



2023

West Virginia Department of Environmental Protection Annual Evaluation Report

Prepared By:

Charleston Field Office
Office of Surface Mining
Reclamation and Enforcement
Charleston, West Virginia

OFFICE OF SURFACE MINING RECLAMATION
AND ENFORCEMENT

Annual Evaluation Report
for the
Regulatory and Abandoned Mine Land Programs
Administered by the
West Virginia Department of Environmental Protection

of

WEST VIRGINIA

for

EVALUATION YEAR 2023
(July 1, 2022 to June 30, 2023)

Prepared by:
CHARLESTON FIELD OFFICE

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Executive Summary

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) provides authority to the Office of Surface Mining Reclamation and Enforcement (OSMRE) to oversee the implementation of state programs that have been approved by the Secretary of the Interior as meeting the minimum standards specified by SMCRA. This report contains summary information regarding OSMRE's evaluation of the West Virginia Department of Environmental Protection's (WVDEP) Regulatory and Abandoned Mine Land (AML) Programs, and the effectiveness of those programs in meeting the goals of SMCRA. This report covers the evaluation year (EY) beginning July 1, 2022 and ending June 30, 2023.

The OSMRE and the WVDEP cooperatively develop a biannual Performance Agreement. The agreement contains the basic framework for oversight and technical assistance activities for the EY. The OSMRE solicited public input into the agreement by providing notice to interested citizens, industry, and environmental groups. The 2022/2023 Performance Agreement is available on OSMRE's on-line database, ODocs (odocs.osmre.gov). The 2024/2025 Performance Agreement, signed in June of 2023 by both OSMRE and WVDEP, is also available on ODocs.

Highlights of WVDEP's program activities and accomplishments during the EY from both the Regulatory and AML Programs are outlined below.

Regulatory

During EY 2023, OSMRE awarded WVDEP \$10,199,272 as matching funds to operate its Regulatory Program. Through the support of this funding, WVDEP:

1. Conducted 99% of the inspections required by West Virginia's approved program, which included 13,555 partial and 6,975 complete inspections on 1,852 permits, and 0 active coal exploration permits,
2. Investigated 265 citizen complaints within two days of receipt of the complaint,
3. Released Phase III bond on 2,714 acres for successful completion of reclamation,
4. Measured the rate of off-site impacts, with 94% of the inspectable units (IU) found free of off-site impacts. This is above the Government Performance and Results Act (GPRA) goal of 88%.
5. Issued 22 new permits and approved 201 Incidental Boundary Revisions (IBR), which removed a net 409 surface acres for mining, and
6. Approved 266 permit renewals, 33 permit transfers, 16 general permit amendments, and 21 exploration permits.

The OSMRE is required by Directive REG-8 to conduct inspections and reviews to assure West Virginia is meeting the minimum standards of SMCRA. In support of this goal, OSMRE:

1. Conducted 274 oversight inspections. These inspections included complete, partial, and bond release inspections along with required document reviews,

2. Performed analyses of both OSMRE oversight inspections and WVDEP inspections to demonstrate the successful implementation of its Inspection and Enforcement Program, and
3. Identified 21 active permits with off-site impacts during all scheduled oversight inspections.

Abandoned Mine Lands

During EY 2023, OSMRE awarded WVDEP \$167,381,469 in Abandoned Mine Land Reclamation Funding. The WVDEP did not receive a fee-based grant for EY23 but received \$26,630,000 in Abandoned Mine Land Economic Revitalization (AMLER) funding and \$140,751,469 in Bipartisan Infrastructure Law (BIL) funding. The WVDEP accomplished the following with this funding:

1. Completed reclamation of 54.15 GPRA acres on 27 AML projects. Reclamation reduced potential exposure to 22,362 people as estimated by State census data.
2. Investigated 337 AML-related citizen complaints within two days of receipt.
3. Entered 228 new or significantly revised PADs into eAMLIS for OSMRE's approval, an increase of 39% from last year.
4. Submitted requests for 36 projects, and received ATP on 36. Five of the projects submitted were non-emergency reclamation, 29 were emergencies, and two were funded under AMLER grants.

During EY 2023, WVDEP received \$26.63 million in Fiscal Year (FY) 2022 funding from OSMRE's AMLER program bringing the total available AMLER funding, including FY 2016, 2017, 2018, 2019, 2020 and 2021, to \$181.63 million. Project applications for AMLER funding are in various stages of submittal, review, and approval. Thus far, 65 potential projects have been submitted for OSMRE review since 2016.

Each EY, WVDEP continues the following activities and initiatives:

1. Participates in the Acid Mine Drainage (AMD) Set-aside Program by drawing down AML grant funds awarded and by depositing those funds in a State account solely dedicated to treatment/remediation of AMD from pre-SMCRA coal mining operations,
2. Utilizes the AML Enhancement Rule to reclaim AML sites at minimal cost to the AML Fund,
3. During EY 2023, the OAMLR continued monthly project meetings via Teams conferencing with CHFO to discuss the progress, and any issues, related to any of the activities within the AML program. These meetings were originally proposed to discuss AMLER projects; however, they have expanded to discussion of any aspect relating to the program. These meetings have been extremely beneficial to CHFO and OAMLR and will continue, and
4. Improvements to its National Environmental Policy Act (NEPA) document submittal through training and draft review of project documents.

The OSMRE collects information annually in the following areas: Acid Mine Drainage (AMD) Set-Aside funds, Water Supply Restoration, AML Enhancement, and e-AMLIS (electronic-Abandoned Mine Land Inventory System).

Table of Contents

EXECUTIVE SUMMARY	4
REGULATORY	8
Introduction	8
Overview of the West Virginia Coal Mining Industry	11
Overview of Public Participation and Outreach Efforts	12
Major Accomplishments and Innovations in the West Virginia Program	14
Success in Achieving the Purpose of SMCRA	15
WVDEP Inspections	15
OSMRE Inspections	16
Off-site Impacts	18
Reclamation Success	21
National Priority and General Oversight Topic Reviews	22
Regulatory Program Problems and Issues	26
OSMRE Assistance	28
ABANDONED MINE LAND RECLAMATION	32
Introduction	32
Noteworthy Accomplishments	36
Utilization of OSMRE Assistance	38
Results of Evaluation Year 2023 Reviews	41
Appendix 1 Summary of Core Data to Characterize the Regulatory Program	
Appendix 2 Summary of Core Data to Characterize the AML Program	
Appendix 3 State Comments and Response to EY 2023 West Virginia Annual Report	

TABLE OF FIGURES

Figure 1- Mining areas within West Virginia.....	11
Figure 2 Annual Coal Production via AML fees.....	11
Figure 3-Evaluation Year historic number of violation types.....	16
Figure 4 Evaluation Year 2023 types of violation categories.....	16
Figure 5 Off-site Impacts categories effects.	19
Figure 6- Impacts effecting types of environments.	19
Figure 7- Resources effected by offsite impacts.....	20
Figure 8- Forfeited sites, offsite impacts effecting resources.....	20
Figure 9- Historic permitted / released acres by evaluation year.	21
Figure 10- West Virginia Program Amendment Status.....	25
Figure 11- Historic Staffing via grant year.....	28
Figure 12- Unfunded vs Completed projects via evaluation year.....	33
Figure 13 - West Virginia Inventory Summary (as currently reported in e-AMLIS)	36
Figure 14- AMD Treatment Projects in Which eAMLIS Indicates Set-Aside Funding Spent During EY 2023	38
Figure 15 Hazardous Mine Portal along the Hatfield-McCoy ATV Trail.....	41
Figure 16- AML Funded Waterlines	41
Figure 17- Authorizations to proceed via evaluation year.	42
Figure 18 Complaints Investigated and Emergency declarations issued by evaluation year.....	43
Figure 19 Completed Trailhead at the Friends of the Cheat RECREATING Site, FY19 AMLER Project	45

Regulatory

Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSMRE) within the Department of the Interior. The SMCRA provides the authority to OSMRE to evaluate the implementation of, and provide Federal funding for, the State and Tribal Regulatory and Abandoned Mine Land (AML) Programs approved by the Secretary of the Interior. Among its responsibilities, OSMRE is charged with reviewing and approving State and Tribal Programs for regulating surface coal mining and reclamation operations, ensuring compliance with SMCRA, promoting the achievement of state program goals and objectives, ensuring adherence to Federal and state statutory and regulatory requirements, and maintaining minimum nationwide mining and reclamation standards.

The SMCRA encourages States and Tribes to assume the primary responsibility for regulating coal mining and reclamation activities (primacy). Once States and Tribes are granted primacy, the role of achieving many of the purposes of SMCRA lies primarily with them, including protecting society and the environment from the adverse effects of coal mining, assuring mining is not conducted where reclamation is not feasible, and assuring lands are reclaimed in a contemporaneous manner. The West Virginia Program was granted primacy on January 21, 1981 and is administered by the West Virginia Department of Environmental Protection (WVDEP) Division of Mining and Reclamation (DMR) and the Office of Abandoned Mine Lands and Reclamation (OAMLRL).

Since West Virginia has primacy, OSMRE's primary role is to:

1. Monitor and conduct inspections of surface coal mining and reclamation operations to ensure WVDEP is fulfilling its SMCRA responsibilities by effectively implementing, administering, maintaining, and enforcing its State program,
2. Provide assistance to WVDEP in implementing its SMCRA responsibilities,
3. Evaluate WVDEP's Regulatory and AML Programs,
4. Work with WVDEP to resolve, in a reasonable and timely manner, program and implementation issues identified through oversight, and
5. Pursue corrective actions provided by SMCRA, Title 30 Code of Federal Regulations (CFR), and OSMRE policy if WVDEP is not meeting program requirements.

The OSMRE Directive REG-8 outlines procedures and general criteria for evaluating State and Tribal Regulatory Programs. An EY begins on the first day of July every year and ends the last day of June in the following year.

This report contains summary information regarding the West Virginia Program and its effectiveness in meeting the goals of SMCRA as specified in Section 102, covering the evaluation period between July 1, 2022 and June 30, 2023. Individual reports for program elements evaluated during the period are available in OSMRE's on-line database, ODocs. Reports are also available for review and duplication at the OSMRE office located at 1027 Virginia St. E, Charleston, West Virginia or by calling (304) 347-7162.

The following acronyms are used in this report:

ABS	Alternate Bonding System
AER	Annual Evaluation Report
AMD	Acid Mine Drainage
AML	Abandoned Mine Land
AMLIS	Abandoned Mine Land Inventory System
ARRI	Appalachian Regional Reforestation Initiative
CHFO	Charleston Field Office
CHIA	Cumulative Hydrologic Impact Assessment
CSR	Code of State Regulations
DMR	Division of Mining and Reclamation (WVDEP)
EPA	Environmental Protection Agency
EY	Evaluation Year
FRA	Forest Reclamation Approach
FTE	Full Time Equivalent
FWS	United States Fish & Wildlife Service
FY	Fiscal Year
IBR	Incidental Boundary Revision
IMB	Investment Management Board
IU	Inspectable Unit
NOI	Notice of Intent to Sue
NPDES	National Pollutant Discharge Elimination System
NTTP	National Technical Training Program
OAMLRL	Office of Abandoned Mine Lands and Reclamation (WVDEP)
OSMRE	Office of Surface Mining Reclamation & Enforcement
OSR	Office of Special Reclamation (WVDEP)
PAD	Problem Area Description
QA/QC	Quality Assessment/Quality Control
REE	Rare Earth Elements

SMCRA	Surface Mining Control and Reclamation Act of 1977
SRF	Special Reclamation Fund
SRWTF	Special Reclamation Water Trust Fund
TDN	Ten Day Notice
TIPS	Technical Innovation and Professional Services
USACE	United States Army Corps of Engineers
WVDEP	West Virginia Department of Environmental Protection
WVHC	West Virginia Highlands Conservancy
WVSMCRA	West Virginia Surface Coal Mining and Reclamation Act

Overview of the West Virginia Coal Mining Industry

Underground mining was the predominate method of mining coal in West Virginia from the early 1700s through the 1950s. Surface mining began around 1916; however, significant production did not occur until World War II.

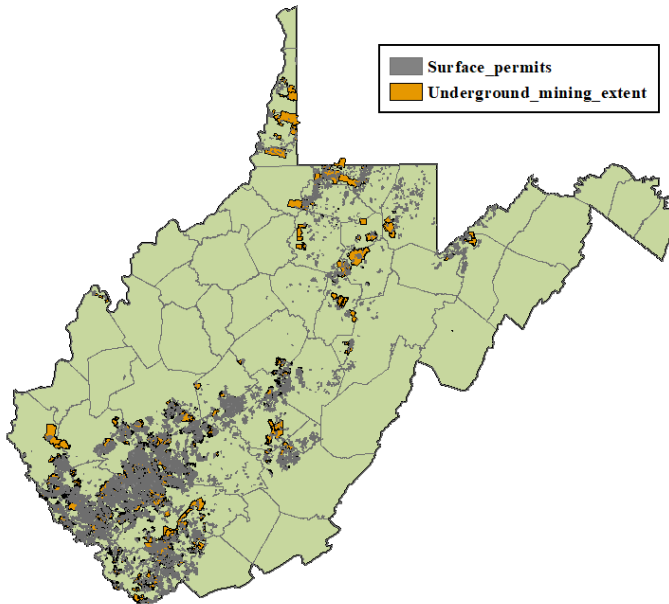


Figure 1- Mining areas within West Virginia.

identified in 43 counties, totaling 117 seams state-wide; 65 seams contain recoverable coal. West Virginia's coal production accounts for about 13.6% of the nation's total coal production. In 2022, West Virginia produced 79.2 million tons of coal (Figure 2), making it the second-largest coal producing State in the nation (see Appendix 1, Table 1 for coal production based on sales).

Coal was produced in 22 counties and 38 different seams in 2022. The State historically has a recovery rate of 68.2% at producing mines, leaving 31.8% in place. The average market price for West Virginia coal in October 2022 was \$77.12 per ton. (EIA)

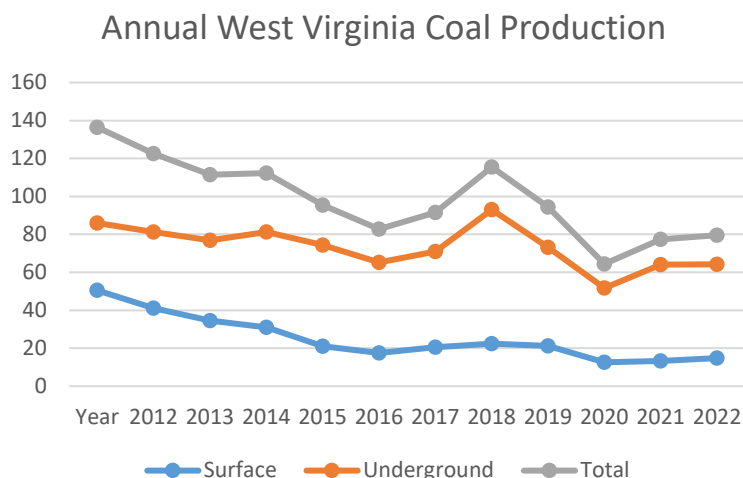


Figure 2 Annual Coal Production via AML fees.

Mining activities occurring before passage of SMCRA in 1977 resulted in many under-reclaimed areas within the State, given some reclamation standards were less stringent than SMCRA. Currently, there are 5,307 problem sites listed in the Abandoned Mine Land Inventory System (AMLIS) for West Virginia.

West Virginia's demonstrated coal reserve base amounts to 29.8 billion tons, and the estimated recoverable reserves amount to 16.2 billion tons. Recoverable coal is coal that can be mined using current technology. Operational mines attributed 1.5 billion tons to the State's estimated recoverable coal reserves in 2023. West Virginia currently ranks fifth in the country for proven coal reserves and recoverable coal reserves. Mineable seams have been

Methods of surface mining used in WV include contour, area, auger, mountaintop, and highwall operations. These surface methods account for 17% of coal mined in the State, which contributes 4% of the Nation's surface mined coal.

West Virginia surface coal production increased in 2022 by about 2%, compared to 2021.

Excluding coal exploration operations, West Virginia has 1,867 inspectable units, including 1,019 active mines, 595 inactive mines, 238 bond forfeiture

sites, and an additional 15 inspectable units (all bond-forfeited) on Federal lands. Inspectable units average 183.77 acres. The surface area above underground works are not bonded, except for support facilities. Approximately 55% of the State's permits are active and require two partial inspections and one complete inspection per month; inactive permits require one complete inspection per quarter by the WVDEP.

Overview of Public Participation and Outreach Efforts

The OSMRE Directive REG-8, Oversight of State and Tribal Regulatory Programs, establishes policies, procedures, and responsibilities to ensure that States and Tribes are effectively administering, maintaining, and enforcing their approved regulatory programs. Outreach and public participation are essential elements to effective oversight, and OSMRE continues to maximize opportunities for public participation and make oversight-related information more available to the public.

The OSMRE website, located at <http://www.osmre.gov>, contains information for public use concerning SMCRA and OSMRE's mission. More specifically, the website contains information regarding OSMRE resources and initiatives concerning mining and reclamation and contains contact and general information about OSMRE's evaluation of state mining and reclamation programs.

To increase the level of transparency specific to oversight activities and the public, OSMRE posts documents for each state program on its REG-8 Oversight Database (ODOcs). The ODOcs is located on the OSMRE's website and contains documents as required by the OSMRE Directive REG-8. The public can utilize the ODOcs built-in search feature to view documents covering the various aspects of OSMRE's evaluation of the West Virginia Program, such as Topical Studies, Evaluation Plans, Work Plans, Oversight Reports, and Annual Evaluation Reports.

The EY 2023 was covered under the 2022/2023 Performance Agreement, which outlines oversight activities between OSMRE and WVDEP. During the development of this agreement, OSMRE conducted outreach to solicit comments from the public and interested parties regarding the evaluation process and their views on potential topics for inclusion into the performance agreement. The OSMRE posted an announcement on its website, as well as a publication in local newspapers, soliciting public input. CHFO can be contacted using the information below.

OSMRE-CHFO
1027 Virginia St E,
Charleston, WV 25301
OSM-CHFO@osmre.gov
(304) 347-7158

Outreach efforts included the following elements:

1. Announcement of the opportunity to provide suggestions, comments, or view or prior to the release of the 2024/2025 Performance Agreement,
2. A meeting with the Sierra Club regarding the comments provided during development of the 2024/2025 Performance Agreement,
3. The OSMRE acknowledgment of receipt and appreciation for the public input received,
4. Posting of the proposed and final 2024/2025 Performance Agreement on OSMRE's website,

5. Attendance at the National Association of Abandoned Mine Land Programs Conference,
6. Attendance at the American Society of Reclamation Sciences Conference,
7. Participation in the West Virginia Mine Drainage Task Force, and
8. Attendance at various meetings of the West Virginia Coal Association, as well as the Symposium.

The OSMRE considers public input while determining where to focus resources and what aspects of the State Regulatory Program will be reviewed. Notices of Performance Agreement development were mailed and e-mailed to interested citizens, industry, and environmental groups.

During the EY 2023 evaluation year, the Charleston Field Office attended five educational outreach events in West Virginia including:

1. Arbor Day Tree Planting at Morris Creek,
2. Cheat River Festival,
3. DEP Earth Day Outreach Event,
4. GEAR UP – STEM event at Clay Center, and
5. Junior Conservation Camp.

In addition to OSMRE's public participation opportunities, WVDEP's Regulatory Program provides many opportunities for public participation. The public can access WVDEP's Program information via its website (www.dep.wv.gov).

Within the permitting process, the State requires the coal mining applicants to advertise in a local newspaper of general circulation in the locality of the proposed operation of each permit application, significant revision, or permit renewal and must provide interested citizens the opportunity to comment. Interested parties may review applications online, and the link to access applications is provided in the public notice. Citizens may request WVDEP conduct an informal conference to discuss an application before a decision is rendered to issue or deny a permit, significant revision, or renewal.

A similar process for public advertisement applies to completed surface mining and reclamation operations at the time of bond release. Bond release occurs when all applicable reclamation activities have been accomplished in accordance with the requirements of SMCRA. The permittee must publish each bond release application in a local newspaper once a week for four consecutive weeks. The bond release advertisement must include permittee name, permit number, precise location, number of acres, total amount of bond, amount of bond requested to be released, a summary of the reclamation, and an address where written comments should be filed. The permittee must also provide proof of notification to surface owners, adjacent property owners, local government bodies, planning agencies, and sewage and water treatment facilities. The OSMRE's annual bond release inspections found WVDEP was timely in notifying citizens and resolving all bond release issues prior to making a bond release decision.

At any time, a citizen may file a complaint with WVDEP concerning mining activities or adequacy of reclamation. WVDEP responds to all oral and written citizen complaints. In EY 2023, WVDEP received 272 complaints that were regulatory in nature. The WVDEP responded to 265 complaints within two working days. If a citizen does not agree with WVDEP's action regarding a citizen's complaint, the citizen may request an informal review with WVDEP of the decision within 30 days. The WVDEP resolved 244 complaints during this EY, with 28 under review pending additional information.

Section 520 of SMCRA allows citizens to file civil actions against the United States, a governmental instrumentality, an agency, or any other person who is in violation of any rule, regulation, order, or permit issued pursuant to the Act. A Notice of Intent to Sue (NOI) is sent to notify the coal industry, and/or, state or Federal regulatory authority that a citizen intends to file a civil action.

Major Accomplishments and Innovations in the West Virginia Program

WVDEP accomplished the following in EY 2023:

1. Conducted three sessions of virtual industry training. Topics included: Electronic Submission System (ESS) Process, Surface Water Runoff Analysis (SWROA) Monitoring Requirements, Updates concerning Endangered Species Act, Overview of Probable Hydrologic Consequences (PHC), Cumulative Hydrologic Impact Assessment (CHIA), and Post Underground Mining assessment (PUMA) process, and Administrative Penalty Orders and Single Event Violations (SEVs), Structure Removal, BAS/Fish Tissue Monitoring, and Post Mining Limits.
2. Issued a compliance bulletin concerning Site-Specific Blast Plan guidance.
3. Continued conducting random compaction testing to provide independent verification of the construction specifications associated with the coal refuse disposal permit.
4. Implemented a new fee schedule for Coal NPDES permitting actions and annual permit fees beginning on July 1, 2022.
5. Participated in and supported the QA/QC panel. WVDEP has implemented its recommendations, such as eMap standards; conducting industry training sessions; continuing to encourage industry to submit timely bond release applications when a permit meets reclamation requirements; and encouraging industry, at the appropriate time in the reclamation process, to pursue post-mining effluent limits, removal of water retention structures, and deletion of NPDES outfalls
6. Participated in collegiate job fairs to attract applicants for vacant positions,
7. Conducted hybrid in-person informal conferences and assessment hearings,

Reforestation and Reclamation

During EY 2023, per Appendix 1 Table 4, the WVDEP received 10 new applications for surface mine permits and issued 15 of these permits, covering 3,950 acres. Additionally, WVDEP received nine applications for surface mine permit amendments that would add acreage to the permit; WVDEP approved 14 of these amendments this EY, covering 1,135 acres. WVDEP also received applications for, and approved, three new permits for underground mines. WVDEP received three new permits for other facilities and approved four such permits. Taking into consideration incidental boundary revisions, WVDEP approved a cumulative total of 5,610 newly bonded acres. Conversely, WVDEP released 2,714 acres through Phase III bond releases.

The WVDEP has promoted the Forestry Reclamation Approach (FRA) by encouraging the implementation of FRA techniques in forestry-related post-mining land uses (PMLU). The FRA is a science-based technique for reclaiming coal-mined land to forest while complying with existing state and Federal mining laws. The five major elements of FRA are: creating a suitable rooting medium, loosely grading topsoil, using compatible ground cover, planting multiple types of trees, and using proper planting techniques.

West Virginia continues to be a leader in reforestation in the Appalachian coalfields by actively promoting the utilization of FRA on both active and abandoned mine land sites. The Appalachian Regional Reforestation Initiative (ARRI) is a coalition of groups, including citizens, the coal industry, and government entities, dedicated to restoring forests on coal mined lands in the eastern United States. Mining operations in West Virginia's

coalfields reforested mined lands with 1,580,152 trees this evaluation year, covering approximately 2,599 acres. Most of the sites included high-value native hardwood tree species in accordance with the FRA.

Rare Earth Elements (REEs)

During EY 2023, WVDEP continued to collaborate with West Virginia University (WVU) in evaluating the concentrations of REEs in AMD sludge that is present on several bond forfeiture sites throughout the State.

Recent research conducted by WVU has shown that AMD is enriched in REE and the critical mineral cobalt. It has been found that AMD has an average total REE concentration of about 287 µg/L (0.287 ppm), ranging from negligible to 2,000 µg/L. WVU has created a concentrate of 80% REE derived from AMD treatment precipitates. The strategy of using raw AMD as the feedstock to their acid leaching/solvent extraction refining process was demonstrated on a bench scale level and in the field where a mobile field unit was deployed at a conventional AMD treatment plant operated by WVDEP.

The Buffalo Coal bond forfeiture site treatment plant located near Mount Storm, WV went online during the fall of 2022. The pilot plant for REE processing sludge began shortly after the AMD treatment facility was completed with startup and smoothing out operational tweaks within the system. The AMD treatment facility is averaging 576,000 gallons per day (AMD water) for removal of heavier iron sludge then providing the REE plant an average of 17,280 gallons per day.

Success in Achieving the Purpose of SMCRA

To further the goal of reporting end results and reclamation success, OSMRE field offices utilize State inspections, OSMRE inspections, and program element evaluations to prepare findings on the National Measurement Elements of off-site impacts and reclamation success, as outlined in OSMRE's Directive REG-8. Comprehensive reports for the program elements evaluated during this period are available in OSMRE's ODocs database. Reports are also available for review and duplication at OSMRE's office located in Charleston, West Virginia or by calling (304) 347-7158.

WVDEP Inspections

West Virginia's approved program requires the State conduct an average of one complete and two partial inspections each calendar quarter for all mine sites, except those sites with an approved reduced inspection frequency due to abandonment, temporary cessation of operations, or a Phase II bond release. Sites in the bond release process and in temporary cessation require an average of one complete inspection per quarter.

