II because Premier Elkhorn had petitioned for Chapter 11 bankruptcy and was protected by the bankruptcy automatic stay. Finally, the court granted the government’s motion to dismiss because the court found that there were no outstanding issues related to the four counts in the first amended complaint.

Data Source: U.S. Department of the Interior, Office of the Solicitor

Photo Captions

- Table of Contents: Background image - Picture of reclamation work at Grand River, Alabama.
- Pages 1 & 2: Background image - Completed reclamation work at Coyote Canyon at the Navajo Nation.
- Pages 5 & 6: Background image - A miner climbing into a dump truck at a mine site.
- Pages 7 & 8: Background image - A photo of acid mine drainage at Dead Lake near The Wilds in Ohio.
- Pages 9 & 10: Background image - Heavy equipment loading overburden at a coal mine.
- Pages 13 & 14: Background image - An archived image of an idled coal mine circa 1910 – 1915.
- Pages 15 & 16: Background image – An image of Blackwater River, West Virginia.

- Pages 23 & 24: Background image – A view from a dragline at a mine in Texas.
- Pages 25 & 26: Background image – A panoramic view of the San Juan Mine complex in New Mexico.
- Pages 31 & 32: Background image - A satellite view of the North Antelope Rochelle Mine.
- Pages 37 & 38: Background image: Endangered and threatened wildlife grazing and resting in a meadow at The Wilds in Ohio.
- Pages 55 & 56: Background image: Reclaimed mine land at The Wilds in Ohio.
- Back cover: Volunteers using a dibble bar to plant trees using the Forestry Reclamation Approach at the Wildcat Mine in Kentucky.





Office of Surface Mining Reclamation and Enforcement
U.S. Department of the Interior
1849 C Street, NW
Washington, DC 20240

www.osmre.gov

