Annual Report Fiscal Year 2018-19



Jim Justice, Governor Austin Caperton, Cabinet Secretary

Protecting, Restoring and Supporting Roles in Promoting a Healthy Environment

The West Virginia Department of Environmental Protection's mission is to promote a healthy environment. To do this, the agency must protect the environment while leaving room for a sustainable industry base. Such a task requires careful balance. Its major divisions – protecting air, land, and water – plus an office regulating the oil and gas industry, must be circumspect and fair in regulating industry, permitting extraction of natural resources and protecting the public from potential pollution hazards.



west virginia department of environmental protection



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Protecting the Environment

Division of Air Quality

The Division of Air Quality (DAQ) develops and implements regulations and related programs mandated by the federal Clean Air Act (CAA) and the state Air Pollution Control Act. It works for the protection of public health and the prevention or mitigation of environmental impacts resulting from air pollutant emissions. DAQ monitors air quality and regulates emissions of air pollutants from industrial and commercial facilities.

During FY19, DAQ accomplished:

Air Monitoring

- Received \$446,716 grant from the U.S. Environmental Protection Agency, which partially funded fine particulate matter (PM) monitoring, laboratory, and data handling activities.
- Collected and processed more than 2,000 PM2.5 (particulate matter less than 2.5 micrometers in diameter) and PM10 (particulate matter less than 10 micrometers in diameter) filter samples.
- Received \$23,000 grant from EPA to partially support operation of an Inductively Coupled Plasma Mass Spectrometer (ICP-MS) to conduct air toxics analysis of particulate samples.
- Performed nearly 500 air toxics particulate metals analyses for sites in West Virginia, as well as for the National Air Toxics Trends Site in Washington, D.C., and sites in Philadelphia and Pittsburgh, Pa., and Delaware.
- Operated 18 air monitoring sites across the state, including two air toxic sites, two fine particulate matter speciation sites, a multipollutant NCore site, and a radiation network monitor, on behalf of EPA's national radiation monitoring program.

Compliance and Enforcement

- Conducted 633 full compliance inspections of air pollution sources, 87 of which were major sources of air pollution and 52 were synthetic minors.
- Conducted 179 partial evaluations of air pollution sources.
- Reviewed 733 self-monitoring reports from air pollution sources.
- Investigated 469 citizen complaints.
- Inspected 90 asbestos demolition/renovation projects.
- Reviewed 274 source performance tests, stack tests, relative accuracy test audits and opacity tests.
- Reviewed and approved 352 stack test protocols.
- Received and reviewed 186 Title V annual certification reports.
- Issued 20 notices of violation.
- Negotiated 20 consent orders to settle violations.
- Collected \$851,083, as a result of the consent orders.

Hazardous and Solid Waste Air Program (HSWAP)

- Conducted 37 compliance site inspections at hazardous waste air pollution sources.
- Conducted five used and waste oil burner source inspections.
- Assisted in the development/update of the 2018-19 DAQ air rules 45CSR (code of state rules) 18, 45CSR25 and 45CSR34.
- Submitted to EPA the required grant reports on the Resource Conservation and Recovery Act (RCRA) and the CAA 111(d)/129 programs.
- Assisted the Division of Water and Waste Management on revisions to the West Virginia RCRA Hazardous Waste State Authorization Program for combustion, thermal treatment, and subparts AA, BB, and CC.
- Worked on ongoing CAA 111(d)/129 plan revisions for commercial industrial solid waste incinerators for EPA approval.
- Worked on rule changes to 45CSR23 for Municipal Solid Waste Landfills and assisted with the submittal of a corresponding State Plan.
- Issued one permit under 45CSR25 for Hazardous Waste Burners.



Permitting

Title V Program

- Issued 69 permit revisions, including two administrative amendments, and 56 minor and 11 significant modifications.
- Issued 43 renewal permits and initial permits

New Source Review Program

- Issued 90 Rule 13 construction/modification permits.
- Issued one PSD (major source) permit.
- Issued four temporary permits.
- Issued five relocation permits.
- Issued 63 administrative updates to existing permits.
- Issued 161 general permit registrations and reviewed 107 Alternative Operating Scenarios and 187 Annual Certifications.
- Rendered 70 decisions on permit determinations.
- Completed seven withdrawal requests.
- Held four public meetings.
- Required all general permit registration application to be submitted through the Electronic Submittal System (ESS).