A complete inspection requires a review of all applicable performance standards associated with the mining operation, while a partial inspection only requires a review of some applicable performance standards. Requirements are detailed below.

1. Active sites require one complete inspection and two partial inspections quarterly.
2. Inactive sites require one complete inspection every quarter.
3. Forfeited abandoned sites require one complete inspection per year.
4. Not Started sites require one complete inspection per quarter per the State's policy.

The WVDEP inspectors conducted 20,530 inspections on 1,852 mine permits and 0 inspections on 0 coal exploration permits during this EY, per Appendix 1 Table 10.

This EY, WVDEP conducted 6,975 complete inspections and 13,555 partial inspections on active and inactive permits. Irrespective of monthly inspection requirements, data shows WVDEP conducted four percent (281) more complete inspections than required, along with 40% (5,403) more partial inspections than required by

the program. WVDEP met inspection frequency on 99% of permits for both partial and complete inspection requirements. For more information on inspection numbers please refer to Table 10 in the Appendix 1.

WVDEP's Inspection Results

During EY 2023, WVDEP issued 699 violations, 69 Failure-to-Abate Cessation Orders, and 18 Imminent Harm Cessation Orders. For EY 2023, Permit Conditions was the most common violation type identified by WVDEP. Permit Conditions accounted for 25% of the violations, Sediment Control accounted for 15%, and Surface Water accounted for 8%. The remaining 52% of violations were spread among other performance standard categories. Overall number of violations has increased slightly from the prior EY.

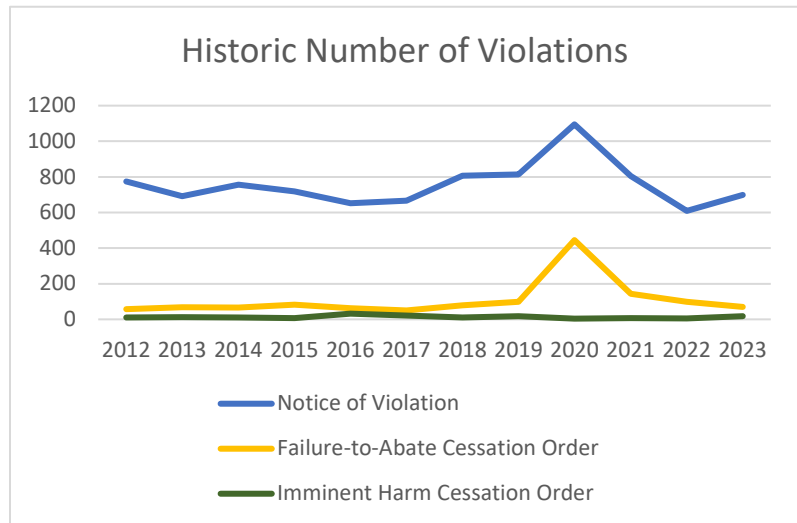


Figure 3-Evaluation Year historic number of violation types

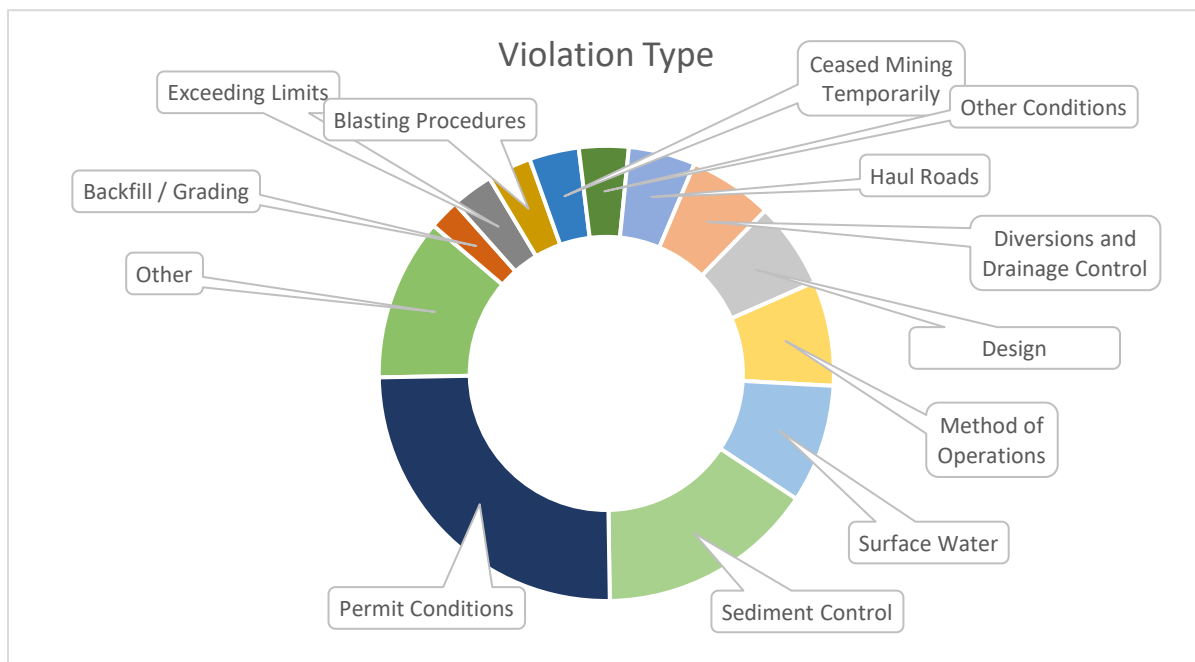


Figure 4 Evaluation Year 2023 types of violation categories.

OSMRE Inspections

For States and Tribes with more than 1,000 IUs, OSMRE uses a sampling formula to determine its target number of oversight inspections. OSMRE adopted this formula to give a high level of statistical confidence to the data with the understanding that the statistical validity of the results will vary from year to year depending on the stratification of the sites selected and types of studies conducted. The formula OSMRE utilizes to determine the target number of inspectable units to be inspected in States and on Indian lands with more than 1,000 IUs is $n = 384 / (1 + (383/N))$; n is the number of oversight inspections required, and N is the total number of IUs.

OSMRE utilized this calculation at the end of EY21 to populate the target number of inspections for inclusion in the 2022/2023 Performance Agreement. Regulatory Table 2 within the 2022 AER included a total inspectable unit count of 1880; thus, the required number of oversight inspections required during EY 2023 amounted to 319, as calculated below.

$$n = 384 / (1 + (383 / 1880))$$

$$n = 319$$

The OSMRE completed 274 oversight inspections for EY 2023, which is 85.8% of the target of 319 oversight inspections. This evaluation activity is detailed in Appendix 1, Table 13. OSMRE additionally conducts inspections and site visits for special regional studies, assistance to the State, citizen complaints, bond release follow-ups, and document reviews. During EY 2023, along with the 57 complete and 180 partial inspections, OSMRE conducted 36 “Other” inspections. These included citizen complaint inspections, document reviews, and impoundment inspections. These additional types of activities are reflected in the Site Visits, “Other” column of Table 13.

The OSMRE Directive REG-8 specifies at least 33% of these oversight inspections must be complete inspections. It also states that bond release inspections should not represent more than 25% of the total number.

Oversight inspections evaluate compliance with West Virginia’s permanent regulatory program provisions, the approved permit terms and conditions, and approval of the current permit operator under the Applicant Violator System. This enforcement data also helps evaluate and identify program trends, concerns, and accomplishments.

Throughout complete and partial inspections, inspectors gather off-site impact data, compile general compliance statistics, and document other findings including program trends, concerns, and accomplishments.

If OSMRE observes violations during joint OSMRE/WVDEP inspections, OSMRE defers the enforcement action to WVDEP. If OSMRE believes WVDEP has not adequately addressed a violation, OSMRE will issue WVDEP a Ten-Day Notice (TDN), which allows the state time to take appropriate enforcement action, decide that a violation does not exist, or show good cause for not taking enforcement action. If OSMRE determines WVDEP’s response to a TDN is not arbitrary, capricious, or an abuse of the state’s discretion, then OSMRE takes no further action. If OSMRE judges a state TDN response as inappropriate, after allowing time for an appeal, OSMRE may take enforcement action independently, if necessary. The WVDEP generally takes appropriate action when it observes a violation.

OSMRE Inspection Results

The OSMRE identified 204 violations during inspections in EY 2023 as shown in Appendix 1, Table 13. All violations were either abated during the OSMRE oversight, deferred to state action, or previously cited by the WVDEP. There were no TDNs issued during EY 2023. The OSMRE identified the following types of violations during EY 2023: Vegetative Cover, Terms & Conditions of Permit, Temporary Cessation, Surfacing & Maintenance, Surface Stabilization, Steep Slope (includes downslope), Stabilization (rills and gullies), Siltation Structures, Post Mining Land Use, Placement, Mining within the Valid Permit, Mining within Bonded Area, Inspections & Certifications, Effluent limits, Drainage Control, Discharge Structures, Contemporaneous Reclamation, and Other. While conducting the 274 oversight inspections, OSMRE found 71% of permits it reviewed were violation-free.

Bond Release Inspection Results

The OSMRE considers bond release acreage a method to determine if the approved West Virginia Program is successfully achieving results. Both OSMRE and WVDEP have worked together to implement procedures to capture the bond release data necessary to measure program performance. The WVDEP records indicate 2,714 acres of land received Phase III bond release during EY 2023.

OSMRE conducted 37 oversight bond release inspections on permits where the permittee had requested bond release during the evaluation year. Field conditions were compared to the reclamation plan contained in the permit. Twenty-one inspections were on Phase III releases, six inspections on Phase II releases, and ten inspections on Phase I releases. OSMRE oversight inspections of bond releases resulted in four off-site impact violations being issued.

The 21 Phase III bond release inspections conducted by OSMRE occurred on 21 individual permits that submitted Phase III bond release applications during the EY. The 21 permits requesting bond release included 13 surface mines, six underground mines, one preparation plant, and one loadout.

National Measurement Elements

Directive REG-8 identifies two National Measurement Elements OSMRE should evaluate as key indicator of the success of a State or Tribal Program. These elements include the rate of off-site impacts and reclamation success. Review of these elements is supplemented by inspections, national priority topic reviews, and other topic-specific reviews, all outlined in the applicable Performance Agreement developed by OSMRE and a State or Tribal Program.

The EY 2023 summary result of OSMRE's review of these elements is detailed below for WVDEP.

Off-site Impacts

The OSMRE conducts an annual review of the effectiveness of West Virginia's program in protecting the environment and public from off-site impacts resulting from surface coal mining and reclamation operations. The goal is for each IU to have minimal or no off-site impacts; the objective is that States, Tribes, and OSMRE direct efforts to continually reduce the occurrence of off-site impacts. Off-site impacts resulting from surface coal mining and reclamation operations are one of the metrics utilized by OSMRE to collect data for the Government Performance and Results Act (GPRA). The measurement is intended to identify and report for each IU the number and degree of off-site impacts, determine the causes of the impacts, and identify where improvements may be made to lessen the number and degree of impacts. If evaluation data related to off-site impacts indicates program and/or implementation-related problems, OSMRE and the State or Tribe will implement changes to minimize recurring impacts.

An off-site impact is defined as anything resulting from a surface coal mining and reclamation activity or operation that causes a negative effect on resources outside the permitted area (people, land, water, structures) where that impact is intended to be minimized or prevented by SMCRA or the applicable state program. Off-site impacts are classified by the type of impact and by the degree of impact (minor, moderate or major). One off-site impact may be recorded to affect multiple resources to varying degrees, but the impact itself is counted only once. During EY 2023, off-site impacts were identified through both routine WVDEP inspections and OSMRE-scheduled oversight inspections.

Bonded: Off-site Impact Events and Resources Affected

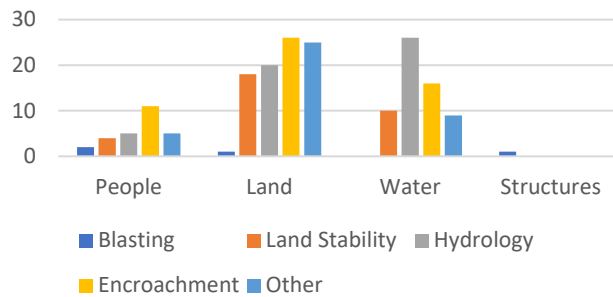


Figure 5 Off-site Impacts categories effects.

Bonded Sites

Per Appendix 1 Table 5, 1,737 of the State's non-forfeited permits were evaluated for off-site impacts by reviewing the inspection and enforcement data contained in the State's Environmental Resources Information System (ERIS). A total of 142 off-site impacts were found during 17,683 inspections. These offsite impacts occurred on 98 permits, or 6% of the State's permitted population. Therefore, the majority (94%) of the permitted sites were free of off-site impacts. Last EY, 179 off-site impacts were identified on 101 permits, indicating a 21% decrease in off-site impacts from last year and a 3% decrease in the number of permits with off-site impacts.

OSMRE conducted 274 oversight inspections during EY23. During these oversight inspections, 41 off-site impacts were identified, including 14 minor, 20 moderate, and seven major impacts.

This EY, WVDEP identified an average of one off-site impact for every 125 inspections conducted. In comparison, OSMRE identified an average of one off-site impact for every seven oversight inspections conducted.

As part of the evaluation of off-site impacts and based on the State data, OSMRE determined that the primary cause of off-site impacts this EY is operator negligence. These impacts were categorized as to type of impact, resources affected, and degree of impact as required by Table 5 in REG-8. Figure 5 depicts the frequency with which the various impact event types affected each resource category.

Bonded: Off-site Impact Events by Type

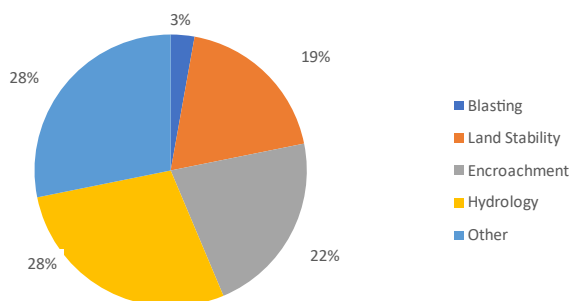


Figure 6- Impacts effecting types of environments.

Hydrology represented 28% of the type of impact events identified this year and is tied with Other for the most common type of impact event resulting from mining operations. This is a decrease from last year's 40% of impacts. The hydrology category includes violations such as exceeding effluent limits, black water spills, and breached diversion ditches. Other is the second most frequently cited impact event this year at 28%, which is more than last year's 24%. Encroachment represents 22% of the type of impact event, which is an increase from last year's 7%. Land stability represents 19%, which is less

than last year's 27%. Blasting represents 3% of the type of impact event this year, which is slightly more than last year's 2%.

Twenty-eight impacts affected People; these included three minor, eight moderate, and 17 major impacts. Most of these were related to subsidence issues and citizen complaints. Impacts affected Land 90 times, including 20 minor, 48 moderate, and 22 major impacts. Most of these impacts were related to mining off the permit, landslides caused by down slope spoil placement, and breached perimeter diversions causing erosion and sedimentation. Impacts affected Water 56 times, including 17 minor, 22 moderate, and 17 major impacts. Most of these impacts were related to violations of effluent limitations or State water quality standards and other mine discharges that resulted in water quality problems. Impacts affected Structures one time, including one moderate impact. This type of impact usually results from coal trucks tracking mud onto county highways or creating fugitive dust causing unsafe driving conditions and blasting operations.

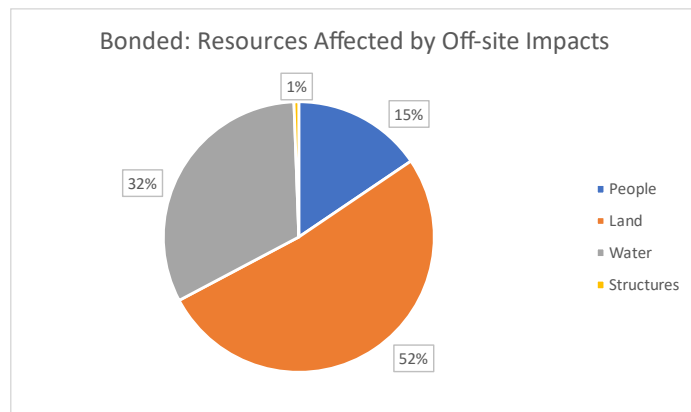


Figure 7- Resources effected by offsite impacts.

With regard to intensity of impact, Minor impacts accounted for 23% of the overall total, Moderate for 45%, and Major for 32%.

Forfeited Sites

The State's OSR conducted an off-site impact evaluation of forfeited sites for this review period. During this review period, OSR added three new bond forfeitures to the inventory, see Appendix 1 Table 7A. The State's bond forfeiture permits inventory now stands at 276, a decrease of four from last year's 280 permits.

Treatment is currently making improvements to the water quality at many forfeited permits but has not completely eliminated the off-site impacts due to the poor water quality, see Figure 8 below.

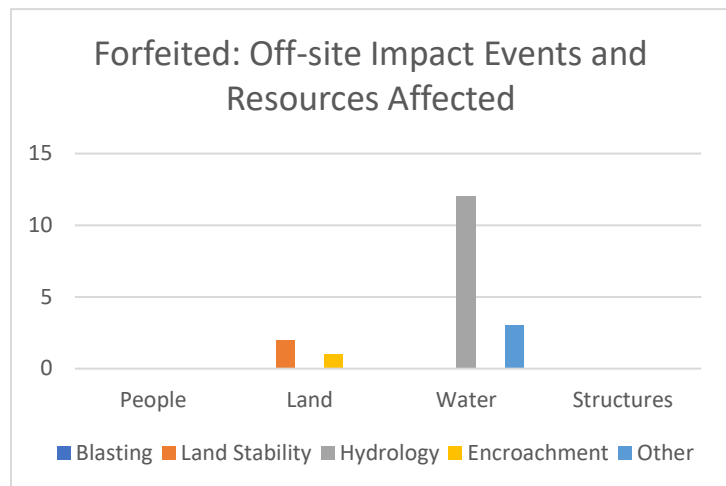


Figure 8- Forfeited sites, offsite impacts effecting resources.

The OSR maintains an inventory of the State's forfeited permits and is responsible for the reclamation of those permits. The number of off-site impacts associated with those permits totaled 19 during the review period, an increase of 10% from last year's 17 off-site impacts at bond forfeiture sites. Of these 19 impacts, 12 impacts were categorized as hydrology impact events, one impact was categorized as an encroachment impact event, four impacts were categorized as other, and two impacts related to land stability impact events. Ninety-three percent of the State's un-reclaimed bond forfeiture sites were free of off-site impacts during EY 2023, a decrease from last year's 94%.

These impact events affected land and water resources. Impacts affected land one minor time and two moderate times; impacts affected water 15 times, including 11 minor impacts, two moderate impacts, and two major impacts.

Reclamation Success

The OSMRE's Directive REG-8 requires the evaluation of State programs to ensure successful reclamation on lands affected by surface coal mining operations provided through the State or Tribal Program.

The OSMRE considers the bond release process one opportunity to determine whether the approved West Virginia Program is successfully achieving results. Success can be measured based on the number of acres that meet the bond release standards and have been released by West Virginia.

The WVDEP takes a proactive approach with regard to bond release by identifying, and communicating to the permittee, the work necessary to be eligible for each phase of bond release. Additionally, inspection and technical staff work together expeditiously during the bond release decision process.

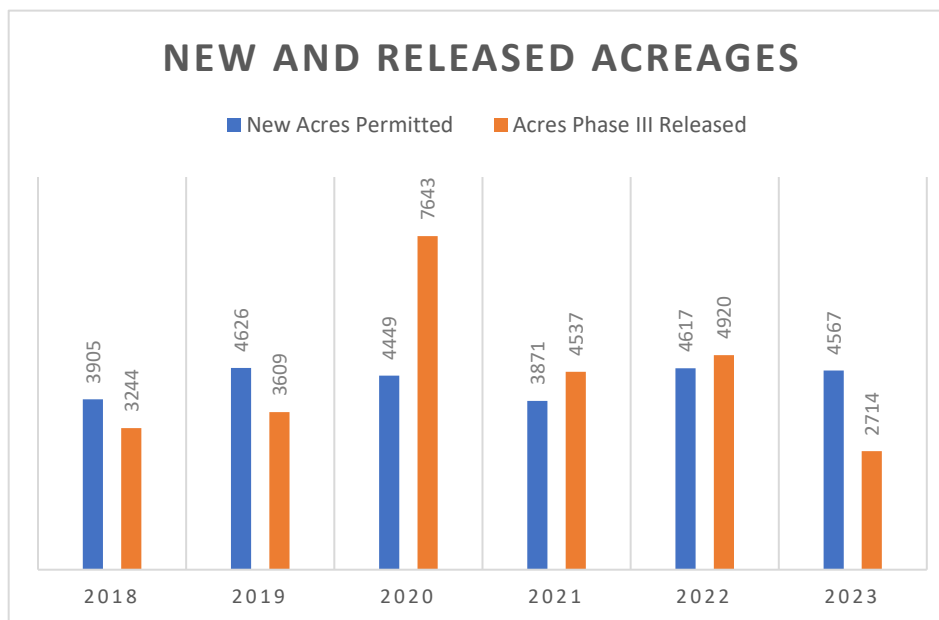


Figure 9- Historic permitted / released acres by evaluation year.

The State releases reclamation bonds in three phases. Phase I bond release indicates backfilling is complete, and the topography is returned to its approximate original contour, unless there is an approved variance. The Phase II release verifies vegetative cover or other erosion control measures adequately stabilize the surface from erosion, and soil resources are adequate to support that cover; in addition, the site must not be contributing suspended solids to streamflow or runoff outside of the permit

area. Finally, Phase III, or final bond release, confirms the mine site is fully reclaimed, meeting the required maintenance period, and the approved post mining land use has been achieved; complete restoration of land and water resources affected by mining is required at this bond release.

The WVDEP records, and Appendix 1 Table 6, indicate 6,357 acres of land received Phase I release, 3,215 acres of land received Phase II release, and 2,714 acres of land received Phase III bond release during EY 2023, illustrating the program is effectively fostering reclamation success on lands impacted by surface coal mining.

The State's Office of Special Reclamation's (OSR) records, and Appendix 1 Table 7, indicate that OSR completed land reclamation on seven bond forfeiture sites, totaling 212 acres in EY 2023. The OSR continues to maintain an inventory of the state's bond forfeiture sites and oversees the reclamation of these sites.

National Priority and General Oversight Topic Reviews

During EY 2023, OSMRE and/or WVDEP evaluated the following Regional or General Oversight topics; no National Priority Topics were evaluated. Unless otherwise noted, the following reviews were conducted by teams representing both OSMRE and WVDEP. Individual reports are available in OSMRE's on-line database, ODocs. Reports are also available for review and duplication at the OSMRE office located in Charleston, WV or by calling (304) 347-7158.

National Priority Topics

No National Priority topics were conducted during EY 2023.

Regional Oversight Topics

Cumulative Hydrologic Impact Assessment (CHIA) Program and Trend Station Data

During prior years, OSMRE's Regional Office evaluated the WVDEP CHIA process by reviewing existing policies and guidelines governing the CHIA process, interviewing permit review staff, and conducting permit CHIA reviews to document the implementation of the policies. Following the evaluation, OSMRE documented its findings in a report titled "Documentation of West Virginia's Cumulative Hydrologic Impact Assessment Program." As a logical progression following the CHIA review, the regional office planned to look further into various trend station data collected by the states; however, at the close of EY 2023 this study has not been initiated.

General Oversight Topics

Program Amendment Status

There are ten Program Amendments outstanding for WVDEP's regulatory program. These amendments are summarized in the following table.

Amendment	Description	Law/ Regulations Amended
WV-115 (Combined with WV-116)	<ol style="list-style-type: none"> SB 600 amends §22-3-11 of the Code of West Virginia to implement actuarial recommendations relating to the continued fiscal sustainability of the Special Reclamation Fund. The legislation consolidates what has been known as the "7-and- 7.4 tax" (the 7.4 portion of which is currently subject to annual renewal) into a 14.4 cents tax per ton of clean coal mined, reviewable every two years by the Legislature. OSMRE will publish this rule with WV-116. 	§22-3-11, §22-3-11(h)
WV-116	<ol style="list-style-type: none"> SB 153 amends State's Surface Mining Reclamation Regulations concerning the continued oversight of "approved" persons who prepare, sign, or certify mining permit applications and related materials. SB 153 additionally proposes to modify incidental boundary revisions (IBRs) to existing permits, clarify certain types of collateral activities, delete the bonding matrix forms, change the term "bio-oil" to biofuel, and clarify standards for hayland and pasture use (Administrative Record WV-1522). 	Permit Applications, IBRs, Biofuel Bio-oil Standards, Hayland Pastureland, §22-3-8 References

Amendment	Description	Law/ Regulations Amended
	<p>3. SB 1011 amends West Virginia Code by requiring surface mine reclamation plans to comport with approved master land use plans and authorizing surface mine reclamation plans to contain alternative post-mining land uses (Administrative Record WV-1523).</p> <p>4. SB 436 amends West Virginia Code 22-3-8 by changing references to “the commissioner of the Bureau of Employment Programs” to “executive director of Workforce West Virginia” and “the executive director of the workers’ compensation commission” to “Insurance Commissioner” (Administrative Record Number WV-1521).</p> <p>5. OSMRE will publish the final rule when review is complete.</p>	
WV-118	<p>1. SB121 amends minimum incremental bonding rate of \$10,000 per increment. (Administrative Record WV-1561). Additionally, it clarifies the format and information necessary for a complete permit application submittal and for the renewal process to consider WVDEP’s electronic filing process. It provides that an approved person must maintain the capability of submitting maps, plans and all other technical data in an electronic format prescribed by the Secretary. In addition, it provides that pre-subsidence surveys will be confidential and only used for evaluating damage relating to subsidence and clarifying that bonding for a permit in inactive status shall remain in effect for the life of the operation. It also provides the Secretary shall issue e-mail notice of a Show-cause Order to members of the public who have subscribed to the Secretary’s e-mail notification service and otherwise provide notice to any person whose citizen complaint has resulted in the issuance of any enforcement action that led to the issuance of a Show-cause Order.</p> <p>2. OSMRE will publish the final rule when review is complete.</p>	Incremental Bonding Rate, Permit Application Renewal, Map Submission, Pre-subsidence Surveys, Show-Cause Order notification
WV-120	<p>1. In 2009, WVDEP expressed an interest in revising its State-Federal Cooperative Agreement. West Virginia entered a cooperative agreement with OSMRE in 1983 to regulate coal mining on Federal lands within the State.</p> <p>2. OSMRE will publish the final rule when review is complete.</p>	Federal -Lands Permitting
WV-123	<p>1. HB 4726 terminated the Office of Explosives and Blasting (OEB) with the passage of Section 22-3-34 of the West Virginia Code and transferred the duties and responsibilities relating to blasting to the Division of Mining and Reclamation (DMR).</p> <p>2. HB 4726, at Section 22-3-13(g) of the West Virginia Code, authorizes WVDEP to revise its rules regarding hydrologic protection and storm water runoff analyses for mining operations and to promulgate rules that conform with Federal requirements to minimize disturbances to the prevailing hydrologic balance at a mine site and in associated off-site areas.</p>	OEB termination, §22-3-34, (CSR) 199-1, Hydrologic Impact Assessment

Amendment	Description	Law/ Regulations Amended
	<p>3. WVDEP may conduct a cumulative hydrologic impact assessment and requires a statement of probable hydrologic consequences and to prevent flooding.</p> <p>4. OSMRE will publish the final rule when review is complete.</p>	
WV-124	<p>1. The SB 357 amended West Virginia Code Sections 22-3-13 and 19, and authorized WVDEP to promulgate revisions to its contemporaneous reclamation and inactive status regulations.</p> <p>2. HB 117 provides that the legislative rule filed by WVDEP in the State Register on July 27, 2015, that includes revisions regarding contemporaneous reclamation, inactive status, and topsoil received authorization by the West Virginia Legislature. In addition, amendments regarding bonding requirements for permit renewals and incremental bonding for permit renewals also received authorization by the Legislature. (Administrative Record WV-1606)</p> <p>3. OSMRE will publish the final rule when review is complete.</p>	§22-3-13, §22-3-19, Inactive Status, Topsoil, Contemporaneous Reclamation
WV-125	<p>1. SB 687 amends West Virginia Code §§22-3-11(g) (1) and (2), 22-3-13a (a) and (b), 22-3-13a (f) and (h), and 22-3-23 (c) and (i) providing that money be paid from the Special Reclamation Water Trust Fund to assure a reliable source of capital and operating expenses for the treatment of discharges from bond forfeited sites; modifying notification requirements for pre-blast surveys for surface mining operations and certain other blasting activities; and removing minimum bond requirements related to certain reclamation work.</p> <p>2. OSMRE will publish the final rule when review is complete.</p>	SRWTF, SRF, Pre-Blast Surveys, Bond Requirements
WV-126	<p>1. WV-126, on May 2, 2018, WVDEP submitted Senate Bill 163 (SB 163) to OSMRE. The SB 163 authorized WVDEP to consolidate all its blasting regulations under its Surface Mining Reclamation Regulations. SB 163 modified section 6 relating to blasting in general and created new sections 25 through 27 relating to certification of blasters, blasting damage claim and arbitration for blasting damage claims and explosive material fee, respectively. Additionally, SB 163 revised numbering and removed sections from 12.4.a.2.B to 12.5.e including 22-12.4.c timely requirements of 180 days to initiate reclamation operations on bond forfeiture sites.</p> <p>2. SB 626 includes proposed statutory revisions that amend §§22-3-9 and 22-3-20 of the West Virginia Code. The SB 626 includes new public notice requirements regarding permit applications. The revisions at §22-3-9 provide an applicant's advertisement for public notice be published on a form and in a manner prescribed by the Secretary of WVDEP, which may be electronic. Additional revisions to §22-3-20 provide similar public notice requirements for the informal conference. (Administrative Record Number WV-1613A-B).</p>	Blaster Certification, Damage Claim and Arbitration, Explosive Material Fee, Public Notice Requirements

Amendment	Description	Law/ Regulations Amended
	3. OSMRE will publish the final rule when review is complete.	
WV-127	<ol style="list-style-type: none"> 1. HB 4217 amends language relating to owner compensation of material damages from subsidence to an owner's structures or facilities. 2. OSMRE will publish the final rule when review is complete. 	Subsidence Compensation, Sureties Approval
WV-128	<ol style="list-style-type: none"> 1. On April 5, 2022 the West Virginia Legislature passed HB4758 in the 2022 session. The Governor signed the bill on March 28, 2022, and it became effective on June 6, 2022. HB4758 amends §22-3-11(i)(2) of Code of West Virginia to develop and maintain a database to track reclamation liabilities in WVDEP program. 2. On Tuesday, May 23, 2023, the proposed rule was published for comment. The comment period ended June 7, 2023. 3. OSMRE will publish the final rule when review is complete. 	Special Reclamation Fund, Water Trust Fund

Figure 10- West Virginia Program Amendment Status

For more information on specific amendments contact: osm-chfo@osmre.gov or (304) 347-7158. Upon final approval of each amendment, OSMRE will publish the final rule to [Federalregister.gov](https://www.federalregister.gov). Amendments can be located by utilizing the search bar on this page and entering the amendment number, including the letters and dash mark, ie. WV-128.

Underground Mine Hydrology Field Review

CHFO conducted a topical oversight study evaluating the WVDEP's procedures for reviewing underground bond release applications. The review focused on WVDEP's process for determining eligibility of an underground mine to be considered fully reclaimed and ready for underground bond release (Phase I, Phase II, or Phase III), with an emphasis on the Post Underground Mining Assessment (PUMA). The PUMA is designed to reflect the current hydrologic conditions within the deep mine and to project the stability of those conditions into the future to prevent adverse impacts post bond release.

This review covered the time period between November 15, 2015 and June 30, 2021 and encompassed 106 underground bond release applications. WVDEP took appropriate action to achieve the objectives and complete all of the procedural tasks for underground bond releases for 73 (~70 percent) of the 106 applications submitted. Applicants did not provide critical information necessary to assess post mine closure hydrology for 29 (~27 percent) of the 106 underground bond release applications, resulting in those underground bond release requests either being withdrawn, terminated, or denied by the WVDEP.

During the course of this review, WVDEP implemented improvements to its review procedures for underground bond release applications. Improvements included revising the 2015 guidelines in June of 2016 to use the Abandonment Plan and to add any data necessary to validate the Probable Hydrologic Consequences (PHC) and Hydrologic Reclamation Plan (HRP) in the Cumulative Hydrologic Impact Assessment (CHIA). WVDEP provided a wholistic approach to addressing hydrological impacts from underground mines, from the initial permitting process to the final underground bond release. Training workshops were provided for WVDEP Inspection staff (2020) and for Industry (2019, 2020, and 2023) on comprehensive and complete hydrological assessments for post closure underground mines.

Despite these improvements, the study determined that, upon submission, underground bond release applications continue to lack sufficient data to predict future adverse impacts. WVDEP continues to follow steps to improve information initially supplied by the permittee for an underground bond release request. OSMRE has determined that the State has progressively improved its underground bond release process with the continued guidance, training, and monitoring of the underground bond release process. CHFO provided these findings to WVDEP. This study is concluded, is available for review at CHFO, and will no longer be reported upon in future AERs.

Timeliness of Bond Forfeiture Reclamation

In 2017, the OSMRE initiated a study to evaluate the timeliness of bond forfeiture reclamation by OSR. The 38 CSR 2-12.4.c provides that after the notice of forfeiture has been served, the Secretary shall in a timely manner, but not later than 180 days after such notice, initiate reclamation operations to reclaim the site in accordance with the approved reclamation plan or modification thereof, including action to remediate any acid mine drainage from the site.

Prior to the conclusion of this study, WVDEP submitted program amendment WV-126; this amendment proposes to remove the 180-day requirement from the State's regulations. Pending the approval/disapproval of the program amendment, OSMRE revised the scope of the study to not only identify the population of permits that have been revoked and the bond forfeiture process initiated, but also to determine whether the revoked permits were eligible for removal from the inspectable units list (IUL).

Regulatory Program Problems and Issues

Any Regulatory Program problems or issues WVDEP experienced during EY 2023 are discussed in the following sections.

30 CFR Part 732 Notifications

Under 30 C.F.R. Section 732.17(c) OSMRE is requiring WVDEP to submit an amendment to their mining program that will ensure tracking of existing reclamation liabilities (including water treatment) at mining operations. On March 29, 2022, WVDEP submitted a program amendment (WV-128, HB4758) to amend Section 22-3-11(i)(2) of the Code of West Virginia to develop and maintain a database to track reclamation liabilities of WVDEP's Special Reclamation Program. OSMRE published the proposed rule within the Federal Register on May 23, 2023. The public comment period closed on June 7, 2023. For more information refer to 'WV-128' under Program Amendments within this AER. Additional background information can also be found within the 2022 AER. OSMRE will publish the final rule when review is complete.

West Virginia Bonding Program Evaluation

As a result of the events which led to the referenced 30 CFR Part 732 Notification, OSMRE was conducting an oversight study to evaluate all aspects of the bonding program to determine whether a program amendment would be required. The study was being conducted using a two-phase approach.

Prior to finalization of the phase one report, WVDEP submitted a program amendment (WV-128), and OSMRE published the proposed rule on May 23, 2023. Due to the program amendment submittal and OSMRE's ongoing review, OSMRE discontinued efforts related this study and, after approval/disapproval of the amendment, will cease reporting on it in future AERs. OSMRE will continue to report on the status of WV-128 in future AERs.

Monitoring and Improvements to West Virginia's Alternative Bonding System (ABS)

Separate from the 30 CFR Part 732 Notification and West Virginia Bonding Program Evaluation discussed above, OSMRE has monitored, and continues to monitor, the solvency of the West Virginia ABS.

Alternative Bonding System

During EY 2023, the Special Reclamation Fund Advisory Council (Advisory Council), in coordination with WVDEP and OSMRE, continued monitoring the State's ABS, commonly known as the Special Reclamation Fund (SRF).

The Advisory Council, through the WVDEP, contracted with Taylor & Mulder, Inc. of Potomac, Maryland to complete an actuarial study of the ABS. By law, an actuarial study is to be conducted on the State's ABS every two years, and informal reviews are completed annually. The last actuarial report published was submitted to WVDEP early in Calendar Year 2021. Projections at that time implied that the funds would be solvent through 2039.

Special Reclamation/Water Trust Funds

Through the State Investment Management Board (IMB), the Advisory Council continued to invest the Special Reclamation Water Trust Fund (SRWTF) revenue in long-term bond investments. The adoption of this investment strategy has resulted in increased rates of return for the SRWTF, and to a lesser extent, for the SRF. As of March 31, 2023, the SRF had a balance of \$13.8 million, an increase of 12.7% from March of 2022, with a transfer from the SRWTF of \$1.7 million. The SRWTF had a balance totaling \$153.6 million, a 9.25% decrease from March of 2022.

Since 2018, the SRWTF had a net gain due to \$30.3 million earned through investments. During the reporting period, the SRWTF funds invested in the State's IMB reported a loss of \$1.3 million due to overall market conditions. These gains are encouraging with the hope that investments will continue to accrue interest so the funds can be used to reclaim bond forfeiture sites, including water treatment, into the future.

Acid Mine Drainage Inventory of Active Permits

The WVDEP continues to develop and maintain its AMD inventory of active permits. Determining current reclamation liability of active permits for both land and water treatment is critical to assessing the solvency of the SRF. The OSMRE continues to be concerned about the reclamation liabilities of existing forfeitures.

During EY 2023, WVDEP took steps to improve its water treatment inventory of active permits. The WVDEP tasked its inspection staff with validating the number of sites likely to be treating water after active mining operations have ceased. The WVDEP began assessing water treatment cost data for its AMD Inventory on a discharge outlet basis. This EY, WVDEP began extracting HPU ERIS database information pertaining to chemical treatment in a systematic manner. Once this dataset is finalized, actuaries will have access to this information to better assess potential liabilities in the future. This data collection has become part of the discussion related to the 30 CFR Part 732 Notification from August 23, 2021.

Notice Of Intent to Sue OSMRE and USFWS from Center for Biological Diversity

On April 6, 2023, the Center for Biological Diversity (the Center) and Appalachian Voices sent the Department a notice of intent to sue (NOI) OSMRE and the USFWS for alleged violations of the Endangered Species Act (ESA). The Center alleges that "OSMRE is failing to oversee and ensure the effective implementation of [Kentucky, Virginia, and West Virginia's] Title V programs, as the 2020 BiOp requires." The NOI identifies hundreds of mines in these three states that are alleged to lack approved species-specific Protection and Enhancement Plans (PEPs) for the endangered Guyandotte River crayfish (GRC) and the threatened Big Sandy

crayfish (BSC) and which the Center alleges are causing unauthorized impacts to these and other species. As of June 30, 2023, the end of the 2023 evaluation year, OSMRE was assessing the allegations.

State Regulatory Staffing and Program Funding

During EY 2023, the State had an approved regulatory program staff of 205.81 Full-Time Equivalent (FTE) positions, but there were 19.5 vacant positions, resulting in only 186.28 FTE filled positions as shown in Appendix 1 Table 8. State officials anticipate this vacancy rate will continue into the next EY due to recent turnover rates.

Most coal models project the State coal production will continue to decline in the future. Informal assessments show the continued decline in State coal production will result in a revenue loss from coal severance tax revenue. However, given any State proposal to increase revenue requires legislative approval, WVDEP must act to find a permanent source of revenue for the Regulatory Program. OSMRE will continue to monitor this closely.

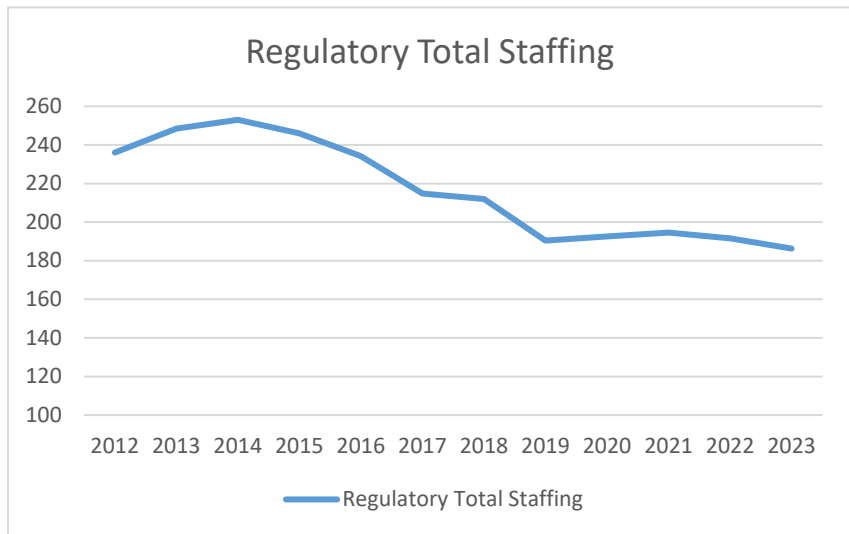


Figure 11- Historic Staffing via grant year.

OSMRE Assistance

The OSMRE supports WVDEP's Regulatory Program through many avenues. The most significant is through a yearly fiscal grant. The WVDEP's regulatory grant cycle begins on January 1 of each calendar year. For EY 2023, WVDEP received \$10,199,272 to fund 50% of its Regulatory Program costs.

In addition to financial support, OSMRE also provided assistance in the following areas during the EY.

Technical Training – Technical Innovation and Professional Services (TIPS) and National Technical Training Program (NTTP)

The OSMRE organizes and conducts in the classroom training courses throughout the year for State and Federal program staff. The courses are specifically oriented toward the latest technologies useful for the regulation of active mining and reclamation of abandoned mines. OSMRE's NTTP and TIPS Program administers these courses. During EY 2023, 79 WVDEP Title V employees attended NTTP courses and one WVDEP Title V employee attended a TIPS course.

Lexington Coal Company West Virginia, LLC

Horizon Natural Resources Company (Horizon) filed for Chapter 11 bankruptcy protection in November 2002, resulting in the largest coal company bankruptcy in United States history at the time. In August 2004, the U.S. Bankruptcy Court in Kentucky approved the company's reorganization plan, which included the formation of Lexington Coal Company West Virginia, LLC (LCC). LCC's primary responsibility was to complete land reclamation on the remaining permits and to provide for the treatment of any pollutant discharge found to be present.

The LCC submits summaries of its operation, maintenance, and capital improvement costs at sites requiring water treatment to WVDEP. Pursuant to the Trust Fund and Bond Agreements, WVDEP and LCC review and update the water treatment cost estimates and adjust the bond amounts based on the Primary and Capital Trust and Target valuations set forth in the Agreements. Based on this review, monies within the Trust Funds can be adjusted over time. If the Trust valuations are less than the Target valuations, WVDEP can request that LCC add monies to the Funds. However, if the Trust valuations are more than the Target valuations used in managing the trust funds, WVDEP is required to instruct the Trustee to disburse the excess funds to LCC.

The State's IMB invests the three LCC trust funds for WVDEP. According to the IMB, the three trust funds had a value of \$11,478,090.03 as of June 30, 2023. During the evaluation year, LCC had not yet requested expenditures for operation and maintenance and capital costs that it has incurred at these three sites. The WVDEP and OSMRE continue to monitor and report on LCC's water reclamation activities on these permits.

The Quality Assessment Quality Control Panel (QAQC Panel)

The Bragg vs. Robertson Lawsuit Consent Decree entered in the U.S. District Court for Southern West Virginia on December 22, 1999, created a QAQC Panel, with the purpose of "reviewing surface mining permits and to visit mine sites, as appropriate, to apprise the Director of WVDEP respecting administrative completeness of permits and to help assure consistent application of policies and procedures." The Consent Decree also specified that the Director create and post new positions to include a biologist (with at least a master's degree in biology) and a trained and qualified (professional) engineer with at least a Bachelor of Science Degree in mining or civil engineering. Five personnel make up the QAQC Panel: two coal industry representatives, two environmental representatives, and one WVDEP representative. The WVDEP also provides a full-time "Approximate Original Contour (AOC) Engineer" and other WVDEP representatives, if needed, to assist and support the Panel. The OSMRE is not a member of the Panel, but often attends meetings as an observer and resource to the team.

The Panel is required to meet nine times per year. This generally consists of four, two-day sessions at WVDEP regional offices and two one-half-day sessions to prepare and present the Panel's annual report to the Director and his staff at WVDEP headquarters. The calendar year 2023 represents the QAQC Panel's 24th year in existence.

While the Panel reviews and monitors the overall completeness and quality of permit applications, examples of specific technical areas on which it has concentrated in the past include:

- AOC calculations, determinations, and compliance certifications;
- AOC variances and alternate post-mining land use justifications;
- Contemporaneous reclamation plans and variances;
- Topsoil substitute waivers;
- Endangered Species issues;
- Storm Water Runoff Analyses (SWROAs);
- Drainage control designs;
- Slurry impoundment construction plans;
- §404 Clean Water Act delineation and mitigation requirements; and
- Field application of specific reclamation techniques (such as forestland and ARRI).

The Panel annually reviews permitting statistics, reports on recent trends and permit practices, reviews user issues, and makes overall recommendations to WVDEP to improve permit quality and the efficiency of permit reviews. Over the past several years, the panel has identified and commented on general completeness and any potential deficiencies needing to be addressed. At the request of WVDEP staff, the Panel has also reviewed specific state policies and/or proposed guidelines, offered assistance with the development or revision of various certification forms, assisted with industry training sessions, and recommended measures to clarify/update WVDEP's e-permitting system (now called ESS or Electronic Submission System).

The panel's plans and goals for the calendar year 2023 included:

- Visit each regional office as practical.
- Continue to review most recently submitted SMA's by region
- Conduct site visits, approximately 1-2 meeting days;
- Re-visit site(s) previously visited by the Panel in early stages of mining in order to review progress and current compliance;
- Visit Alternative Post Mining Land Use (PMLU) sites;
 - Prepare a SWROA Frequently Asked Questions (FAQ) document/help file, based on the results of last year's most common SWROA deficiency project;
- Assist WVDEP with training seminars/sessions, as requested;
- Take on any special project or review of issues requested by the Director or Secretary;
- Prepare and present End of Year (EOY) Report to the Director; and,
- Assist WVDEP with draft policy on submission standards for PDF files of permit application maps and drawings.

The QAQC Panel expects to present its annual report to the Director in early December 2023; the report will summarize 2023 activities, recent permitting trends, plans for 2024, and any Panel recommendations to WVDEP.

Assistance with Compliance with the National Historic Protection Act and the Archaeological Resource Protection Act

On May 5th, 2023, the WVDEP contacted CHFO to request assistance identifying the pertinent agencies and Tribes to contact after a permittee discovered, and inadvertently disturbed, an archeological site containing sensitive cultural material. During the application process for an IBR, WVDEP required the permittee to consult with SHPO, in accordance with the approved State regulatory program. SHPO recommended the permittee conduct a phase 1 archeological survey before approval of the pending permitting action. The survey led to the discovery of prehistoric sensitive cultural material within the proposed boundaries of the pending IBR.

Subsequent to the survey, and prior to permitting approval of the subject permitting action, the permittee disturbed the archeological site. WVDEP issued two violations related to this incident: off-site disturbance and not having permit boundary markers in place. The permittee submitted a revised IBR application that excluded the archeological site, and markers were amended to prevent further disturbance to the archeological material.

OSMRE provided the requested guidance to WVDEP, suggesting WVDEP contact by phone each of the Tribes with ancestral ties to WV; SHPO provided a list of such Tribes to WVDEP. OSMRE provided a suggested format and content for these initial phone calls. Following initial contact, OSMRE recommended WVDEP send a letter, similar in scope, to each of the Tribes. WVDEP implemented OSMRE's recommendations and continues to engage with the Tribes to reach a consensus on the path forward. CHFO continues to monitor this incident and provide guidance.

Elevation under the Dispute Resolution Process of the 2020 Biological Opinion

On January 26, 2023, the WVDEP DMR initiated the Dispute Resolution Process (DRP) in accordance with Appendix B of the Endangered Species Act Section 7 Consultation Final Programmatic Biological Opinion and Conference Opinion on the United States Department of the Interior Office of Surface Mining Reclamation and Enforcement's Surface Mining Control and Reclamation Act Title V Regulatory Program (2020 Biological Opinion). DMR initiated the elevation through the DRP to address delayed reviewing and processing of three permitting actions by the USFWS West Virginia Field Office (WVFO). CHFO, WVFO, and DMR agreed to resolve the elevation at the level one of the DRP, with the understanding that an on-staff biologist with CHFO would assist WVFO with SMCRA-related ESA reviews for one calendar year from the date of resolution. On April 5, 2023, CHFO's biologist began assisting WVFO with SMCRA-related ESA reviews and has been successfully aiding WVFO in reducing the aforementioned delays.

ESA Stream Assessment for the Guyandotte and Big Sandy Crayfish

The WVDEP requested OSMRE provide technical assistance to determine if environmental controls on surface mine operations are adequate to protect the Guyandotte River Crayfish (*Cambarus veteranus*) and the Big Sandy Crayfish (*Cambarus callainus*), both listed in early 2016 under the Endangered Species Act due to declining range and habitat loss. USFWS designated the critical habitat for these species in 2022. Currently the draft report detailing the study and its findings is undergoing managerial review by WVDEP and OSMRE. Once finalized, the report will be available on <https://www.odocs.osmre.gov/>.

Abandoned Mine Land Reclamation

Introduction

The SMCRA encourages States and Tribes to assume the primary responsibility for reclamation of lands and water adversely affected by past mining practices. States and Tribes may assume primary authority for reclamation of AML by obtaining approval of an Abandoned Mine Land Reclamation Plan (AMLR) under Title IV of SMCRA. Once an AMLR Plan is approved, OSMRE has the responsibility to oversee the approved AML Program to determine if it is being administered in accordance with the approved provisions. Since West Virginia has the authority to manage its AML Program, OSMRE's primary role is to:

1. Monitor WVDEP's compliance with the requirements of its approved AMLR Plan, SMCRA, applicable 30 CFR regulations, grant requirements, applicable 43 CFR regulations and applicable Office of Management and Budget circulars governing financial management,
2. Assess WVDEP's progress in addressing problems identified in its e-AMLIS inventory,
3. Ensure WVDEP maintains its capability to fulfill SMCRA responsibilities,
4. Assist WVDEP in implementing its responsibilities,
5. Report on the evaluation of WVDEP's Program,
6. Work with WVDEP to resolve, in a reasonable and timely manner, program and implementation issues identified through oversight,
7. Pursue corrective actions provided by SMCRA, Federal rules, and OSMRE policy if WVDEP is not meeting program requirements, and
8. Authorize each AML reclamation project to proceed after reviewing environmental information submitted by WVDEP to make the necessary National Environmental Policy Act (NEPA) findings and to ensure proper consultations with coordinating agencies are performed.

The AML-related problems include, but are not limited to, landslides, stream sedimentation, hazardous structures, dangerous highwalls, subsidence, loss of water, AMD, open mine portals, water-filled pits, highwalls, fumes at burning refuse piles, and unstable refuse disposal areas. A large number of AML-related hazards are still present in the coalfields and are being addressed on a priority basis.

There are two main categories of AML hazards: emergencies and priority reclamation projects. An emergency hazard is defined as a sudden danger or impairment related to coal mining that presents a high probability of substantial physical harm to the health, safety, or general welfare of the people before the danger can be abated under normal AML Program operation procedures. A priority hazard is defined as a threat to the public health, safety, general welfare, land, water resources, or the environment, but is not sudden and can be abated under normal program operations. Priority hazards are divided into three categories (priorities 1, 2, and 3) based on the impacts and severity.

The OSMRE Directive AML-1 required OSMRE to develop and maintain a computerized inventory of eligible lands and waters consistent with the requirements of SMCRA Section 403(c). This system is known as the enhanced Abandoned Mine Lands Inventory System (e-AMLIS) and was developed to assist in the planning and evaluation of reclamation projects. Grant funding provided by OSMRE to states may not be expended for the

development, design, or reclamation of a coal problem unless it is contained in e-AMLIS. The States and Tribes are responsible for administering their individual AML Programs and setting the priority of each proposed project in accordance with OSMRE Directive AML-1 and their approved Reclamation Program. It is OSMRE's responsibility to approve each addition.

Each hazard is located within a specific area and is designated a certain problem type and priority based on the level of danger to the public's health and safety. The e-AMLIS allows for multiple maps and documents to be uploaded to the system and linked directly to problem areas. Programs developed within e-AMLIS allow users to enter problem type units, such as number of portals, gallons of water, or feet of highwall, and the program equates those problems to a predetermined number of acres for a problem type, GPRA acres. A consistent measurement such as this allows users to get a general idea of the overall status of reclamation throughout the nation.

The OAMLR staff continues to amend existing information within e-AMLIS to reflect existing conditions more accurately in the field and to update e-AMLIS with completion data as sites are reclaimed. This information is available to the public at <https://eamlis.osmre.gov>. Figure 12 shows the status of reclamation in West Virginia and the changes that have occurred in recent years.

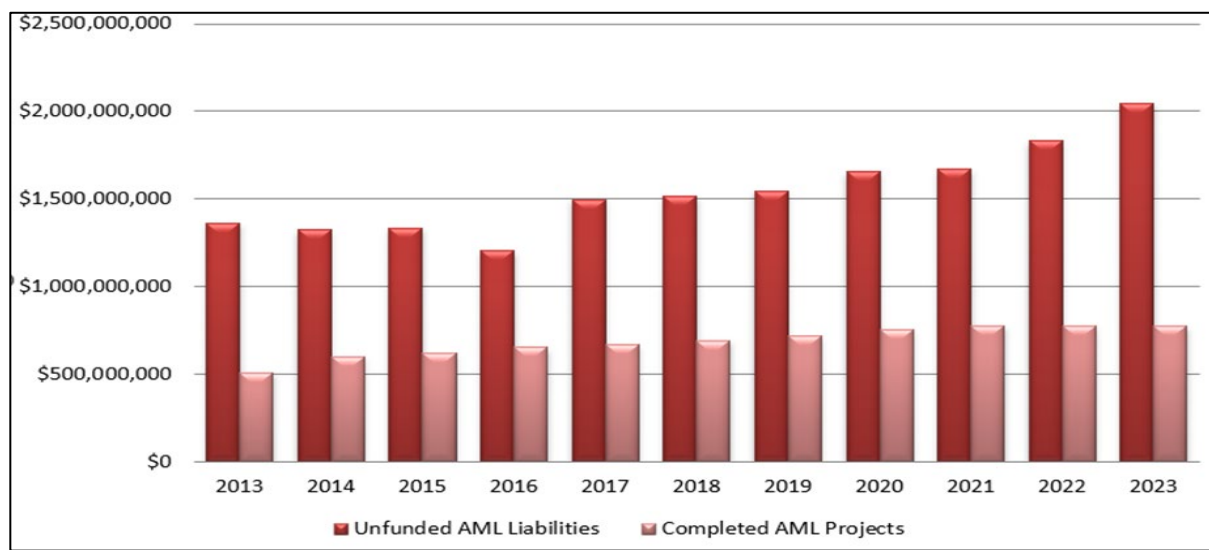


Figure 12- Unfunded vs. Completed projects via evaluation year.

Program Administration

The WVDEP annually applies for a grant from OSMRE to reclaim high-priority AML sites across the State. The grant funds are used to support full-time AML employee positions, design reclamation plans, obtain consent for rights-of-entry, publish public notices in local newspapers, and to ensure the site is reclaimed and problems are abated according to the engineering design. Grant funds come from fees paid by the coal industry on each ton of coal mined. Current fees are \$22.4 per ton of coal mined by surface mine methods, and \$9.6 per ton of coal mined using underground methods.

During EY 2023, the OAMLR was issued the following grants from OSMRE:

1. FY 22 AMLER- \$26,630,000
2. FY 22 BIL- \$140,751,469

At the time of this AER, the OAMLRL had applied for their FY 2023 fee-based grant, and the application was under review by OSMRE. It is anticipated to be awarded by the end of FY 23.

The OAMLRL utilizes the administrative portions of its grants to fund a staff of 46.18 FTE positions. Per the current fee-based grant application, five of the 48.18 positions were vacant. The WVDEP plans to fill half of these vacancies in this grant year, if possible.

The OSMRE has approved the following four primary AML components to the West Virginia Program:

1. The regular construction program abates high priority, non-emergency problems caused by past mining practices. The OSMRE approved the regular abandoned mined lands construction program on February 23, 1981.
2. The State's Emergency Program abates problems caused by past coal mining practices. These must be expedited because the health and safety issues result from a sudden occurrence too serious to be addressed under the regular construction program. The OSMRE approved the State's Emergency Program section on August 26, 1988. In FY 2011, OSMRE stopped providing specific funding for emergency projects, but OAMLRL continues to address emergency issues with its regular grant funding and continues to operate an Emergency Program as it did prior to the elimination of direct, Federal emergency funding.
3. Potable water supply provisions allow the State to repair or replace water supplies when the damage from past mining practices occurred primarily before August 3, 1977. The OSMRE approved this program provision on July 25, 1990.
4. The Acid Mine Drainage Abatement and Treatment Program (AMD set-aside) allows the State to use a percentage of its annual grant allocation to reclaim watersheds impacted by AMD. The OSMRE originally approved this program component on March 26, 1993 and limited the amount of the "set-aside" to ten percent. The 2006 Reauthorization of the AML program allowed the State to increase the amount of funding in the set-aside for AMD treatment and abatement to 30% of its annual grant. The fund, including all interest, is specifically for the abatement of the causes and treatment of the effects of AMD in a comprehensive manner within qualified hydrologic units affected by past coal mining practices.

An additional function of the OAMLRL Program is the administration of the Abandoned Mine Land Economic Revitalization (AMLER) Program. During FY 2016, as part of The Consolidated Appropriation Act of 2016 (Public Law 114-113), \$30 million was made available to WVDEP to partner with other entities to develop economic revitalization projects focused in areas of the State severely impacted by the economic downturn in the coal market. The focus of these grant monies is to accelerate the remediation of AML sites with economic and community development end uses, and to explore strategies to convert legacy coal sites into productive land uses. During FY 2017, FY 2018, FY 2019, FY 2020, and FY 2021, \$25 million was made available to the WVDEP for each of these FYs, through subsequent AMLER grants. During FY 2023 OAMLRL received its FY 2022 AMLER grant for \$26,630,000. Throughout these seven FYs, the WVDEP has submitted 65 potential projects for OSMRE's review.

The Bipartisan Infrastructure Law (BIL), P.L. 117-58 "The Infrastructure Investment and Jobs Act," was enacted on November 15, 2021. This enacted legislation included language that directly, or in some cases indirectly, impacted OSMRE. In addition to the extension of AML fee collections and mandatory AML Grant distributions, \$11.293 billion in new funding was authorized to be appropriated for deposit into the Abandoned Mine Reclamation Fund. As directed by the BIL, OSMRE will be distributing approximately \$725 million annually for

15 years, beginning in FY2022. Eligible States and Tribes will receive these annual BIL AML grant distributions for the remaining years, subject to any required adjustments. During FY 23, the OAMLR received its first BIL AML Grant, totaling \$140,751,469. During FY 23, the OAMLR continued to update e-AMLIS with potential BIL funded land reclamation and acid mine drainage reclamation projects. Also, during this EY, the OAMLR began to acquire design services using the State of West Virginia's approved procurement policies. It is anticipated that several BIL funded projects will be initiated during FY 24.

National Environmental Policy Act Review

The National Environmental Policy Act (NEPA) provides a process by which Federal agencies make decisions on proposed actions based on the environmental consequences of those actions and their alternatives. Traditionally, WVDEP prepares the necessary environmental documents, required for OSMRE's compliance with the CEQ's NEPA regulations. For each proposed AML construction project, WVDEP submits to OSMRE an environmental package that includes: an environmental document, AML eligibility statement, applicable supplemental information, NEPA consultation correspondence, and new or updated e-AMLIS documents when needed. The e-AMLIS documentation shows the eligible AML feature entered and categorized as "unfunded" with the estimated budget for the project.

The OSMRE reviews each environmental package to ensure relevant consultations with coordinating agencies were performed and comments/concerns from those consultations regarding site-specific impacts are resolved. The reviews also ensure necessary permits and proposed borrow/disposal areas have been identified. A joint OSMRE/WVDEP site visit may be conducted to gain a better understanding of the AML project scope or issues involved with the proposed construction. The OSMRE works with WVDEP to revise the environmental document as necessary, and then issues a notification of its decision within 14 working days of receiving a completed environmental package. Immediately prior to the issuance of the ATP, WVDEP annotates e-AMLIS showing the AML feature units and costs involved with the project "funded" based on the estimated budget for the project. If OSMRE does not issue an ATP, WVDEP is notified of the reason(s) and the project package is returned for modifications.

During EY 2023, WVDEP submitted requests for 36 projects, receiving ATP on 36. Five of the projects submitted were non-emergency reclamation, 29 were emergencies, and two were funded under AMLER grants.

When an emergency occurs, WVDEP and OSMRE work cooperatively to abate the problem. In case of emergencies, the same procedures are followed as with all proposed AML projects unless the abatement measures are required sooner than when the regular NEPA process can be completed. The WVDEP submits to OSMRE emergency project information, and an inspection may be conducted to confirm the project meets the emergency criteria. Required NEPA consultations are initiated at this time. The OSMRE will issue an ATP via email or phone in cases where abatement measures are required as soon as possible. After the emergency is abated, WVDEP will submit a full NEPA package to OSMRE.

Enhanced Abandoned Mine Land Inventory System Update

Last EY, the OAMLR entered 164 new Problem Area Descriptions (PAD) into eAMLIS for OSMRE's approval. This year, OAMLR submitted 228 new or significantly revised PADs into eAMLIS for OSMRE's approval, an increase of 39%.

Completed AML projects (reclaimed sites, including a variety of project types – Priority 1, Priority 2, and elevated Priority 3) continue to increase yearly as OAMLR addresses more projects (Figure 12). Unfunded AML liabilities (problem areas which are inventoried sites that require reclamation) continue to heavily outweigh completed projects which abate these liabilities. An increase in AML funding occurred after 2007, due to the 2006 reauthorization. Over the past several years, a decrease in fee-based grant funding occurred, largely the

result of a federally required sequestration, less income into the State share of the AML fund because of reduced mining, and the decline of coal sales due to the significant drop in the coal market. However, with the passage of the BIL, the OAMLRL now has the funding to abate a significant number of un-reclaimed AML sites.

The OAMLRL continues to complete AML projects. Over the past EY, OAMLRL issued construction contracts for 39 non-water projects funded with fee-based grant funding and one water project funded with BIL funding. As shown on the graph in Figure 12, AML project completion data remained consistent compared to last EY. Below is a summary of the current West Virginia AML inventory costs as reflected in eAMLIS. The detailed AML tables attached to this report provide an in-depth look at the State AML inventory and the status of the State's reclamation accomplishments. NOTE: As outlined in the 22 AER, West Virginia continues to perform major e-AMLIS updates as a result of the implementation of BIL. As a result of this new funding, the OAMLRL continues to add the liability costs associated with the large number of highwalls, AMD stream treatment sites, and underground mine fires that do not presently appear on the inventory and can fund larger cost projects which could not be done prior to BIL. The eAMLIS updates will provide a much more accurate display of the State's AML reclamation liabilities.

As of June 30, 2023, many project pads were in edit mode as a result of eAMLIS updates, and, consequently, the data associated with said pads was unavailable to the system query. For this reason, the cumulative, completed liability status this EY (\$771,604,859) is less than that reported last EY (\$772,542,199). This same phenomenon impacted the availability of eAMLIS data last EY. CHFO will continue to emphasize to WVDEP the impact edit mode has on data availability within eAMLIS.

Unfunded OAMLRL Liability Status (AML Problems Requiring Reclamation)	\$2,047,604,885
Funded OAMLRL Liability Status (Current AML Projects under, or proposed for, reclamation)	\$48,374,239.50
Completed OAMLRL Liability Status (Completed AML Projects)	\$771,604,858.69

Figure 13 - West Virginia Inventory Summary (as currently reported in e-AMLIS)

Noteworthy Accomplishments

Overall Performance

The WVDEP's major AML accomplishments and innovations for EY 2023 include:

1. Reclamation of 54.15 GPRA acres on 27 completed AML projects. EY 2023 projects consisted of reclamation of subsidence, public water human consumption, portals, dangerous slides, dangerous impoundments, vertical openings, and water problems. Reclamation reduced potential exposure to 22,362 people as estimated by WVDEP.
2. Investigation of 337 AML-related complaints, each within a two-day timeframe once reported,
3. Completion of 924 AML project inspections,
4. Review of 48 applications for potential funding under the AMLER Program. During EY 2023, an additional \$26,630,000 was awarded to West Virginia for reclamation and economic development at AML sites, and
5. During EY 2023, the OAMLRL continued monthly project meetings via Teams conferencing with CHFO to discuss the progress, and any issues, related to any of the activities within the AML program. These

meetings originally discussed AMLER projects; however, they have expanded to discuss any aspect relating to the AML program. These meetings are extremely beneficial to CHFO and OAMLRL and will continue.

DLRNET

In EY 2008, West Virginia OAMLRL began the development of a new information database and management system known as WebAML. In April 2010, WebAML became a reality, allowing AML management and staff to store and manage data electronically. The system is the primary source for information for all aspects of the AML program and continues to be utilized by CHFO staff on a regular basis. OAMLRL transitioned from WebAML to AMLNET. AMLNET continues to improve and expand from the basic framework to include access to more data and programs and has been renamed DLRNET after the Division of Land Restoration, in which OAMLRL is located. This EY, time was spent on data quality, operational adjustments, security adjustments, and user support.

AMD Set-Aside Projects

West Virginia currently has over 500 streams, with a combined length of approximately 2,700 miles, that are impaired due to AMD from pre-law mining.

During FY 23, OAMLRL did not place any of its eligible AML grant funding into the set aside program. The OAMLRL had not received its FY 23 fee-based grant which allows for a portion of the funding to be placed into the AML Set Aside subaccount. Also, as originally proposed, the BIL grant awarded to the OAMLRL did not allow for funding to be placed into the set-aside subaccount. However, since the time of the original BIL implementation, Congress passed the "Safeguarding Treatment for the Restoration of Ecosystems from Abandoned Mines Act" or "STREAM" which allows for the placement of 30% of BIL funding into the set-aside subaccount for the treatment of acid mine drainage. The STREAM Act also allows the 30% set -aside to fund mine subsidence abatement and coal mine fire abatement projects. As outlined earlier in this report, OAMLRL is completing major updates to e-AMLIS to properly inventory and plan for major AML abatement projects utilizing the BIL AML funding, as well as to plan for the use of this major boost in the State's set-aside account. The CHFO encourages OAMLRL to make every attempt to add funding to this account on an annual basis due to the significant need in West Virginia for cleaning up AMD impacted streams.

Figure 13 outlines the annual accomplishments by OAMLRL utilizing its set-aside funding. However, AER AML Table 4 (EY 2023 Completed Projects) does not include most of this data since the expenditures of this funding is a project maintenance type requirement to continue to treat AMD impacted streams at several of the established water treatment facilities.

Project Name	GPRA Acres Reclaimed	Number of People with Reduced Exposure	EY 2023 Expenditures
Abram Creek AMD Treatment	14,633	53	\$3,858
Weaver Portals and Drainage	450	937	\$4,179
Black Water River/ Beaver Creek	91,920	46	\$5,735
Pringle Run Doser (FOC)	5	1,450	\$1,921
Laurel Run Mine Shaft, aka Crellin doser	250	110	\$26,337
Middle Fork Limestone Sand Treatment	24,192	155	\$31,151
Three Forks Creek Watershed Restoration	82,085	223	\$117,294
Total	213,535	2,974	\$ 190,475

Figure 14- AMD Treatment Projects in Which eAMLIS Indicates Set-Aside Funding Spent During EY 2023

OAMLRL continues to utilize a revised funding mechanism to accrue interest on the AMD abatement and treatment fund. Leaving the principal amount in the fund, the OAMLRL uses only the accrued interest to fund the annual operation and maintenance costs associated with its AMD treatment facilities. Under this investment strategy, most funds have been included in the State of West Virginia's IMB financial investment pool. Traditionally, the State of West Virginia allowed investments in money market and short-term bond accounts. These types of investments normally provided a minimal yearly return rate, often less than one percent annually. This new investment mechanism allows the AMD set-aside funding to grow at a more substantial rate. However, since this investment strategy is subject to overall market activity, the fund is subject to both positive and negative market conditions. To date, this approach has yielded overall positive results for the set-aside fund.

Utilization of OSMRE Assistance

Grants

The WVDEP's AML grant cycle begins on January 1 of each calendar year. As described earlier in this report, the OAMLRL did not receive a traditional fee-based grant (FY 23) last EY. The proposed distribution for FY 22 is \$15,601,223 and will likely be awarded to the program by the end of FY 23.

During EY 2023, funding was also provided for the 2022 AMLER grant, totaling \$26,630,000. With this new funding, AMLER funding totals \$181.63 million for AML projects with an economic nexus. Also, the OAMLRL

received its first BIL grant totaling \$140,751,469. Appendix 2 Table 7, West Virginia AML Program Grant Awards and Staffing, reports grants awarded by OSMRE for AML Program administration and construction.

NEPA Reviews

During EY 2023, OSMRE provided assistance to WVDEP and consultants regarding NEPA documents and procedures, which included draft reviews and comments for 36 environmental assessments and categorical exclusion documents.

Agency Coordination

U.S. Fish and Wildlife Service Programmatic Agreement

During EY 2023, OSMRE, WVDEP, and USFWS continued to coordinate to improve consultation processes with regards to threatened and endangered species. In April 2008, OSMRE and FWS signed an agreement, titled “Programmatic Consultation on the Abandoned Mine Lands Reclamation Program” (Programmatic Agreement). The agreement allowed AML to conduct project activities without prior notification to the FWS for specific actions the agencies agree would have no effect on federally listed species or critical habitats. On March 19, 2013, a new agreement went into effect, which was valid for five years (until March 19, 2018). Efforts this past EY have focused on drafting an updated Programmatic Agreement. OSMRE will continue to seek to renew the Programmatic Agreement during the upcoming EY.

U.S. Army Corp of Engineers Regional General Permit

As noted in the last AER, the USACE issued its regional general permit on February 22, 2018, and it was valid until February 22, 2023. Over the past EY, CHFO and the USACE drafted a new RGP. At the time of this AER, the final document is awaiting signature by USACE management.

Technical Training

The OSMRE conducts classroom-style courses throughout the year in the latest technology related to active and abandoned mine regulations. OSMRE, as a direct result of the COVID-19 Pandemic, made many of these courses available through online training. Those courses not conducive to an online platform were frequently cancelled. Administration of courses is through OSMRE’s NTTP and the TIPS programs. During EY 2023, OAMLR had 15 employees participate in NTTP classes and 12 employees participated in TIPS classes.

Public Participation and Outreach Efforts

The OSMRE’s Directive AML-22 establishes policies, procedures, and responsibilities for monitoring, assisting, and evaluation of State and Tribal AML Programs. The OSMRE’s monitoring or oversight serves to provide information, assistance, and feedback to States or Tribes, OSMRE, and the public to ensure the purposes and goals of the AML Program are being responsibly, efficiently, and effectively met.

The OSMRE’s website, located at www.osmre.gov, contains information for public use concerning SMCRA and OSMRE’s mission. There are also links to WVDEP’s website where the public can find more specific information on mining in West Virginia and WVDEP’s Regulatory and AML Programs.

To increase the level of transparency regarding oversight activities and the public, OSMRE posts documents for each state program on its Oversight Database (ODOcs). The ODOcs contains documents in accordance with OSMRE Directive AML-22. The public can utilize the ODOcs built-in search to view documents covering the various aspects of OSMRE’s assessment of the West Virginia Program.

During EY 2023, OSMRE and WVDEP continued to implement their 2022/2023 two-year Performance Agreement. Also, the new 2024/2025 Performance Agreement was completed, and signed, by both agencies.

The mandated Performance Agreement directs activities between the two organizations throughout the EY. The OSMRE routinely and periodically interacts with WVDEP and local coal associations, citizens, environmental organizations, and other groups to determine areas of concern and receive suggestions relative to AML reclamation, as well as to provide timely information about OSMRE activities that may interest such groups. The OSMRE conducts an outreach program within the West Virginia Coalfields to solicit comments from the public and interested parties regarding the AML review process, recommendations for additional program element topics for the EY, and suggestions for improvements of future annual AML evaluation reports. The following elements are included in OSMRE's outreach effort:

1. Announcement of the opportunity to provide comments, views, or suggestions prior to the development of the Performance Agreement,
2. Announcement of the opportunity to provide comments on the proposed Performance Agreement after its development,
3. The OSMRE acknowledgment of receipt and appreciation for public input received, and
4. Posting of the proposed and final Performance Agreement on OSMRE's website.

Public input is considered in determining where OSMRE will focus its resources and what aspects of the State AML Program will be reviewed. Notices are also sent to interested stakeholders, including citizens, industry, and environmental groups through our public involvement process. The OSMRE received, multiple AML evaluation topic suggestions for the 2024/2025 agreement and incorporated one of the suggested topics in the final document.

During the EY 23 evaluation year, Charleston Field Office attended five educational outreach events including:

1. Arbor Day Tree Planting at Morris Creek,
2. Cheat River Festival,
3. DEP Earth Day Outreach Event,
4. GEAR UP – STEM event at Clay Center, and
5. Junior Conservation Camp.

The WVDEP public outreach process includes release of public notices and requests for comments on proposed AML reclamation projects in newspapers of general circulation in project areas. During EY 2023, WVDEP relied solely on its newspaper and internet resources for public outreach. However, during the upcoming EY, CHFO anticipates that the OAMLRL outreach processes will have to be revised to accommodate the public outreach requirements of BIL.

Results of Evaluation Year 2023 Reviews

During EY 2023, the following program areas were reviewed for their success towards the overall goal of AML reclamation.

Regular AML Construction Program

During EY 2023, OAMLRL issued construction contracts for 39 non-water construction projects and, according to e-AMLIS, entered reclamation completion data for 4 projects.

As part of their water supply restoration program, the OAMLRL, whether entirely or in partnership with another entity, requested authorization to proceed for three water supply projects during EY 2023. See Figure 15 below for more information.



Figure 15 Hazardous Mine Portal along the Hatfield-McCoy ATV Trail

Water Supply Project Name	OAMLRL Funding Amount	Number of Households Served
Wilderness PSD (Snowhill) Waterline	\$432,000 (BIL)	5
Town of Coalton Waterline Extension	\$3,325,000 (AMLER)	109
Rhodell Water Service Upgrade	\$2,125,000 (AMLER)	150

Figure 16- AML funded Waterlines.

EY	Authorizations to Proceed	Completed Designs	Construction Contracts Issued
EY 2023	5	38	39
EY 2022	37	37	39
EY 2021	11	21	22
EY 2020	14	2	13
EY 2019	28	9	17
EY 2018	24	15	17
EY 2017	22	26	33

EY	Authorizations to Proceed	Completed Designs	Construction Contracts Issued
EY 2016	21	24	13
EY 2015	16	27	17
EY 2014	22	28	29
EY 2013	42	39	28
Total	242	266	267
Average	22	24.2	24.3

Figure 17- Authorizations to proceed via evaluation year.

* These numbers reflect projects possibly implemented under preceding grant years.

The actual accomplishments of the on-ground reclamation are accessible in e-AMLIS. The e-AMLIS provides the units of problem areas reclaimed for all work completed and is publicly available on the OSMRE website. The AML tables at the end of this report also provide specific information concerning the actual accomplishments. Please note, as previously discussed in section IX of this AER, at the end of the EY, West Virginia continued to perform e-AMLIS updates in response to BIL funding. Many project pads were in edit mode, and, consequently, the data associated with said pads was unavailable to the system query. For this reason, the cumulative, completed liability status this EY (\$771,604,858.69) is less than that reported last EY (\$772,542,199).

Emergency Program

During EY 2023, OAMLR's program investigated 337 citizen's complaints, resulting in the declaration of 29 emergencies. All emergency projects began in a timely manner, with most projects reaching completion within days or weeks of the Authorization-to-Proceed. The larger projects, such as landslide abatement projects, required a longer performance period to address the emergency aspects of the project.

Evaluation Year	Complaints Investigated	Emergency Declarations Issued
EY 2023	337	29
EY 2022	390	28
EY 2021	613	22
EY 2020	534	30
EY 2019	461	45

Evaluation Year	Complaints Investigated	Emergency Declarations Issued
EY 2018	353	26
EY 2017	280	31
EY 2016	281	21
EY 2015	278	28
EY 2014	249	33
EY 2013	213	22

Figure 18 Complaints Investigated and Emergency declarations issued by evaluation year.

OAMLRL Project Oversight by CHFO

The OSMRE's March 28, 2013, Directive AML-22, Evaluation of State and Tribal Abandoned Mine Land Programs provides recommendations for the policies and procedures used to monitor, assist, and evaluate AML programs. More specifically, the Directive references AML site visits as being an integral part of OSMRE's oversight responsibility. The goal of the policy is to: ensure the development of environmental documents for AML projects are in accordance with NEPA, assist with performing topic-specific evaluations, and ensure statutory requirements for oversight are met. During this EY, CHFO conducted oversight inspections of OAMLRL reclamation projects in various stages of construction, including 93 site visits on a total of 45 projects, including abandoned mine land reclamation projects, AML Enhancement projects, and AMLER projects. The CHFO completed oversights during the pre-bid, construction, post-construction, and the completion phases of the projects.

AML Project Oversight

The following AML sites received CHFO oversight inspections this EY:

1. Beartown/ Clarks Gap Waterline,
2. Ragland (Mounts) Landslide,
3. Ethel Hollow Refuse AML,
4. Hurricane Branch Portals (2 reports),
5. Trail 29 Mine Openings,
6. Devil Anse Portals,
7. McConnell (Whisman) Burning Refuse,
8. Branchland (Ellis) Landslide, and
9. Road Branch (Davis) Portal.

Overall, CHFO found minimal issues with the construction activities and the overall contract requirements of these projects. The CHFO continues to emphasize the adherence to the project plans and specifications when completing all AML funded projects. It is also noteworthy that the OAMLR has indicated that OSMRE field inspections provide a significant benefit toward staff development and reclamation project quality. The OAMLR continues to request an increase in the frequency of field reviews by the CHFO, there will likely be a significant need based on the anticipated number of newly implemented projects to be funded by the BIL.

AMLER Project Oversight

OAMLR currently has funded 65 AMLER projects through seven grants. To date, CHFO has issued 36 ATPs to the OAMLR to initiate construction on these AMLER projects. During the 2023 EY, CHFO completed 51 oversights on the following AMLER projects:

1. 106 Grace Chapel Road Remediation and Redevelopment,
2. Ashland Crumpler Wastewater Collection and Treatment,
3. Ashland Resort Park Tourism Development (2),
4. ATV Trailcamp at Coaldale (2),
5. Beaver Creek Fishery Enhancement Project,
6. Blackwater River Loop Project,
7. Town of Bradshaw Sanitary Sewer Upgrade Project,
8. Leon Street Slip Remediation (2),
9. Middletown Commons (2),
10. Claudia L. Workman Wildlife Center,
11. Clear Fork Railtrail,
12. Town of Coalton Waterline Extension,
13. Harper-Eccles Sewer Extension,
14. I-79 Technology Park Mine Reclamation and Economic Expansion (2),
15. Jaeger Regional Sewer Project,
16. Ivy Branch Off Road Park,
17. Ivy Branch Off Road Development Park,
18. MCPARC Recreational and Wellness Complex,
19. Minden Sanitary Sewer System Rehabilitation,
20. Mt. State Broadband Expressway (2),
21. East Wheeling Community Park,
22. Appalachian Aquatic Conservation Center,
23. Patriot Gardens Apple Production Facility (6),
24. Range 1 Training Facility,
25. Reclaiming the Cheat River as an Economic Asset through Trail Enhancement (RE-CREATE),
26. Reclaiming the Cheat River as an Economic Asset through Trail Investment & Nurturing Greenspaces (RE-CREATING),
27. Rhodell Water System Replacement,
28. Fleming-as an Old Mining Town to Rustic Ravines (3),
29. Brenton Baileysville Waterline,
30. Opal Smith Site 2/Stonewall Resort Historic Water Trail, Event Center, and Related Amenities (2),

31. Timber Tech Phase I,
32. White Oak Waterline Extension (4),
33. WV Elk Restoration Project Phase 1, and
34. WV Elk Restoration Project Visitor Center.

There were no reportable issues found during these CHFO oversights. However, during the upcoming EY, CHFO anticipates that most of the AMLER projects vetted to date will be in some phase of construction. CHFO proposes to stay engaged in the progress of AMLER projects and will perform periodic project evaluations throughout project completion.



Figure 19 Completed Trailhead at the Friends of the Cheat RECREATING Site, FY19 AMLER Project

AML Enhancement Project Oversight:

This EY, CHFO completed 32 oversights on two AML Enhancement projects (No-cost reclamation Projects):

1. Gooney Otter AML Enhancement (31), and
2. Holy Smoke Ethel Hollow Enhancement.

CHFO continues to focus a portion of our oversight efforts on AML Enhancement projects due to the culmination of the OAMLER Enhancement and 3.14 Oversight Study (completed in EY 18). Currently, there are six active projects being performed, and one proposed AML Enhancement project under consideration by OAMLER, at this time.

The OAMLER continues to address several issues which were outlined in the EY 18 AML Enhancement and 3.14 Study. This EY, OAMLER initiated an additional condition to the AML Enhancement process that requires an applicant to obtain a “Notice of Intent to Prospect” from the WVDEP’s DMR as an initial step in the AML Enhancement process. This new requirement provides the OAMLER and the applicant with surface and subsurface information pertaining to the characteristics of the subject refuse area, which aids all parties in a sound, economic determination of the feasibility of the project. CHFO will monitor the effectiveness of this revised process during the upcoming EY, as well as report on other issues pertaining to the enhancement program.

Project Maintenance Program Oversight Study

During EY 2017, a plan was developed, and accepted, by OAMLER for an oversight study on its project maintenance program, which is used to correct deficiencies found on AML projects completed in past years. Due to the passage of the additional BIL funding available to the WVDEP, a determination was made this EY to focus resources on development of oversight procedures related to BIL rather than on completion of this study. If programmatic issues are identified during normal oversight activities performed by CHFO, this study can be reinitiated as part of a subsequent work plan. CHFO will discontinue reporting on this effort in subsequent AERs.

Culverted Bat Gate Oversight Study

During EY 21, CHFO completed its oversight study to evaluate the WVDEP’s success as it pertains to the installation of culverted-type bat access gates, as part of Title IV reclamation projects, in accordance with SMCRA (Public Law 95-87), the ESA (87 Stat. 884, as amended; 16 U.S.C 1531 et seq.), and the 2013 Programmatic Agreement between the USFWS and OSMRE CHFO. See the West Virginia 2021 AER for the

results of the study. As a result of this study, the CHFO AmeriCorps completed a GIS based inventory of bat gates installed at AML sites. This inventory has been provided to OAMLRL, which continues to utilize the data and input new information as additional bat gates are installed at AML sites.

As a result of this study and communication with the USFWS and the WVDNR, CHFO has recommended OAMLRL discontinue its routine assumption of presence and associated reliance on culverted bat gate installation, for a more portal specific assessment of bat suitability and corresponding analysis of reclamation method alternatives. CHFO, USFWS, and WVDNR have advocated, and continue to advocate, for the completion of more bat habitat and presence surveys at portal locations to better inform the selection of appropriate reclamation methods in a situation specific manner.

Appendix 1 Summary of Core Data to Characterize the Regulatory Program

The following tables present summary data pertinent to mining operations and regulatory activities under the West Virginia Regulatory Program. Unless otherwise specified, the reporting period for the data contained in the tables is the EY. Other data and information used by OSMRE in its evaluation of West Virginia's performance is available for review in the evaluation file maintained by OSMRE in Charleston, WV.

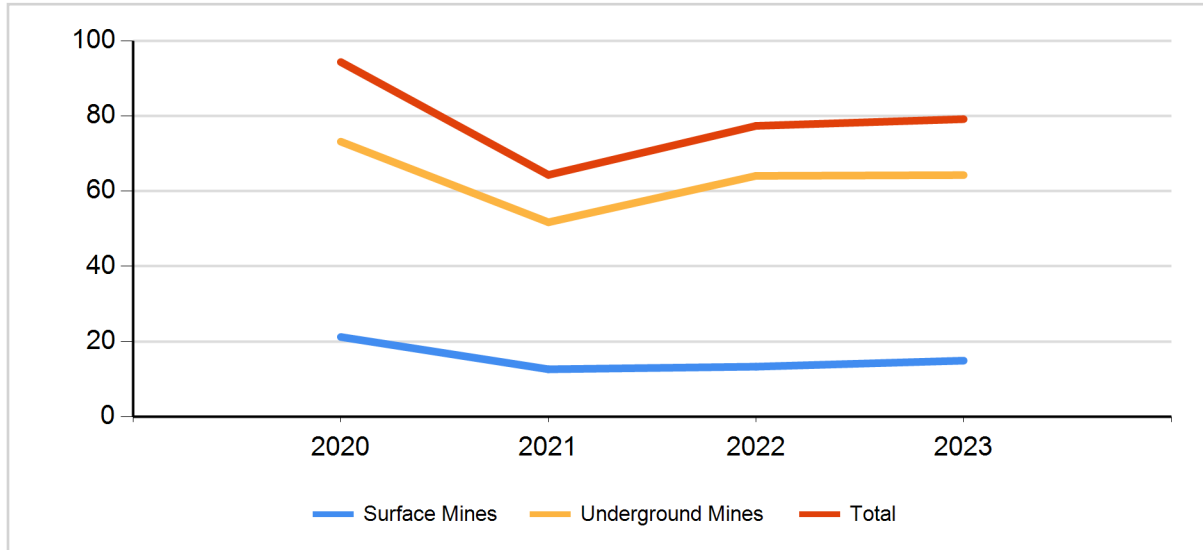
Because of the enormous variations from state-to-state and tribe to tribe in the number, size and type of coal mining operations and the differences between State and Tribal Programs, the summary data should not be used to compare one State or Tribe to another.

Table 1	Coal Produced for Sale, Transfer, or Use
Table 2	Permanent Program Permits, Initial Program Sites, Inspectable Units and Exploration
Table 3	Permits Allowing Special Categories of Mining
Table 4	Permitting Activity
Table 5	Off-Site Impacts
Table 6	Surface Coal Mining and Reclamation Activity
Table 7	Bond Forfeiture Activity
Table 8	Regulatory and AML Programs Staffing
Table 9	Funds Granted to State or Tribe by OSMRE
Table 10	West Virginia Inspection Activity
Table 11	West Virginia Enforcement Activity
Table 12	Lands Unsuitable Activity
Table 13	OSMRE Oversight Activity
Table 14	Status of Action Plans
Table 15	Land Use Acreage

TABLE 1

COAL PRODUCED FOR SALE, TRANSFER, OR USE ^A (Millions of short tons)			
Calendar Year	Surface Mines	Underground Mines	Total
2019	21.200	73.200	94.400
2020	12.610	51.740	64.350
2021	13.300	64.100	77.400
2022	14.900	64.300	79.200
^A Coal production is the gross tonnage (short tons) and includes coal produced during the calendar year (CY) for sale, transfer or use. The coal produced in each CY quarter is reported by each mining company to OSM during the following quarter on line 8(a) of form OSM-1, "Coal Reclamation Fee Report." Gross tonnage does not provide for a moisture reduction. OSM verifies tonnage reported through routine auditing of mining companies. This production may vary from that reported by other sources due to varying methods of determining and reporting coal production.			

TABLE 1
COAL PRODUCED FOR SALE, TRANSFER, OR USE
DURING THE CALENDAR YEAR
(Millions of short tons)



COAL PRODUCED FOR SALE, TRANSFER, OR USE ^A
(Millions of short tons)

Calendar Year	Surface Mines	Underground Mines	Total
2019	21.200	73.200	94.400
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⁴The number of Exploration Sites on Federal lands includes sites with exploration permits or notices any part of which is regulated by the state under a cooperative agreement or by OSM pursuant to the Federal Lands Program, but excludes exploration sites that are regulated by the Bureau of Land Management

CHART 2A HISTORICAL TRENDS
NUMBER OF INITIAL PROGRAM SITES AND PERMANENT PROGRAM PERMITS

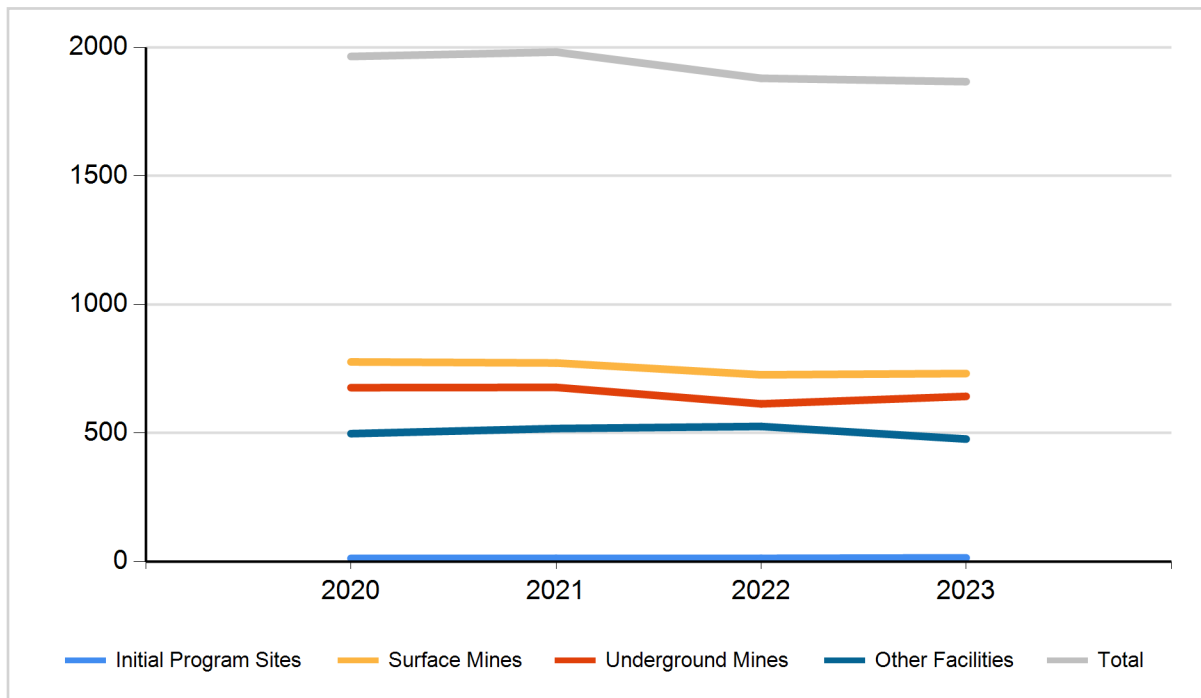


TABLE 2A

NUMBER OF INITIAL PROGRAM SITES AND PERMANENT PROGRAM PERMITS					
Year	Initial Program Sites	Permanent Program Permits			Total
		Surface Mines	Underground Mines	Other Facilities	
2020	13	777	677	498	1965
2021	13	773	678	518	1982
2022	13	727	614	526	1880
2023	15	732	643	477	1867

CHART 2B HISTORICAL TRENDS
AREA OF INITIAL PROGRAM SITES AND PERMANENT PROGRAM PERMITS

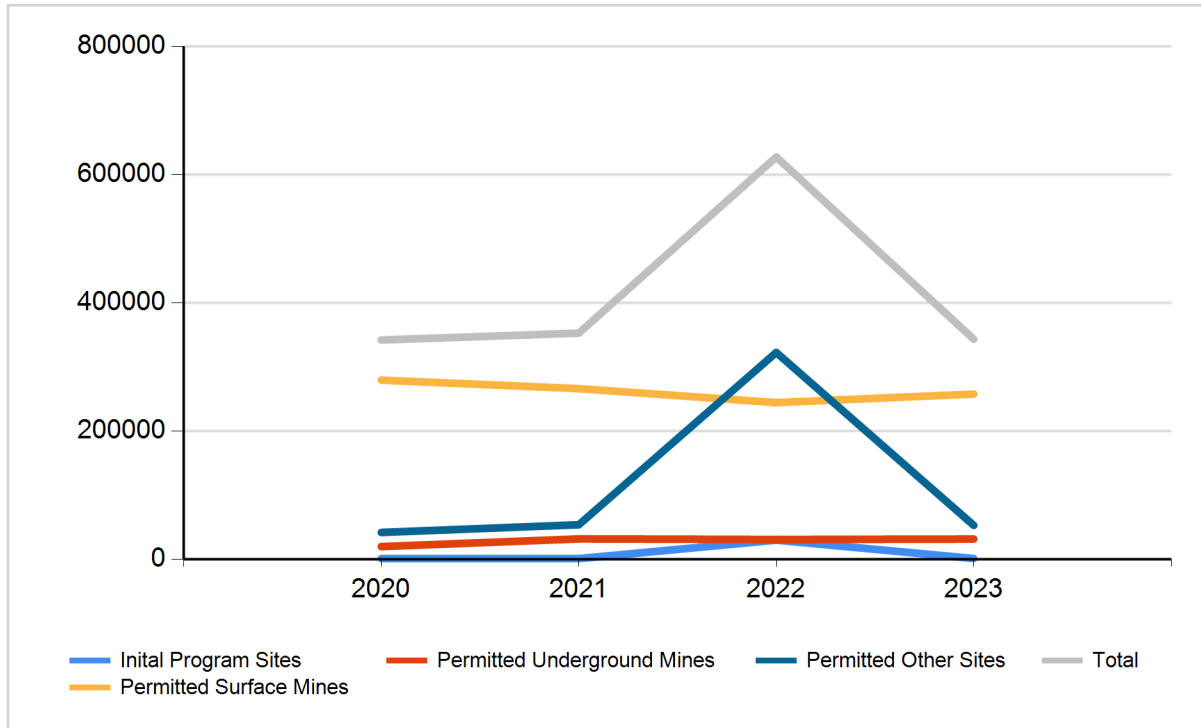


TABLE 2B

AREA OF INITIAL PROGRAM SITES AND PERMANENT PROGRAM PERMITS					
Year	Initial Program Sites	Permanent Program Permits			Total
		Surface Mines	Underground Mines	Other Facilities	
2020	998.0	279359.0	19755.0	41803.0	341915.0
2021	998.0	266081.0	31727.0	53785.0	352591.0
2022	29829.0	244266.0	30777.0	322443.0	627315.0
2023	1154.0	257641.0	31495.0	52817.0	343107.0

TABLE 3

PERMITS ALLOWING SPECIAL CATEGORIES OF MINING			
Special Category of Mining	30 CFR Citation Defining Permits Allowing Special Mining Practices	Numbers of Permits	
		Issued During EY	Total Active and Inactive Permits
Experimental Practice	785.13(d)	0	0
Mountaintop Removal Mining	785.14(c)(5)	0	162
Steep Slope Mining	785.15(c)	2	132
AOC Variances for Steep Slope Mining	785.16(b)(2)	0	34
Prime Farmlands Historically Used for Cropland	785.17(e)	0	1
Contemporaneous Reclamation Variances	785.18(c)(9)	2	191
Mining on or Adjacent to Alluvial Valley Floors	785.19(e)(2)	0	0
Auger Mining	785.20(c)	7	288
Coal Preparation Plants Not Located at a Mine Site	785.21(c)	0	0
In-Situ Processing	785.22(c)	0	0
Remining	773.15(m) and 785.25	0	0
Activities in or Within 100 Feet of a Perennial or Intermittent Stream	780.28(d) and/or (e) 784.28(d) and/or (e)	9	935

CHART 3A HISTORICAL TRENDS
PERMITS ALLOWING SPECIAL CATEGORIES OF MINING

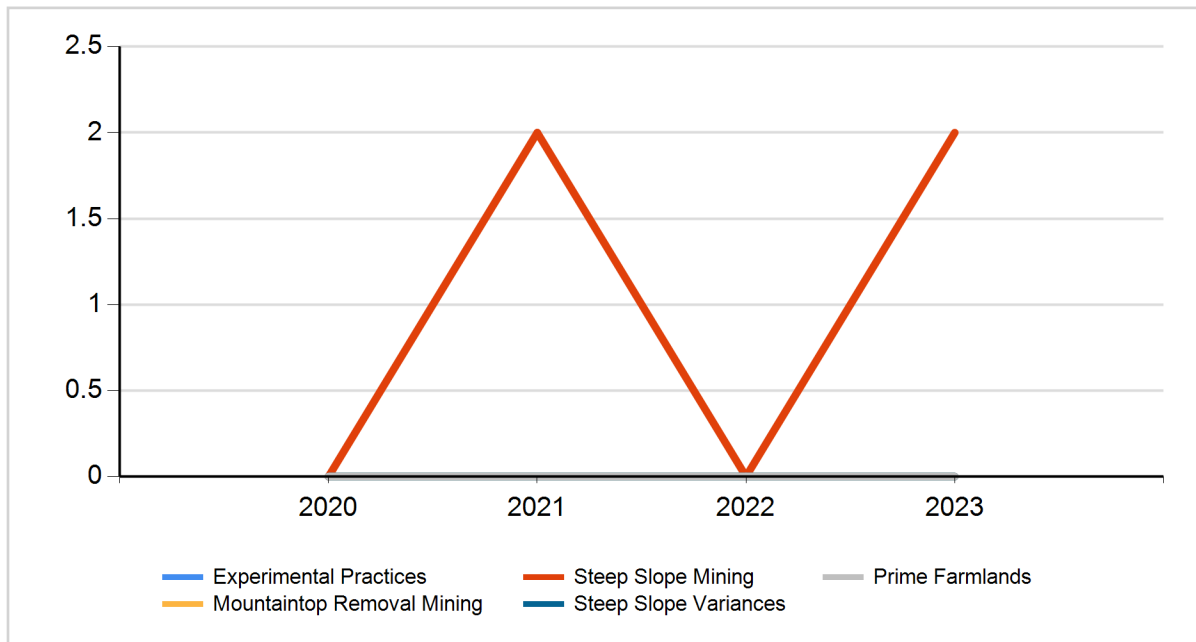


TABLE 3A

NUMBER OF PERMITS ISSUED AND REVISIONS APPROVED					
Year	Experimental Practices	Mountaintop Removal Mining	Steep Slope Mining	Steep Slope Variances	Prime Farlands
2020	0	0	0	0	0
2021	0	0	2	0	0
2022	0	0	0	0	0
2023	0	0	2	0	0

**CHART 3B HISTORICAL TRENDS
PERMITS ALLOWING SPECIAL CATEGORIES OF MINING**

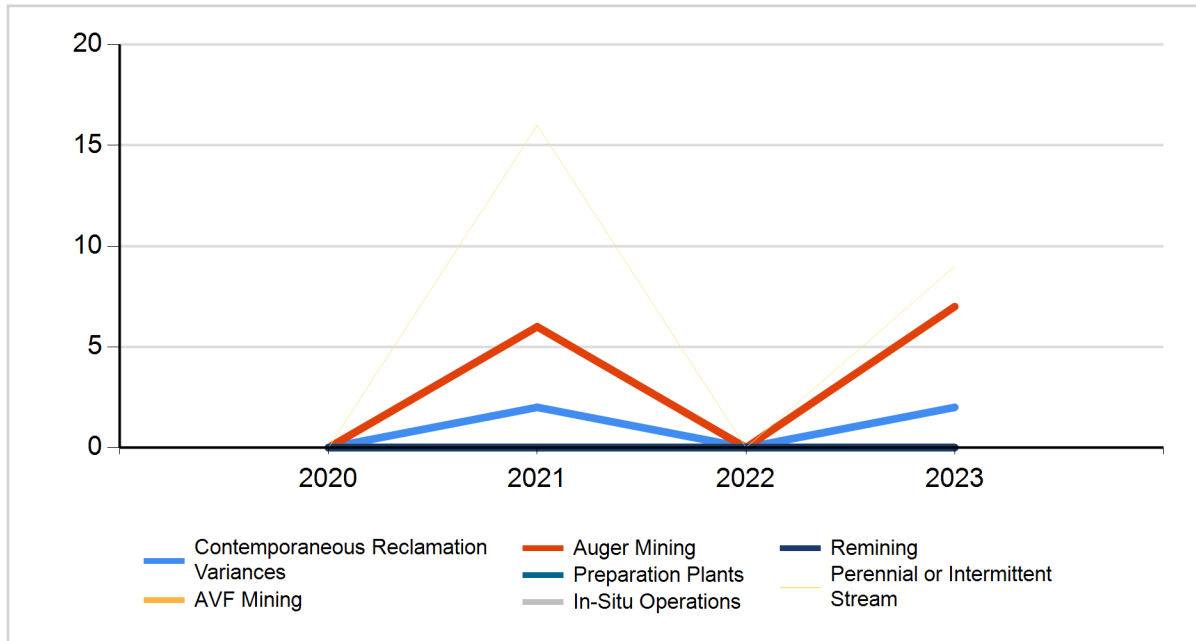


TABLE 3B

NUMBER OF PERMITS ISSUED AND REVISIONS APPROVED							
Year	Contemporaneous Reclamation Variances	AVF Mining	Auger Mining	Preparation Plants Not at Mine Site	In-Situ Operations	Remining	Perennial/ Intermittent Streams
2020	0	0	0	0	0	0	0
2021	2	0	6	0	0	0	16
2022	0	0	0	0	0	0	0
2023	2	0	7	0	0	0	9

PERMITTING ACTIVITY

PERMITTING ACTIVITY												
Type of Application	Surface Mines			Underground Mines			Other Facilities			Totals		
	App. Rec.	Issued/ Appvd	Acres	App. Rec.	Issued/ Appvd	Acres¹	App. Rec.	Issued/ Appvd	Acres	App. Rec.	Issued/ Appvd	Acres
New Permits	10	15	3,950	3	3	69	3	4	548	16	22	4,567
Renewals	58	57		86	89		105	102		249	248	
Transfers, sales, and assignments of permit rights	9	11		4	12		7	10		20	33	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits										52	21	
Exploration notices²											0	
Revisions that do not add acreage to the permit area	184	153		114	97		62	54		360	304	
Revisions that add acreage to the permit area but are not incidental boundary revisions	9	14	1,135	1	1	39	0	1	277	10	16	1,451
Incidental boundary revisions	70	63	(764)	101	87	106	46	51	249	217	201	(409)
Totals	340	313	4,321	309	289	214	223	222	1,074	924	845	5,609
<div> <div>Permits terminated for failure to initiate operations:</div> <div> <div>Number:</div> <div>0</div> <div>Acres:</div> <div>0.0</div> </div> </div> <div> <div>Acres of Phase III bond releases (Areas no longer considered to be disturbed):</div> <div> <div>Acres:</div> <div>2,714.0</div> </div> </div> <div> <div>Permits in temporary cessation</div> <div> <div>Notices received:</div> <div>63</div> <div>Terminations:</div> <div>0</div> </div> </div> <div> <div>Midterm permit reviews completed</div> <div> <div>Number:</div> <div>155</div> </div> </div> <div> <div>¹Includes only the number of acres of proposed surface disturbance</div> <div>²State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.</div> </div>												

**CHART 4A HISTORICAL TRENDS
NEW PERMITS ISSUED**

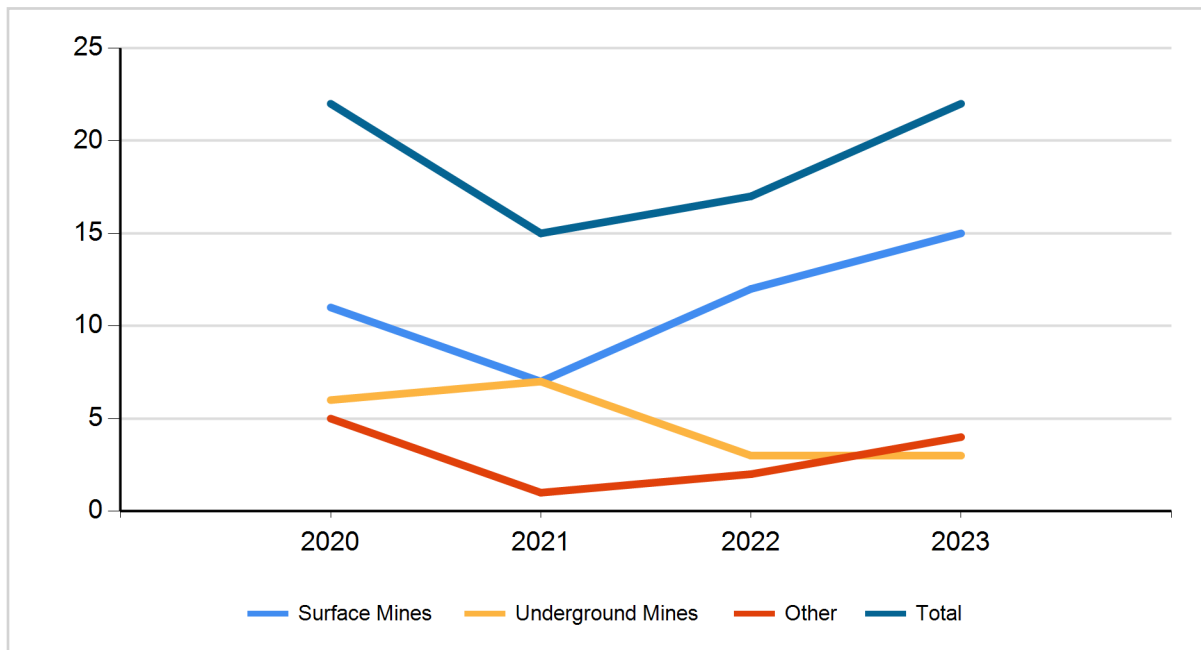


TABLE 4A

NEW PERMITS ISSUED				
Year	Surface Mines	Underground Mines	Other	Total
2020	11	6	5	22
2021	7	7	1	15
2022	12	3	2	17
2023	15	3	4	22

**CHART 4B HISTORICAL TRENDS
NEW ACREAGE PERMITTED**

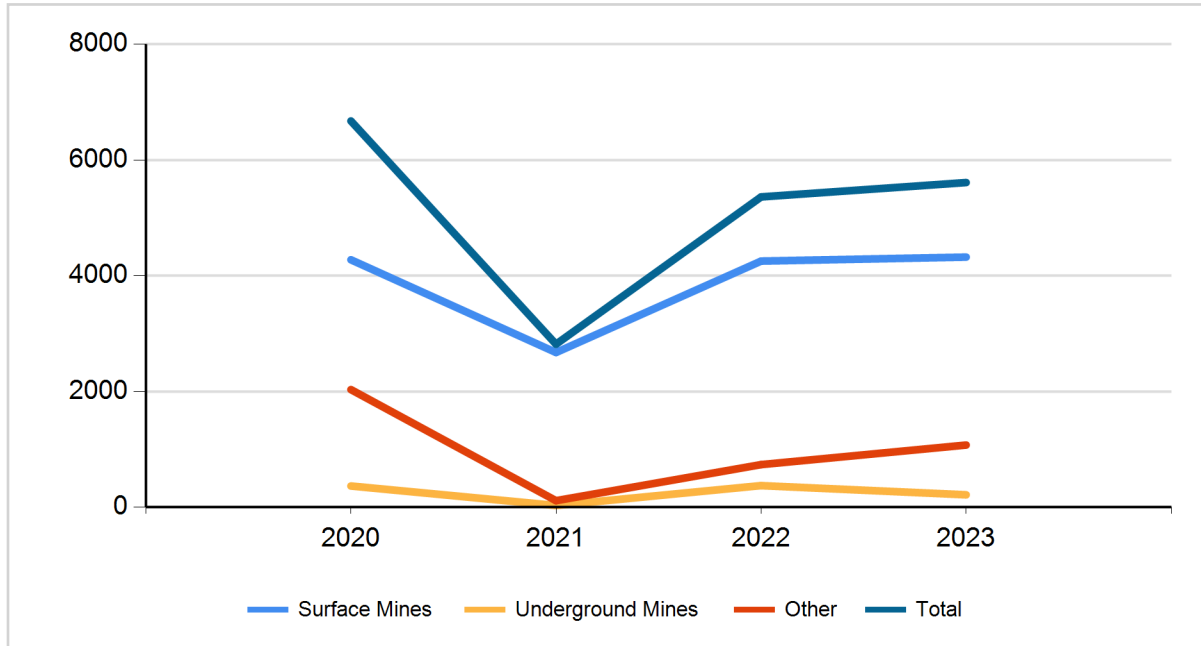


TABLE 4B

NEW ACREAGE PERMITTED				
Year	Surface Mines	Underground Mines	Other	Total
2020	4275.0	366.0	2032.0	6673.0
2021	2673.0	30.0	113.0	2816.0
2022	4252.0	373.0	736.0	5361.0
2023	4321.0	214.0	1074.0	5609.0

TABLE 5

**OFF-SITE IMPACTS
EXCLUDING BOND FORFEITURE SITES**

RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	4	1	0	1	0	1	0	0	0	0	0	1	0
Land Stability	27	0	0	4	2	9	7	3	5	2	0	0	0
Hydrology	40	0	1	4	5	10	5	5	12	9	0	0	0
Encroachment	31	1	5	5	8	11	7	8	1	2	0	0	0
Other	40	1	2	3	5	17	3	1	4	4	0	0	0
Total	142	3	8	17	20	48	22	17	22	17	0	1	0

Total Number of Inspectable Units¹: 1737

Inspectable Units with one or more off-site impacts: 98

Exploration Inspectable Units with one or more off-site impacts²: 0

Inspectable Units free of off-site impacts: 1639 % of Inspectable Units free of off-site impacts⁴: 94

¹ Total number of Inspectable Units is (1) the number of active and inactive inspectable units at the end of the Evaluation Year and (2) the number of Inspectable Units that were final bond released or removed during the Evaluation Year

² Exploration Inspectable Units with one or more off-site impacts is a subset of Inspectable Units with one or more off-site impacts

OFF-SITE IMPACTS AT BOND FORFEITURE SITES

RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	2	0	0	0	1	1	0	0	0	0	0	0	0
Hydrology	12	0	0	0	0	0	0	8	2	2	0	0	0
Encroachment	1	0	0	0	0	1	0	0	0	0	0	0	0
Other	4	0	0	0	1	0	0	3	0	0	0	0	0
Total	19	0	0	0	2	2	0	11	2	2	0	0	0

Total Number of Inspectable Units³: 283

Inspectable Units with one or more off-site impacts: 19

Inspectable Units free of off-site impacts: 264 % of Inspectable Units free of off-site impacts⁴: 93

³ Total number of Inspectable Units is (1) the number of bond forfeiture sites that were reclaimed during the Evaluation Year and (2) the number of bond forfeiture sites that were unreclaimed at the end of the Evaluation Year

TABLE 5
(Continued)

TOTAL OFF-SITE IMPACTS INCLUDING BOND FORFEITURE SITES													
RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	4	1	0	1	0	1	0	0	0	0	0	1	0
Land Stability	29	0	0	4	3	10	7	3	5	2	0	0	0
Hydrology	52	0	1	4	5	10	5	13	14	11	0	0	0
Encroachment	32	1	5	5	8	12	7	8	1	2	0	0	0
Other	44	1	2	3	6	17	3	4	4	4	0	0	0
Total	161	3	8	17	22	50	22	28	24	19	0	1	0
<p>Total Number of Inspectable Units⁵: 2020</p> <p>Inspectable Units with one or more off-site impacts: 117</p> <p>Exploration Inspectable Units with one or more off-site impacts: 0</p> <p>Inspectable Units free of off-site impacts: 1903 % of Inspectable Units free of off-site impacts⁴: 94</p> <p>⁴ % of Inspectable Units free of off-site impacts is based on the number of Inspectable Units during the Evaluation Year. The number of Inspectable Units may vary during the Evaluation Year.</p> <p>⁵ Total number of Inspectable Units is (1) the number of active and inactive Inspectable Units at the end of the Evaluation Year and (2) the number of Inspectable Units that were final bond released or removed during the Evaluation Year and (3) the number bond forfeiture sites that were reclaimed during the Evaluation Year and (4) the number of bond forfeiture sites that were unreclaimed at the end of the Evaluation Year.</p>													

CHART 5A HISTORICAL TRENDS
PERCENT OF INSPECTABLE UNITS FREE OF OFF-SITE
IMPACTS

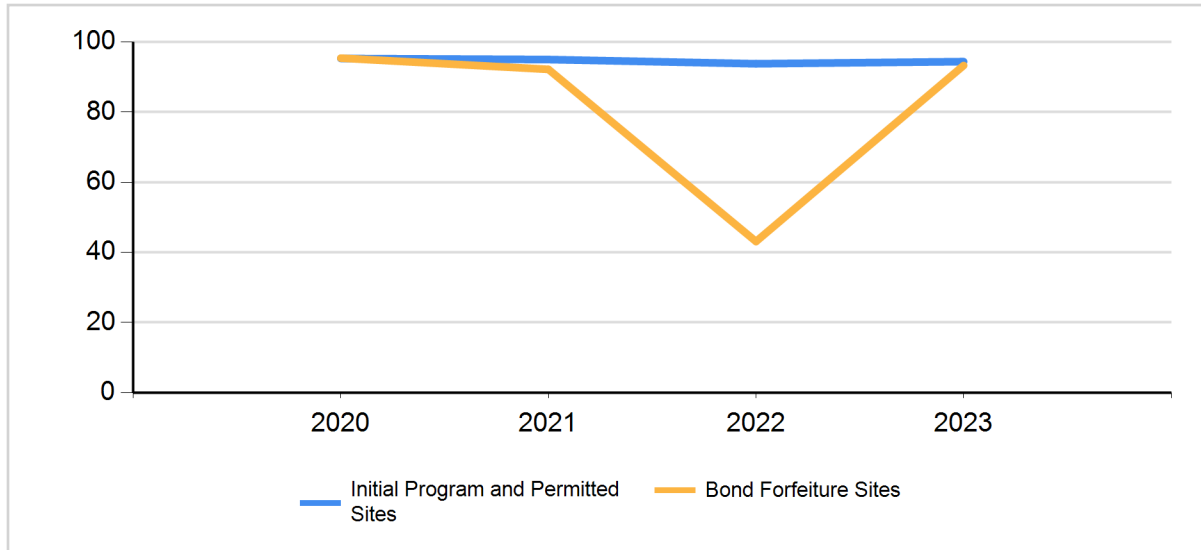


TABLE 5A

PERCENT OF INSPECTABLE UNITS FREE OF OFF-SITE IMPACTS		
Year	Initial Program and Permanent Program Permits	Bond Forfeiture Sites
2020	95.3	95.4
2021	95.0	92.2
2022	93.8	43.1
2023	94.4	93.3

NOTE: The off-site impact numbers for bond forfeiture sites were incorrect in the original Table 5 2022 when it was certified. This error is still reflected in the past historical data.

TABLE 6

SURFACE COAL MINING AND RECLAMATION ACTIVITY							
Areas of Phase I, II, and III Bond Releases During the Evaluation Year (EY)							
Phase I Releases	Phase II Releases		Phase III Releases			Total Acres Released During the EY	
Total Acres Released in Approved Phase I Releases	Total Acres Released in Approved Phase II Releases	Acres not previously released under Phase I	Total Acres Released in Approved Phase III Releases	Acres not previously released under Phase II	Acres not previously released under Phase I or II		
5,417		563			377	Phase I	6,357
	3,146			69		Phase II	3,215
			2,714			Phase III	2,714
Number of Permanent Program Permits with Jurisdiction Terminated Under Phase III Bond Release During the Evaluation Year					25	Other Releases - Acres	
Initial Program Sites with Jurisdiction Terminated During the Evaluation Year					1	Administrative Adjustments	1022
Number of Inspectable Units Removed					26	Bond Forfeiture	212
Areas of Permits Bonded for Disturbance by Surface Coal Mining and Reclamation Operations							

	Total Acres at Start of EY	Total Acres at End of EY	Change in Acres During EY
New Area Bonded for Disturbance			5,610
Total Area Bonded for Disturbance	340,044	341,880	1,836
Area Bonded for Disturbance without Phase I Bond Release	275,299	250,959	(24,340)
Area Bonded for Disturbance for which Phase I Bond Release Has Been Approved	43,411	27,062	(16,349)
Area Bonded for Disturbance for which Phase II Bond Release Has Been Approved	9,034	6,436	(2,598)
Area Bonded for Disturbance with Bonds Forfeited During Evaluation Year			38
Area Bonded for Remining	444	0	(444)
Areas of Permits Disturbed by Surface Coal Mining and Reclamation Operations			
Disturbed Area	135,412	129,325	(6,087)

**CHART 6A HISTORICAL TRENDS
ACRES OF PHASE I, II, AND III BOND RELEASES**

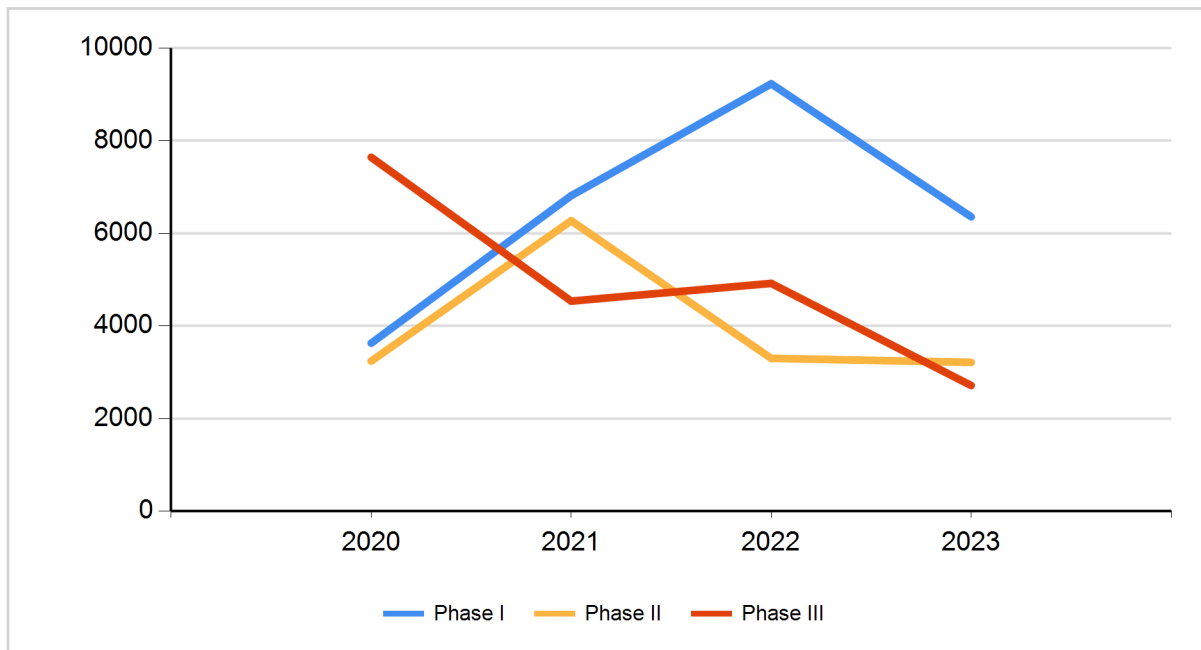


TABLE 6A

ACRES OF PHASE I, II, AND III BOND RELEASES			
Year	Phase III	Phase II	Phase I
2020	7643	3241	3628
2021	4537	6273	6814
2022	4920	3301	9230
2023	2714	3215	6357

**CHART 6B HISTORICAL TRENDS
ACRES BONDED FOR DISTURBANCE AND DISTURBED AREA**

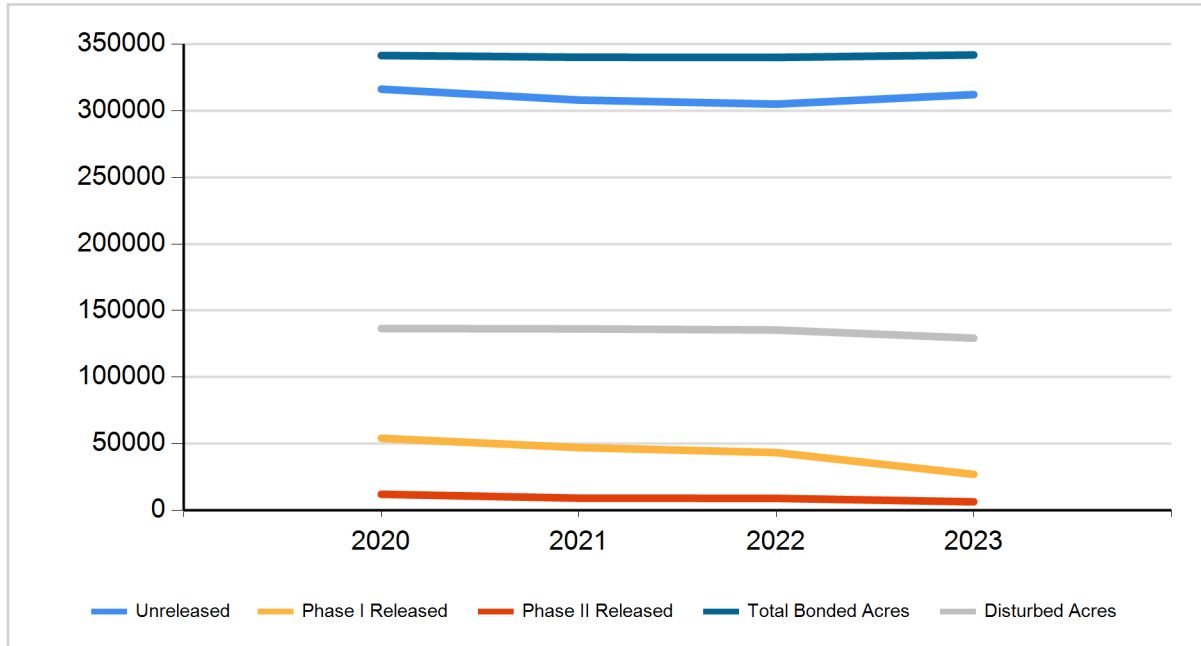


TABLE 6B

AREAS BONDED FOR DISTURBANCE AND DISTURBED AREA					
Year	ACRES BONDED FOR DISTURBANCE				Disturbed Area
	Unreleased	Phase I Released	Phase II Released	Total Bonded Area	
2020	316188.0	54143.0	12106	341466.0	136536.0
2021	308036.0	47160.0	9176	340172.0	136264.0
2022	304969.0	43411.0	9034	340044.0	135412.0
2023	312143.0	27062.0	6436	341880.0	129325.0

TABLE 7

BOND FORFEITURE ACTIVITY (Permanent Program Permits)			
Bond Forfeiture and Reclamation Activity	Number of Sites	Dollars	Acres
Sites with bonds forfeited and collected that were un-reclaimed at the start of the current Evaluation Year (i.e. end of previous Evaluation Year) ¹	280		23,690
Sites with bonds forfeited and collected during the current Evaluation Year	3	10,298	38
Sites with bonds forfeited and collected that were re-permitted during the current Evaluation Year	0		0
Sites with bonds forfeited and collected that were reclaimed during the current Evaluation Year	7		212
Sites with bonds forfeited and collected that were un-reclaimed at the end of the current Evaluation Year ¹	276		23,516
Sites with bonds forfeited but un-collected at the end of the current Evaluation Year	0		0
Forfeiture Sites with Long-Term Water Pollution			
Bonds forfeited, lands reclaimed, but water pollution is still occurring	25		
Bonds forfeited, lands reclaimed, and water treatment is ongoing	147		
Surety/Other Reclamation Activity In Lieu of Forfeiture			
Sites being reclaimed by surety/other party at the start of the current Evaluation Year (i.e., the end of previous Evaluation Year) ²	8		1,597
Sites where surety/other party agreed during the current Evaluation Year to do reclamation	0		0
Sites being reclaimed by surety/other party that were re-permitted during the current Evaluation Year	0		0
Sites with reclamation completed by surety/other party during the current Evaluation Year ³	0		0
Sites being reclaimed by surety/other party at the end of the current Evaluation Year ²	8		1,597
¹ Includes data only for those forfeiture sites not fully reclaimed. ² Includes all sites where surety or other party has agreed to complete reclamation and the site is not fully reclaimed. ³ These sites are also reported in Table 6, Surface Coal Mining and Reclamation Activity, because Phase III bond release would be granted on these sites.			

**CHART 7A HISTORICAL TRENDS
NUMBER OF BOND FORFEITURE SITES**

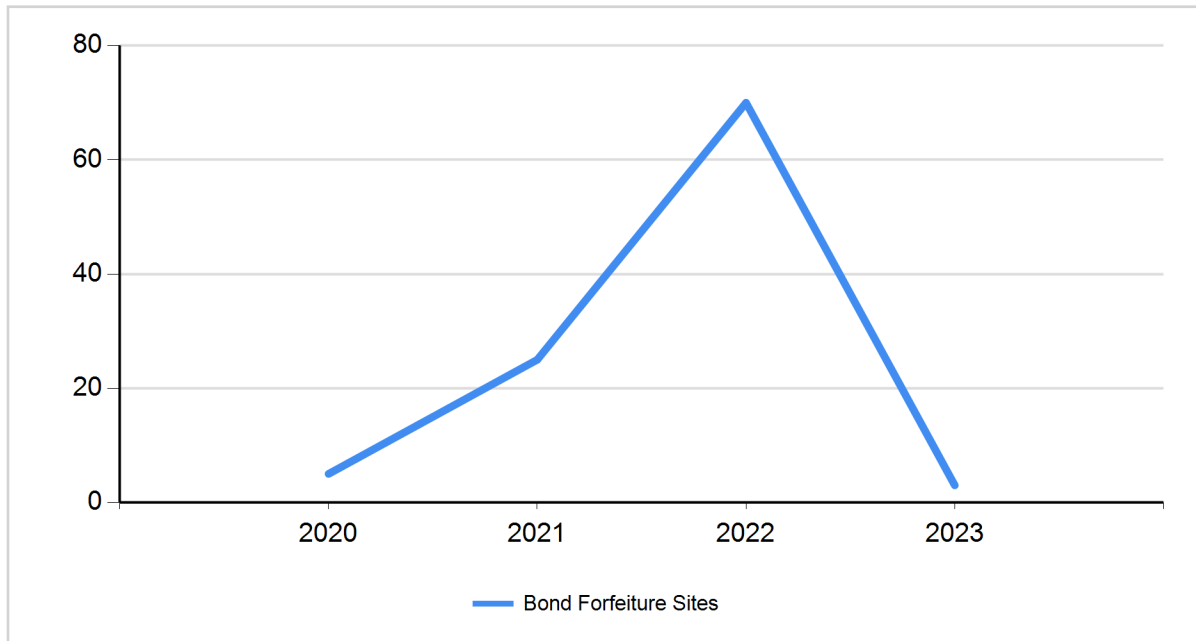


TABLE 7A

NUMBER OF BOND FORFEITURE SITES	
Year	Bond Forfeiture Sites
2020	5
2021	25
2022	70
2023	3

**CHART 7B HISTORICAL TRENDS
ACREAGE OF BOND FORFEITURE SITES**

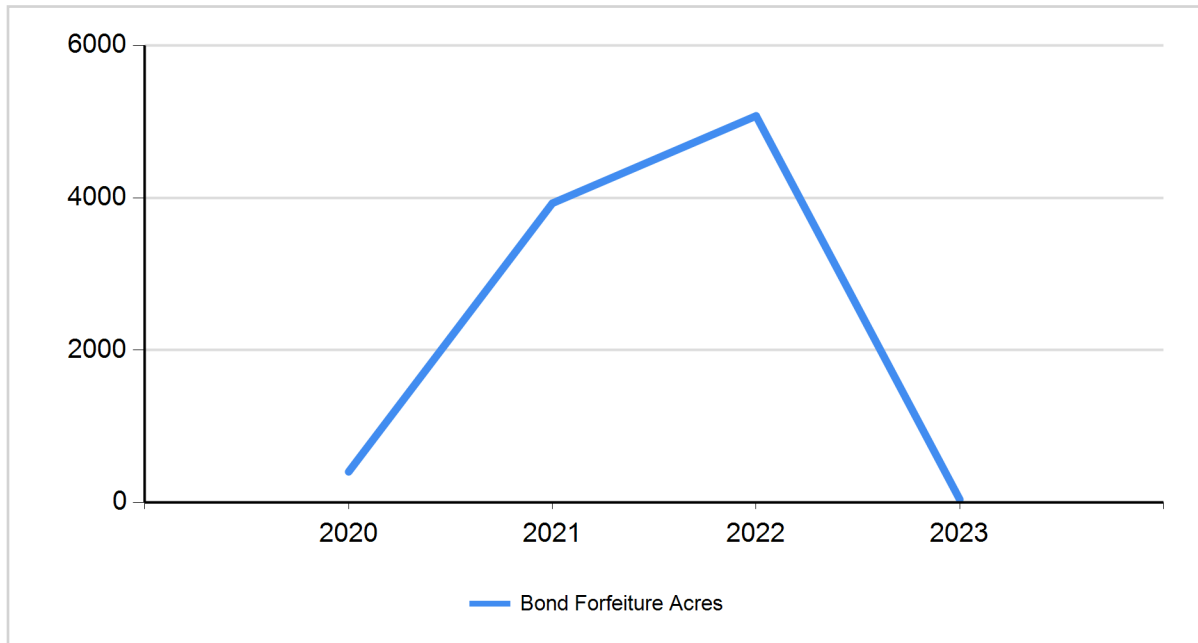


TABLE 7B

ACREAGE OF BOND FORFEITURE SITES	
Year	Acres
2020	403
2021	3930
2022	5077
2023	38

**CHART 7C HISTORICAL TRENDS
NUMBER OF SITES WITH WATER POLLUTION STILL
OCCURRING**

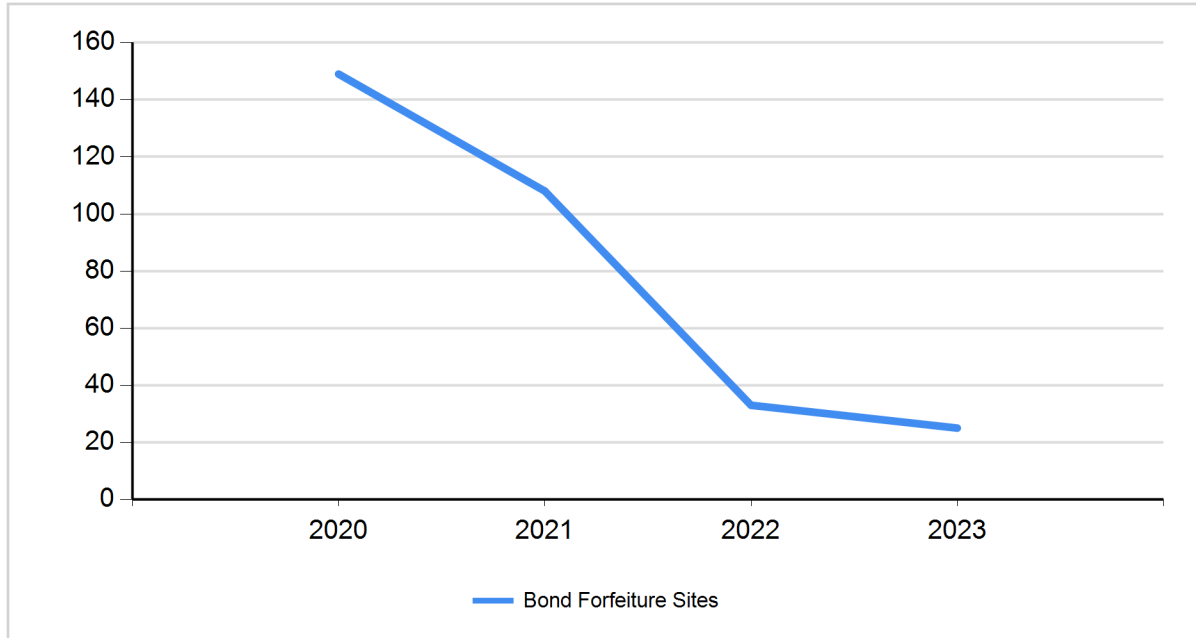


TABLE 7C

NUMBER OF SITES WITH WATER POLLUTION STILL OCCURRING	
Year	Sites
2020	149
2021	108
2022	33
2023	25

CHART 7D HISTORICAL TRENDS
NUMBER OF SITES WITH WATER TREATMENT ONGOING

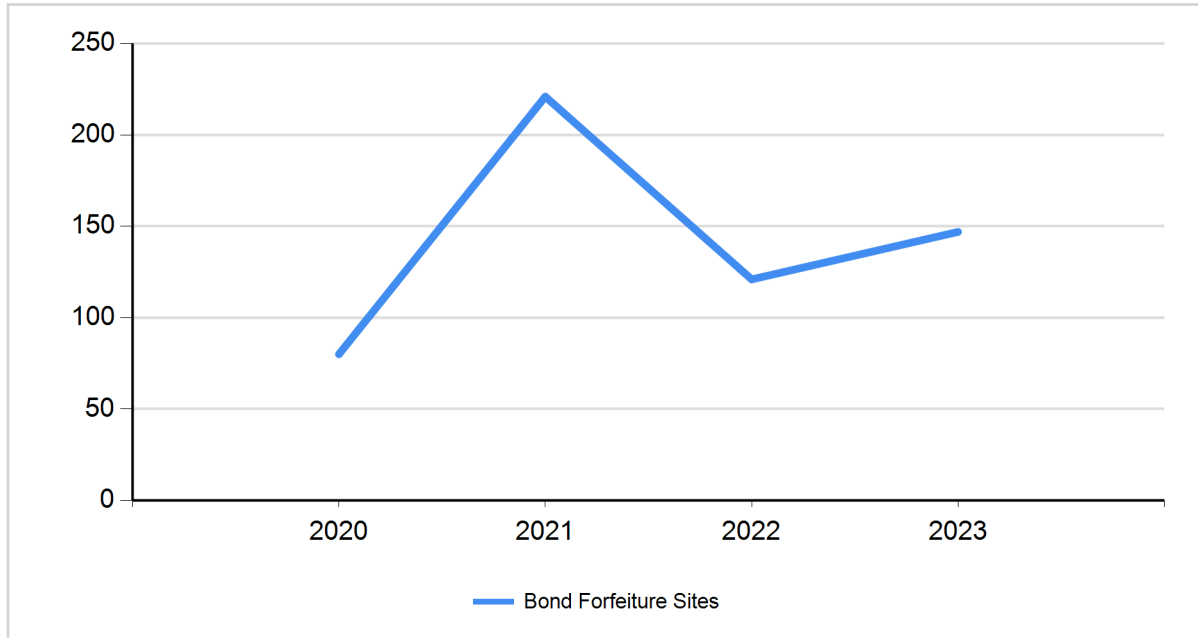


TABLE 7D

NUMBER OF SITES WITH WATER TREATMENT ONGOING	
Year	Sites
2020	80
2021	221
2022	121
2023	147

TABLE 8

REGULATORY AND AML PROGRAMS STAFFING	
Function	Number of FTEs
Regulatory Program	
Permit Review and Maintenance	58.00
Inspection	77.25
Other (supervisory, clerical, administrative, fiscal, personnel, etc.)	51.03
Regulatory Program Total	186.28
AML Program Total	66.00
TOTAL	252.28

**CHART 8A HISTORICAL TRENDS
REGULATORY AND AML PROGRAMS STAFFING**

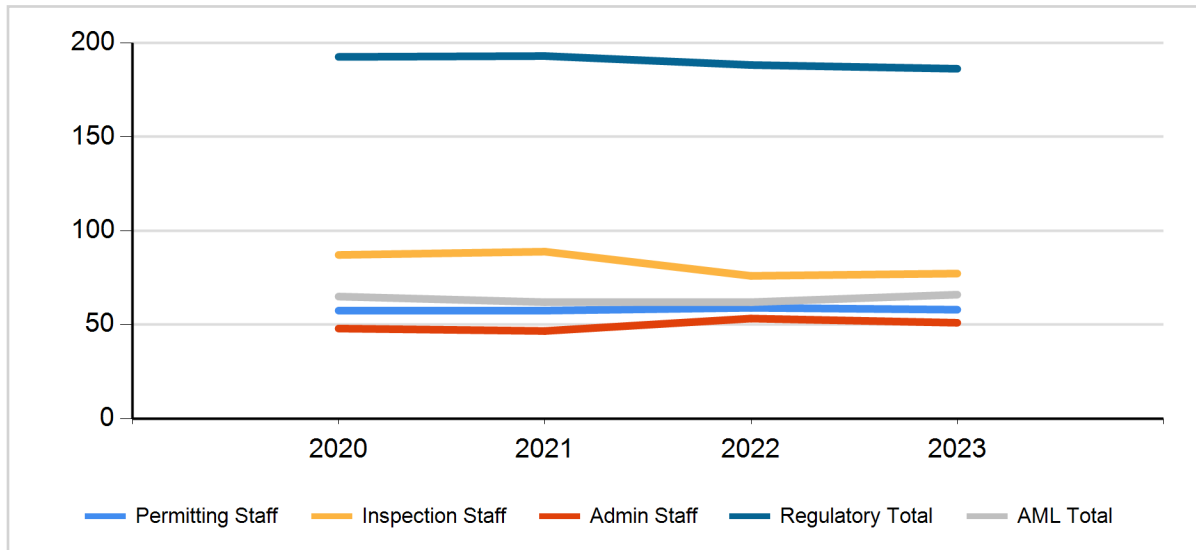


TABLE 8A

REGULATORY AND AML PROGRAMS STAFFING					
	Regulatory Program				
Year	Permitting	Inspection	Admin	Total	AML Program
2020	58	87	48	193	65
2021	58	89	47	193	62
2022	59	76	53	188	62
2023	58	77	51	186	66

TABLE 9

FUNDS GRANTED TO STATE OR TRIBE BY OSM (Actual Dollars Rounded to the Nearest Dollar)			
Type of Funding	Federal Funds Awarded	Total Program Cost	Federal Funds Awarded as a Percentage of Total Program Costs
Regulatory Funding			
Administration and Enforcement Grant	10,199,272		
Other Regulatory Funding, if applicable	0		
Subtotal (Regulatory Funding)	10,199,272	20,398,544	50
Small Operator Assistance Program Grant Funding	0	0	
Abandoned Mine Land Reclamation Funding	167,381,469	167,381,469	100
Watershed Cooperative Agreement Program	0	0	
TOTAL	177,580,741		

**CHART 9A HISTORICAL TRENDS
FUNDS GRANTED TO STATE OR TRIBE BY OSM**

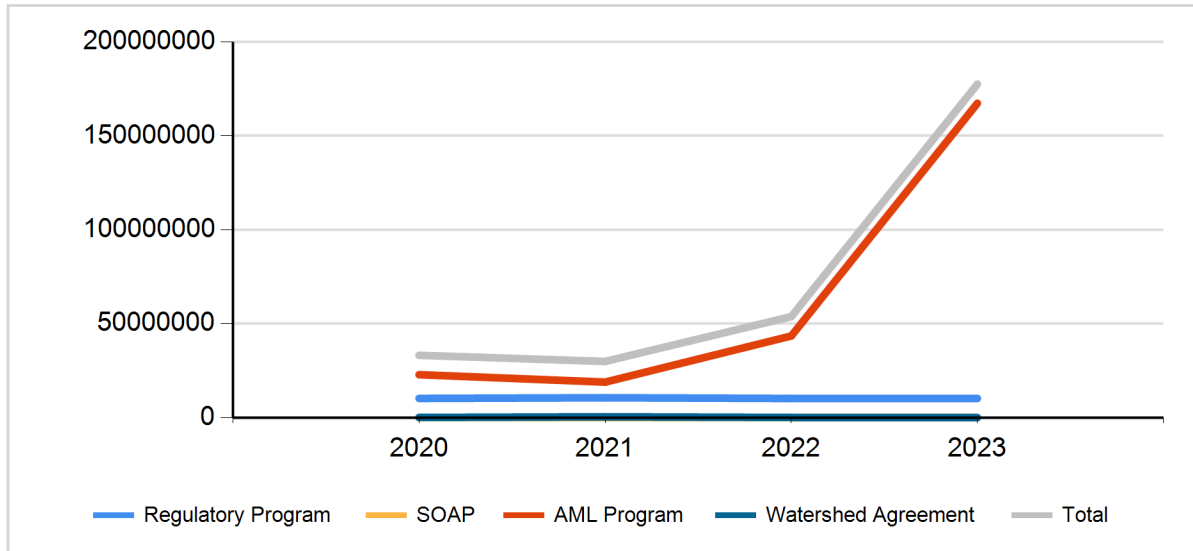


TABLE 9A

FUNDS GRANTED TO STATE OR TRIBE BY OSM				
Year	Regulatory Program	SOAP	AML Program	Total
2020	10,226,486	0	22,865,581	33,185,667
2021	10,587,795	0	18,913,351	29,932,171
2022	10,199,272	0	43,480,441	53,779,713
2023	10,199,272	0	167,381,469	177,580,741

TABLE 10

STATE INSPECTION ACTIVITY
INSPECTABLE UNITS FOR WHICH STATE MET REQUIRED INSPECTION FREQUENCY ON AN
INSPECTABLE UNIT-BY-INSPECTABLE UNIT BASIS ¹

Inspectable Units (IUs)	Total number of inspectable units ²	Number of inspections required annually		Number of inspections conducted		IUs Met Complete Inspection Frequency Requirement		IUs Met Partial Inspection Frequency Requirement		IUs Met Complete and Partial Inspection Frequency Requirements		
		Complete inspections	Partial inspections	Complete inspections	Partial inspections	Number	Percent	Number	Percent	Total number of IUs	Number that met inspection frequency	Percent
COAL MINES AND FACILITIES												
Active	1019	4076	8152	4063	9699	1014	100	1006	99	1019	1006	99
Inactive	595	2380	0	2523	1398	591	99	595	100	595	591	99
Abandoned	238	238	0	389	2458	238	100	238	100	238	238	100
TOTALS ³	1852	6694	8152	6975	13555	1843	100	1839	99	1852	1835	99
Coal Exploration Activities ⁴		Complete Inspections							Partial Inspections			
Exploration sites with permits		0							0			
Exploration sites with notices		0							0			

¹ Calculated on a site-specific basis.

² Total number includes both permanent program permits and initial program sites.

³ OSM is assuming that all states have gone through the process described in 30 CFR 840.11(h) and 842.11(f) to reduce inspection frequency on abandoned/forfeited sites

⁴ Includes all valid notices and permits. No inspection frequency data are provided since SMCRA does not establish a minimum numerical inspection frequency for coal exploration activities.

⁵ NA - Not Available

CHART 10A HISTORICAL TRENDS
STATE OR TRIBAL INSPECTION ACTIVITY

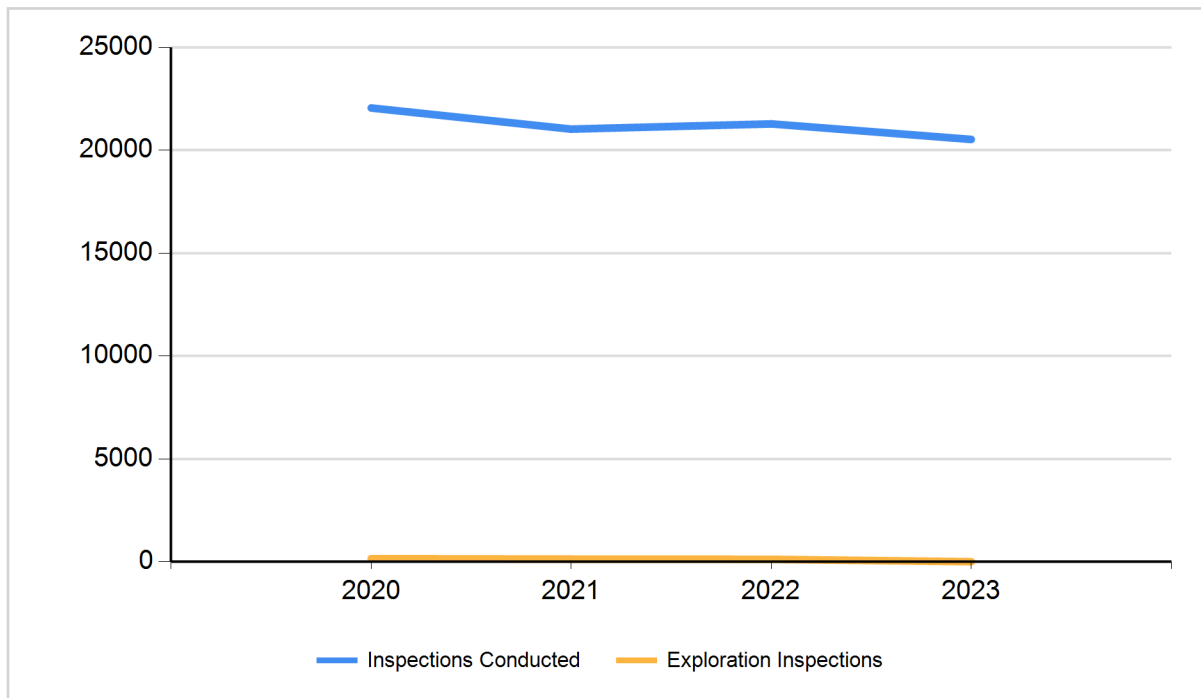


TABLE 10A

STATE OR TRIBAL INSPECTION ACTIVITY		
Year	Inspections Conducted	Exploration Inspections
2020	22058	150
2021	21030	125
2022	21284	117
2023	20530	0

TABLE 11

STATE OR TRIBAL ENFORCEMENT ACTIVITY		
Type of Enforcement Action	Number of Actions ¹	Number of Violations ¹
Notice of Violation	699	699
Failure-to-Abate Cessation Order	69	69
Imminent Harm Cessation Order	18	18
¹ Does not include actions and violations that were vacated.		

**CHART 11A HISTORICAL TRENDS
STATE OR TRIBAL ENFORCEMENT ACTIVITY**

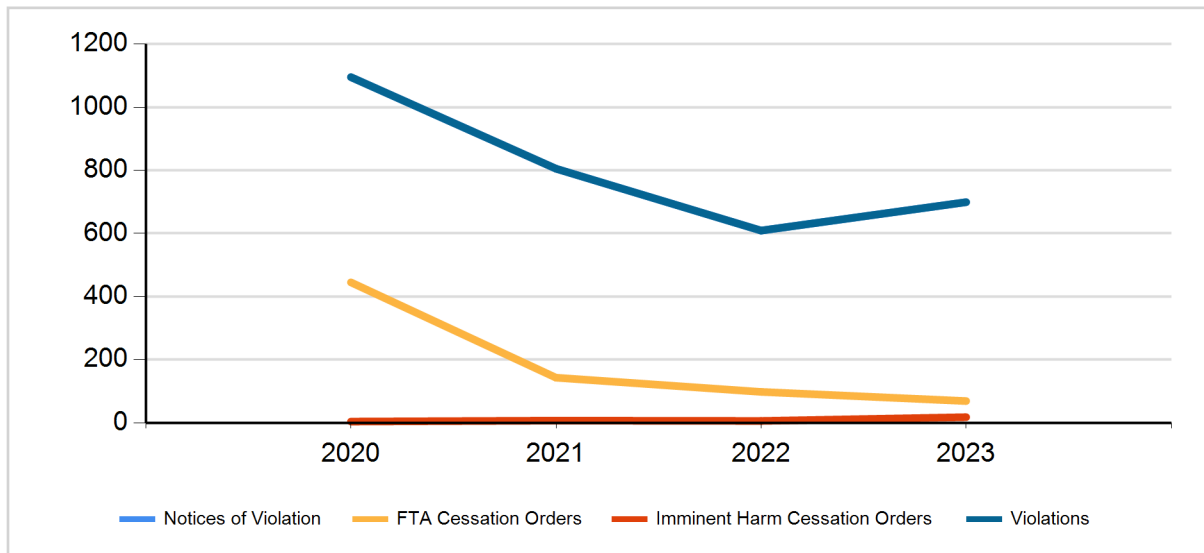


TABLE 11A

STATE OR TRIBAL ENFORCEMENT ACTIVITY				
Year	Notices of Violation	Violations	FTA Cessation Orders	Imminent Harm Cessation Orders
2020	1095	1095	445	4
2021	805	805	143	7
2022	609	609	98	6
2023	699	699	69	18

TABLE 12

LANDS UNSUITABLE ACTIVITY		
Activity	Number	Acres
Petitions Received	0	
Petitions Rejected	0	
Petitions Accepted	0	
Decisions Denying Petition	0	
Decisions Declaring Lands Unsuitable	0	0
Decisions Terminating Unsuitable Designations	0	0

**CHART 12A HISTORICAL TRENDS
LANDS UNSUITABLE ACTIVITY**

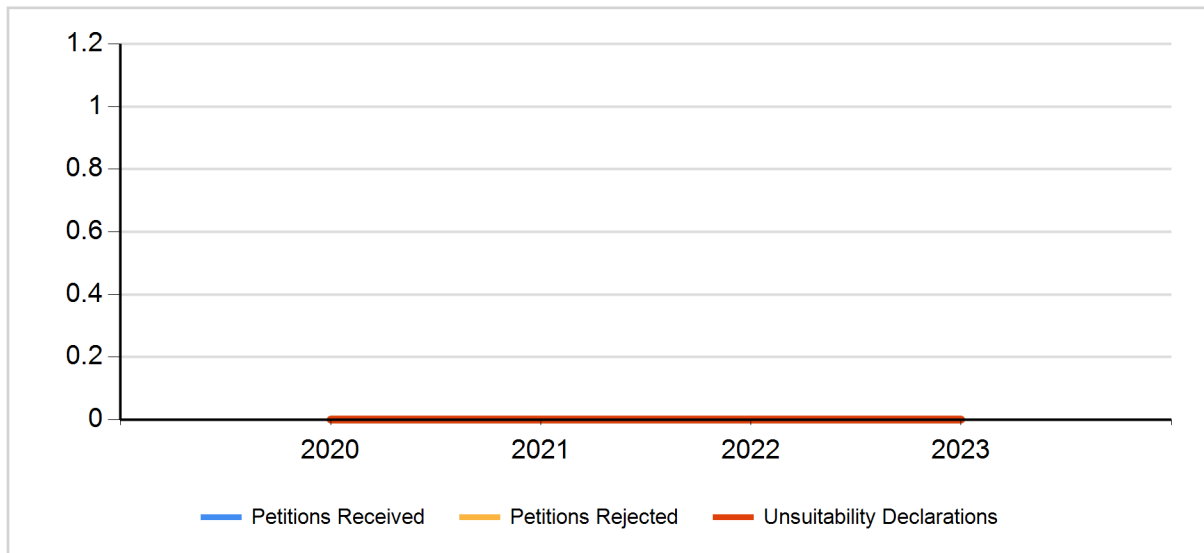


TABLE 12A

LANDS UNSUITABLE ACTIVITY			
Year	Petitions Received	Petitions Rejected	Unsuitability Declarations
2020	0	0	0
2021	0	0	0
2022	0	0	0
2023	0	0	0

CHART 12B HISTORICAL TRENDS
ACRES DECLARED UNSUITABLE

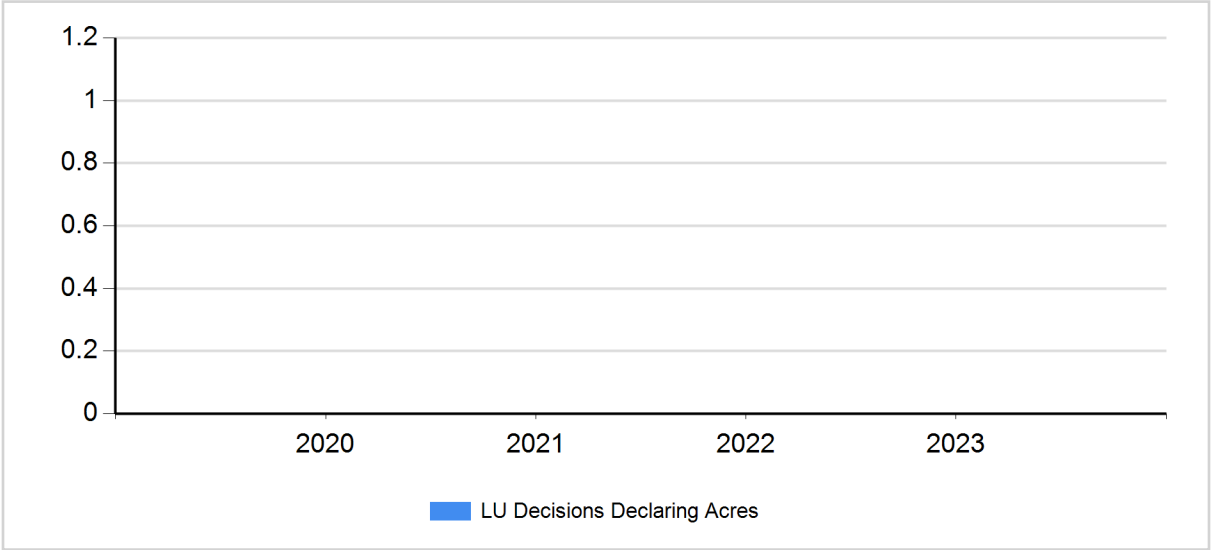


TABLE 12B

ACRES DECLARED UNSUITABLE	
Year	Acres Declared Unsuitable
2020	0.0
2021	0.0
2022	0.0
2023	0.0

TABLE 13

OSM OVERSIGHT ACTIVITY					
Oversight Inspections and Site Visits					
	Complete		Partial		
	Joint	Non-Joint	Joint	Non-Joint	Total
Oversight Inspections	52	5	136	45	238
	Technical Assistance		Other		Total
Site Visits	0		36		36
Violations Observed by OSM and Citizen Requests for Inspection¹					
Type of Action					Total number of each action
How many violations were observed by OSM on oversight inspections?					204
Of the violations observed, how many did OSM defer to State action during inspections?					145
Of the violations observed, how many did OSM refer to the State through Ten-Day Notices? ²					0
How many Ten-Day Notices did OSM Issue for observed violations? ³					0
How many Ten-Day Notices did OSM issue to refer citizen requests for inspection?					0
How many Notices of Violation did OSM issue?					0
How many Failure-to-Abate Cessation Orders did OSM issue?					0
How many Imminent Harm Cessation Orders did OSM issue?					0
OSM Action for Delinquent Reporting or Non-Payment of Federal AML Reclamation Fees					
How many Ten-Day Notices for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?					0
How many Notices of Violation for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?					7
How many Federal Failure-to-Abate Cessation Orders for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?					0
¹ This section does not include actions for delinquent reporting or non-payment of Federal AML fees that are reported in the last section of the table. ² Number of violations contained in Ten-Day Notices not including those issued to refer citizen requests for inspection. ³ Number of Ten-Day Notices issued not including those to refer citizen requests for inspection.					

**CHART 13A HISTORICAL TRENDS
OSM OVERSIGHT ACTIVITY**

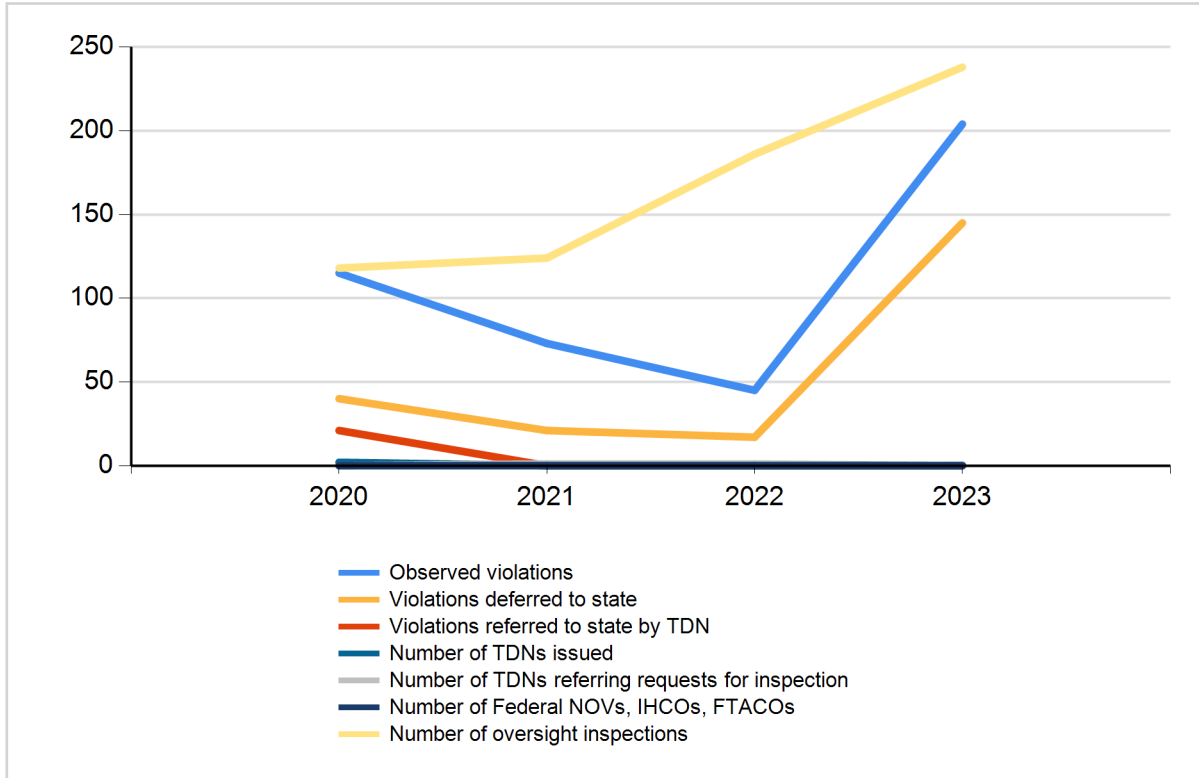


TABLE 13A

OSM OVERSIGHT ACTIVITY							
Year	Number of violations observed on OSM oversight inspections	Number of violations deferred to state action	Number of violations referred to state by TDN	Number of TDN's issued	Number of TDN's issued to refer requests for inspection	Number of Federal NOV, IHCOs, FTACOs, & issued	Number of oversight inspections
2020	115	40	21	2	0	0	118
2021	73	21	0	0	1	0	124
2022	45	17	0	0	1	0	186
2023	204	145	0	0	0	0	238

TABLE 14

STATUS OF ACTION PLANS						
Action Plan ID	Problem Type ¹	Problem Title	Problem Description	Date Action Plan Initiated	Scheduled Completion Date	Actual Completion Date
None						

¹ Problem Type: "PA" indicates a required Program change under subchapter T or 732
"RP" indicates a Regulatory Program implementation or administrative problem

TABLE 15
(Optional)

POST-MINING LAND USE ACREAGE OF SITES FULLY RECLAIMED (Phase III bond release or termination of jurisdiction under the Initial Program)	
Land Use¹	Acres Released
Cropland	0.00
Pasture/Hayland	248.69
Grazingland	37.00
Forestry	549.89
Residential	11.70
Industrial/Commercial	115.35
Recreation	0.00
Fish & Wildlife Habitat	1,491.54
Developed Water Resources	0.00
Undeveloped land or no current use or land management	0.00
Other - Public Utilities	259.32
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Other -	0.00
Sub-Total Other	259.32
Total	2,713.49
¹ Land uses as defined in 30 CFR 701.5 or "Other" as defined under the state or tribal program	

**CHART 15A HISTORICAL TRENDS
POST MINING LAND USE ACREAGES**

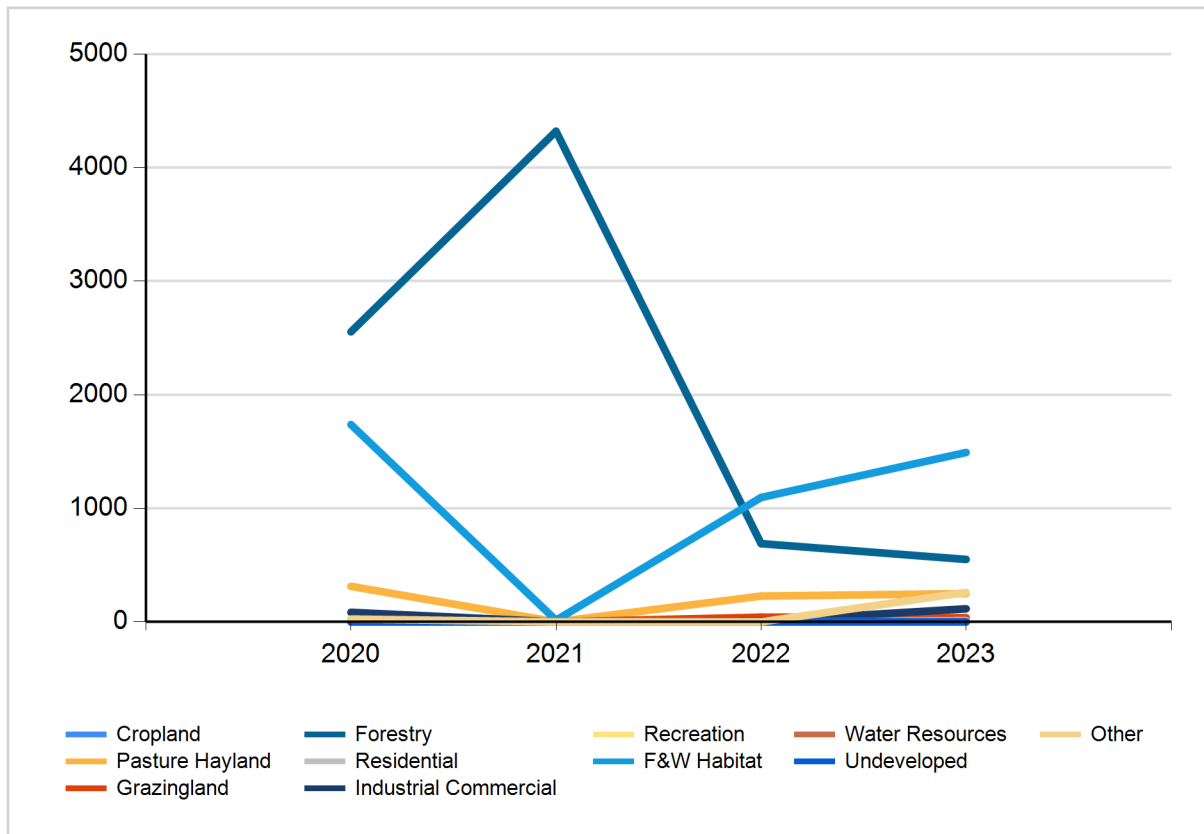


TABLE 15A

POST MINING LAND USE ACREAGES											
Year	Cropland	Pasture Hay	Grazing Land	Forest	Residential	Industrial Comm.	Recreation	F&W Hab.	Water Resources	Undeveloped	Other
2020	0	313	0	2553	3	84	0	1737	0	0	25
2021	0	0	0	4320	0	0	0	15	0	0	0
2022	0	227	41	689	0	7	0	1095	0	0	0
2023	0	249	37	550	12	115	0	1492	0	0	259

Appendix 2 Summary of Core Data to Characterize the AML Program

The following tables present summary data pertinent to mining operations and regulatory activities under the West Virginia regulatory program. Unless otherwise specified, the reporting period for the data contained in the tables is the Evaluation Year. Other data and information used by OSMRE in its evaluation of West Virginia’s performance is available for review in the evaluation file maintained by OSMRE office in Charleston, WV.

Because of the enormous variations from state-to-state and tribe to tribe in the number, size and type of coal mining operations and the differences between State and Tribal Programs, the summary data should not be used to compare one State or Tribe to another.

Table 1	West Virginia Status of AML Inventory
Table 2	West Virginia Accomplishments in Eliminating Health and Safety Hazards Related to Past Mining
Table 3	West Virginia Accomplishments in Eliminating Environmental Problems Related to Past Mining
Table 4	West Virginia Accomplishments in Public Well-Being Enhancement
Table 5	West Virginia Partnership Financial Resources Dedicated to Protecting the Public from Adverse Effects of Past Mining
Table 6	West Virginia Reclamation Projects
Table 7	West Virginia AML Program Grant Awards Staffing

Table 1 – (State/Tribe) Status of AML Inventory all Priority 1, 2, and 3 Hazards on June 30, 2023

	High Priority		Elevated Priority 3	Stand-Alone Priority 3 (Not adjacent or in conjunction w/ P1&2)	Total
	Priority 1	Priority 2			
UNFUNDED					
GPRA Acres	2,477.78	63,488.29	N/A	255,507.17	321,473.24
Dollars	184,129,291.05	1,314,033,763.53	N/A	549,441,830.85	2,047,604,885.43
FUNDED					
GPRA Acres	181.4	8,118.07	1.40	115.50	8,416.37
Dollars	3,769,450.00	41,732,886.20	76,587.50	2,795,315.80	48,374,239.50
COMPLETED					
GPRA Acres	32,022.89	124,049.91	877.00	212,674.09	369,623.89
Dollars	213,294,449.44	527,310,277.14	4,738,268.68	26,261,863.43	771,604,858.69

Table 2 - (State/Tribe) Accomplishments in Eliminating Health and Safety Hazards Related to Past Mining Priority 1 and 2 Hazards (As of July 1, 2023)

	Clogged Stream (CS) (miles)	Clogged Stream Lands (CSL) (acres)	Dangerous Pile or Embankment (DPE)(acres)	Dangerous Highwall (DH) (feet)	Dangerous Impoundment (DI) (count)	Dangerous Slide (DS) (acres)	Gases: Hazardous /Explosive (GHE) (count)	Hazardous Equip. /Facilities (HEF) (count)	Hazardous Water Body (HWB) (count)
UNRECLAIMED/REMAINING HAZARDS (Unfunded)									
Units	42.95	94.87	2,389.62	3,170,246.90	1,268.00	394.43	3.00	737.00	30.13
GPRA Acres	198.60	136.80	2,388.52	45,289.68	6,340.00	382.98	3.00	78.00	150.70
Dollars	21,045,619.20	2,951,549.00	56,739,067.00	793,737,468.48	32,406,466.47	33,735,916.00	265,835.00	8,156,161.00	1,139,304.00
ANNUAL RECLAMATION - EY2023 only (Completed)									
Units	0.17	0.00	62.47	1,200.00	25.00	11.80	0.00	33.00	1.00
GPRA Acres	0.80	0.00	62.47	17.10	130.00	11.30	0.00	3.30	5.00
Dollars	150,000.00	0.00	1,647,689.00	1,898,117.00	453,223.00	1,572,968.50	0.00	1,431,908.00	129,400.00
HISTORICAL RECLAMATION - EY1978 - 2023 (Completed)									
Units	72.01	181.95	5,669.11	397,870.90	2,083.50	758.29	10.80	756.80	35.30
GPRA Acres	342.97	224.40	5,669.41	5,684.17	10,417.50	757.09	10.80	75.78	175.00
Dollars	20,030,882.79	6,556,129.43	155,602,536.12	62,243,077.47	57,293,790.30	77,013,555.83	338,731.36	10,187,280.43	1,107,309.25

Table 2 Continued On Next Page

Table 2 - (State/Tribe) Accomplishments in Eliminating Health and Safety Hazards Related to Past Mining Priority 1 and 2 Hazards (As of Ju

	Industrial/Residential Waste (IRW) (acres)	Portal (P) (count)	Polluted Water:Agri/Industrial (PWAI)(count)	Polluted Water: Human Consumption (PWHC)(count)	Subsidence (S) (acres)	Surface Burning (SB) (acres)	Underground Mine Fire (UMF) (acres)	Vertical Opening (VO) (count)	TOTAL
UNRECLAIMED/REMAINING HAZARDS									
(Unfunded)									
Units	8.00	2,126.10	144.80	929.00	784.60	93.81	4,726.70	142.00	N/A
GPRA Acres	8.00	217.50	724.00	4,645.00	782.90	93.80	4,726.70	14.20	66,180.38
Dollars	59.36	27,492,494.76	55,902,419.00	63,891,734.67	128,252,937.00	6,061,156.00	263,380,698.00	4,779,976.00	1,499,938,860.94
ANNUAL RECLAMATION - EY2023 only									
(Completed)									
Units	0.00	146.00	5.00	1,604.00	0.10	6.50	2.00	3.00	N/A
GPRA Acres	0.00	14.60	25.00	80.22	1.10	6.50	2.00	0.30	359.69
Dollars	0.00	935,369.20	429,848.00	35,047,664.50	5,000.00	389,793.00	1,366,995.00	44,360.00	45,502,335.20
HISTORICAL RECLAMATION - EY1978 - 2023									
(Completed)									
Units	50.60	3,721.00	87.40	26,119.00	638.93	566.20	48.25	231.30	N/A
GPRA Acres	50.30	372.10	433.50	130,595.00	628.61	564.80	48.25	23.13	156,072.81
Dollars	831,981.00	40,809,322.25	14,478,202.59	180,704,423.47	66,308,045.66	30,217,488.16	9,208,888.16	7,673,082.31	740,604,726.58

Table 3 - (State/Tribe) Accomplishments in Eliminating Environmental Problems Related to Past Mining Priority 3 and SMCRA section 403(b) Hazards (As of July 1, 2023)

PROBLEM TYPE (keyword)								
	Bench , Solid Bench, Fill Bench (BE) (acres)	Industrial/Residential Waste Dump (DP) (acres)	Equipment and Facilities (EF) (count)	Gob (GO) (acres)	Highwall (H) (feet)	Haul Road (HR) (acres)	Mine Opening (MO) (count)	Pit, Open Pit, Strip Pit (PI) (acres)
UNRECLAIMED/REMAINING HAZARDS (Unfunded)								
Units	199.80	18.40	94.00	1,131.02	3,171,348.00	14.25	132.00	46.55
GPRA Acres	199.80	18.40	9.40	1,129.82	45,315.05	13.75	13.20	46.55
Dollars	781,401.00	131,837.00	598,536.00	11,703,427.50	529,899,329.84	416,501.00	1,643,590.00	316,868.00
ANNUAL RECLAMATION - EY2023 only (Completed)								
Units	0	1	0	0	0	0	0.00	0
GPRA Acres	0	1	0	0	0	0	0.00	0
Dollars	0	26,257	0	0	0	0	0.00	0
HISTORICAL RECLAMATION - EY1978 - 2023 (Completed)								
Units	44.00	30.15	20.00	195.96	49,363.00	11.00	25.00	14.00
GPRA Acres	43.50	30.15	2.00	194.46	705.19	11.00	2.50	14.00
Dollars	180,866.00	269,042.69	115,416.00	2,522,058.00	6,515,147.91	107,234.00	187,701.16	60,000.00
Table 3 Continued On Next Page								

Table 3 - (State/Tribe) Accomplishments in Eliminating Environmental Problems Related to Past Mining Priority 3 and SMCRA section 403(b) Hazards (As of July 1, 2023)

PROBLEM TYPE (keyword)						
Spoil, Spoil Bank (SA) (acres)	Slurry (SL) (acres)	Slump (SP) (acres)	Water (WA) (gallons)	Other (specify)	Water Supplies (WS) – Section 403(b) (count)	TOTAL
UNRECLAIMED/REMAINING HAZARDS (Unfunded)						
607.50	10.00	28.97	231,650.50	153.00		N/A
607.00	10.00	28.87	233,188.90	0.00		280,580.74
3,919,233.85	12,001.00	2,683,605.00	53,330,030.00	750,749.00		606,187,109.19
ANNUAL RECLAMATION - EY2023 only (Completed)						
0.00	0.00	0.00	201,589.00	0.00		N/A
0.00	0.00	0.00	201,589.00	0.00		201,590.00
0.00	0.00	0.00	543,669.09	0.00		569,926.09
HISTORICAL RECLAMATION - EY1978 - 2023 (Completed)						
1,053.10	2.00	24.71	212,070.58	0.00		N/A
1,053.10	2.00	24.71	211,468.58	0.00		213,551.19
6,863,635.00	40,000.00	845,906.45	13,318,124.90	0.00		31,025,132.11

**Table 4 – (State/Tribe) Public
Well-Being Enhancement
(All Priority 1, 2, and 3 AML
projects completed during EY
2023)**

#	PAD Number	Project Name	Problem Type(s) Reclaimed	GPRA Acres	Cost	Number of People with Reduced Exposure Potential (State Estimated /or/ Census Data)
1	WV006032	Adamsville (Nay) Subsidence	S	0.10	\$36,539.50	396
2	WV007143	Bennetts Run (Robey) Subsidence	S	0.10	\$49,288.80	174
3	WV007117	Bowlby (Layman) Borehole	VO	0.10	\$39,330.00	389
4	WV002127	Chaffey Run Strip	CS	0.50	\$125,000.00	46
	WV002127	Chaffey Run Strip	S	5.00	\$888,082.00	
5	WV006742	Delmar (Brown) Portal	P	0.10	\$51,491.40	397
6	WV007183	Devil Anse Trail Portals	P	0.20	\$41,950.00	327
7	WV007166	Four States Road (Vandevender) Subsidence	S	0.10	\$72,493.80	912
8	WV007158	Francis (Lane) Subsidence	S	0.10	\$32,403.50	469
9	WV007150	Gary (Thomas) Subsidence	VO	0.10	\$158,671.00	316
10	WV007157	Gore (Caloccia) Vertical Opening	VO	0.10	\$11,660.00	519
11	WV007177	Gregorys Run (Bates) Subsidence	S	0.10	\$15,038.80	519
12	WV000250	Hurricane Branch Portals	P	1.80	\$184,568.00	293
13	WV007184	Jones Run (Robey) Subsidence	S	0.10	\$36,295.20	519
14	WV007133	Lamberts Run (Muzzleloader Club) Subsidence	S	0.10	\$60,373.10	519
15	WV006883	Maidsville (Lee) Mine Drainage	DI	20.00	\$301,920.00	389
	WV006883	Maidsville (Lee) Mine Drainage	DP	1.00	\$26,257.00	
	WV006883	Maidsville (Lee) Mine Drainage	HWB	5.00	\$86,823.00	
16	WV007152	Monongah (Abbott) Subsidence	S	0.10	\$12,190.00	1,004
17	WV001903	Montecarlo Complex	DI	15.00	\$47,769.79	175
	WV001903	Montecarlo Complex	P	0.40	\$47,769.79	
18	WV005670	Oak Hill (Rainey) Subsidence IV	VO	0.10	\$44,148.30	12,479
19	WV007182	Old School Road Subsidence	S	0.10	\$324,235.46	10
20	WV007137	Pierce Run (Kearns) Portal	P	0.10	\$30,675.00	563
21	WV007169	Ragland (Curry) Vertical Opening	VO	0.10	\$18,700.00	334
22	WV007151	Reedsville (WVDOH) Subsidence	S	0.10	\$59,579.98	340
23	WV006502	Shady Lane (Watkins) Subsidence Phase II	S	0.10	\$24,487.00	217
24	WV007140	Shumaker Road (Moore) Subsidence	S	0.10	\$61,303.04	240
25	WV007122	Trail 29 Mine Openings	P	2.90	\$121,340.00	327
26	WV006075	Wades Run Dangerous Embankment - Portals	P	0.20	\$23,901.00	389
27	WV006995	Whetsell (Trowbridge Road) Dangerous Slide	DS	0.25	\$433,279.05	100
TOTAL				54.15	\$3,467,563.51	22,362

Table 5 – (State/Tribe) - Partnership Financial Resources Dedicated to Protecting the Public from Adverse Effects of Past Mining (AML projects completed during EY 2023)

#	PAD Number	Project Name	SMCRA Program Funding Source	Total SMCRA funding	Alternate Non-SMCRA Funding Source	Total non-SMCRA Funding	In-Kind Services	Total Project Funding	Comments
1	WV00135	Morgantown Airport Drainage	n/a	\$0.00	WV Division of Highways	\$0.00	\$0.00	\$0.00	Two P-3 mine openings (MO) were dry sealed by the WVDOH as part of a highway project in Morgantown, WV
2									
3									
4									
5									
6									
7									
TOTAL				\$0.00		\$0.00	\$0.00	\$0.00	

Table 6 – (State/Tribe) – Reclamation Projects Started and/or Completed (AML projects started and/or Completed during EY 2023)

Project Type	Project s Started	Projects Comple ted
State/Tribe (EY 2023):	39 Construction contracts issued by OAMLRL	27 (as reported in eAMLIS)
Federal (EY 2023):		
Total (EY 2023):	39	27

**Table 7 – (State/Tribe) – AML Program Grant Awards and Staffing
(State/Tribe)
AML Program Grant Awards and Staffing
(During EY 2023)**

AML Program Costs	
Administration: FY 22 AMLER: \$0.00 FY 22 BIL: \$3,356,633	\$3,356,633.00
Construction: FY 22 AMLER: \$26,630,000 FY 22 BIL: \$122,394,836	\$149,024,836.00
Water Supply Construction: FY 22 AMLER: \$0.00 FY 22 BIL: \$4,000,000	\$4,000,000.00
AMD Set-Aside: FY 22 AMLER: \$0.00 FY 22 BIL: \$0.00	\$0.00
Other(s) (Specify): FY BIL Engineering and design: \$11,000,000	\$11,000,000
Total AML Funding:	\$167,381,469
AML Program Staffing (full-time equivalents on June 30, 2023):	46.18 FTE's approved, 5 vacant

Appendix 3 State Comments and Response to EY 2023 West Virginia Annual Report

State Comments / OSMRE Responses

OSMRE: (pg 4) : Please provide an updated number; this is a placeholder from last year.

WVDEP: 265 within 48 hours

WVDEP: (pg 4) 266 Renewals issued per our table 4 numbers. Your table 4 has a different value.

OSMRE: Total activity of 266 was incorrect. The correct total addition is 248 issued approved.

WVDEP: (pg 11) 2022?

OSMRE: Corrected with 2022 appropriate date.

WVDEP: (pg 13) Is this outside the evaluation year (July 2023?)

OSMRE: This is correct, updated.

OSMRE: (pg14) Please provide updated numbers for this section.

WVDEP: 272 complaints rec'd during EY. 265 were responded to within 2 working days. Resolved 244 complaints during EY, with 28 pending additional information.

OSMRE: (pg 14) Please provide updated accomplishments for this EY; this is from last year's report.

WVDEP:

1. Conducted three (3) sessions of virtual industry training. Topics included: Electronic Submission System (ESS) Process, Surface Water Runoff Analysis (SWROA) Monitoring Requirements, Updates concerning Endangered Species Act, Overview of Probable Hydrologic Consequences (PHC), Cumulative Hydrologic Impact Assessment (CHIA), and Post Underground Mining assessment (PUMA) process, and Administrative Penalty Orders and Single Event Violations (SEVs), Structure Removal, BAS/Fish Tissue Monitoring, and Post Mining Limits.
2. Issued a compliance bulletin concerning Site-Specific Blast Plan guidance.
3. Continued conducting random compaction testing to provide independent verification of the construction specifications associated with the coal refuse disposal permit.

4. Implemented a new fee schedule for Coal NPDES permitting actions and annual permit fees beginning on July 1, 2022.
5. Participated in and supported the QA/QC panel. WVDEP has implemented its recommendations, such as eMap standards; conducting industry training sessions; continuing to encourage industry to submit timely bond release applications when a permit meets reclamation requirements; and encouraging industry, at the appropriate time in the reclamation process, to pursue post-mining effluent limits, removal of water retention structures, and deletion of NPDES outfalls
6. Participated in collegiate job fairs to attract applicants for vacant positions,
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 2. Issued a compliance bulletin concerning Site-Specific Blast Plan guidance.
 3. Continued conducting random compaction testing to provide independent verification of the construction specifications associated with the coal refuse disposal permit.
 4. Implemented a new fee schedule for Coal NPDES permitting actions and annual permit fees beginning on July 1, 2022.
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 6. Participated in collegiate job fairs to attract applicants for vacant positions,

WVDEP: (pg 14) 1 ac discrepancy by our table 4; deleted 408.54 by our count, for a total of 5610 ac newly bonded.

OSMRE: This acreage rounded to the nearest tenth. A value of 5609 acres is recorded. The State data addition is $4567+1451-409=5609$ acres

WVDEP: (pg 15) These appear to be last EY Numbers: Per expert, 2023 tree planting numbers are 1,580,152 trees on 2599 acres.

OSMRE: Corrected

OSMRE: (pg 15) WVDEP, please update for this year; from prior year's report.

WVDEP: The Buffalo Coal bond forfeiture site treatment plant located near Mount Storm, WV went online during the fall of 2022. The pilot plant for REE processing sludge began shortly after the AMD treatment facility was completed with start up and smoothing out operational tweaks within the system. The AMD treatment facility is averaging 576,000 gallons per day (AMD water) for removal of heavier iron sludge then providing the REE plant an average of 17,280 gallons per day.

WVDEP: (pg 19) How are violations abated prior to identification during oversight inspection?

OSMRE: Typo, adjusted to “abated during OSMRE oversight.”

WVDEP: (pg 19) The nature of the inspection should be included for context, i.e. how many per random oversight vs “other” inspections such as citizen complaints.

OSMRE: This is an average just based on number of offsite impacts compared to number of inspections. We could break this down further if it is needed.

OSMRE: (pg 28) WVDEP – true statement? Please adjust if not.

WVDEP: This is true.

OSMRE: (pg 29) WVDEP, please review/update this section.

WVDEP: The State’s IMB invests the three LCC trust funds for WVDEP. According to the IMB, the three trust funds had a value of \$11,478,090.03 as of June 30, 2023. During the evaluation year, LCC had not yet requested expenditures for operation and maintenance and capital costs that it has incurred at these three sites. The WVDEP and OSMRE continue to monitor and report on LCC’s water reclamation activities on these permits.

OSMRE: (Pg 37) WVDEP, please update this section.

WVDEP: [no update provided]

WVDEP: (pg 62) Should a footnote be included about 2022 data? The off-site impact numbers for bond forfeiture sites were incorrect in the original Table 5 when it was certified

OSMRE: A note was added onto the chart explaining the issue: “NOTE: The off-site impact numbers for bond forfeiture sites were incorrect in the original Table 5 2022 when it was certified. This error is still reflected in the past historical data.”