Planning

- On February 4, 2019, WVDEP requested the EPA conditionally approve the West Virginia Supplement to the State Implementation Plan Revision for Clean Air Act §110(a)(2)(A)-(M) Requirements for the 2015 8-Hour Ozone NAAQS with the Demonstration of Compliance with the Good Neighbor Requirements of Clean Air Act Section 110(a)(2)(D)(i)(I) as a State Implementation Plan (SIP) revision, to address the state's obligations under the Clean Air Act Section 110(a)(2)(D)(i)(I) (i.e., "Good Neighbor") requirements, contingent upon the State's adoption of the emission reduction requirements pursuant to 40CFR97 subpart EEEEE, the Cross-State Air Pollution Rule (CSAPR) NOX Ozone Season Group 2 Trading Program. This revision supplemented DEP's September 13, 2018 infrastructure SIP submittal and demonstrated that all reasonable measures, which have been identified as economically and technically feasible, have been implemented by West Virginia to address pollutant transport that may significantly contribute to downwind states' ozone maintenance and nonattainment problems.
- On June 5, 2019, WVDEP requested EPA approve 45CSR43, Cross-State Air Pollution Rule to Control Annual Nitrogen Oxides Emissions, Annual Sulfur Dioxide Emissions, and Ozone Season Nitrogen Oxides Emissions as a revision to the SIP, which included incorporated by reference 40CFR97, Subpart EEEEE, the CSAPR NOx Ozone Season Group 2 Trading Program. With the 45CSR43 SIP revision, DEP requested full approval of two previously submitted "Good Neighbor" SIPs for which DEP had initially requested conditional approval: the March 27, 2018 submittal -West Virginia Demonstration of Compliance with the Good Neighbor Requirements of Clean Air Act Section 110(a)(2)(D)(i)(I) for the 2008 Ozone National Ambient Air Quality Standard, and the February 4, 2019 submittal - West Virginia Demonstration of Compliance with the Good Neighbor Requirements of Clean Air Act Section 110(a)(2)(D)(i)(I) for the 2015 Ozone National Ambient Air Quality Standard.
- During FY19, DAQ reviewed, replicated and approved air dispersion modeling to assess impacts for one facility and reviewed one modeling protocol for a different facility as part of the application process for Prevention of Significant Deterioration (PSD) permits.
- DAQ collected emission inventory data for calendar year 2018 from 168 major Title V facilities, reviewed the data for quality assurance, and submitted the data to EPA. DAQ completed submittal of the data to EPA's Emissions Inventory System on June 25, 2019.
- In April 2019, DAQ finalized seven legislative rules that were approved during the 2019 Legislative Session. Four of these rules were submitted to the EPA in May 2019.
- In June 2019, DAQ proposed five legislative rules for the 2020 Legislative Session.
- Clean Air Act Section 111(d)/129 state plans were submitted to EPA for Commercial and Solid Waste Incineration Units and Municipal Solid Waste Landfills in August and September 2018.

Small Business Assistance Program (SBAP)

• Provided assistance to 133 small businesses (73 in depth, with 31 site visits).



Division of Mining & Reclamation

The Division of Mining and Reclamation (DMR) safeguards the environment during coal mining. It ensures prompt compliance and proper reclamation of mining sites, and maintains a statewide database for mining operations.

During FY 2019, DMR accomplished:

APPLICATION TYPE	TOTAL	AFFECTED ACRES
Surface Mining Application (SMA) Submitted	23	2,410
Surface Mining Permits Issued	9	4,579
Underground Minig Permits Issued	4	46
Other Mining Permits Issued	1	0.5
Quarry Permits Issued	0	0
Quarry Modification	6	346
Quarry Annual Bonding	49	
Amendments	614	1,567
Notices of Intent to Prospect	64	264
Withdrawn/Terminated/Denied Applications	143	
Incidental Boundary Revisions	224	-291
Permit Renewals	223	
Permit Revisions	316	
Permit Transfers/Merger/Ownership	186	
Operator Assignments	23	
Inactive Status	85	
Incremental Bonding	80	
NPDES Applications Approved	754	
Emergency Warning Plans	83	
Special Land Use	0	
Certification of Approval for Dam	50	

INSPECTION AND ENFORCEMENT	TOTAL	AFFECTED ACRES
Inspections	18,240	
Notices of Violation	813	
Conferences	144	
Phase 1 Permit Releases	8	258
Phase 2 Permit Releases	10	866
Phase 3 Permit Releases	23	1,521
Prospect Releases	59	
Incremental Releases	82	
Planting Plan Releases	9	
Cessation Orders	99	
Consent Orders	14	
Complaints Investigated	252	
Coal Mining (Art.3) Permits Revoked	12	
NPDES (Art. 11) Permits Revoked	0	
NPDES Permits Released	21	

DMR EXPLOSIVES AND BLASTING PROGRAM	FY19
Pre-Blast Surveys Accepted	971
Pre-Blast Surveyors Approved	11
Pre-Blast Surveyors Renewed	2
New Damage Claims Processed	4
Complaints Received	*
Complaints Received With Alleged Damage	0
Inspections	*
Violations Issued	*
Cessation Orders Issued	*
Total Exams	109
Total Initial Blasters	23
Total Renewals	53
Total Reciprocity	3

* These numbers are included in the Inspection and Enforcement Section



Office of Oil and Gas

The Office of Oil and Gas (OOG) monitors all actions related to the exploration, drilling, storage, and production of oil and natural gas. OOG tracks more than 62,000 active oil and gas wells, manages abandoned well plugging and reclamation programs, and ensures surface/ground water protection.

During FY 2019, OOG accomplished:

- Reviewed, processed, and issued 902 well work permits; 584 of these were horizontal wells and 287 were plugging permits.
- Conducted 5,437 site inspections.
- Processed 89 complaints.
- Responded to 84 emergencies/spills.
- Issued 117 notices of violations.
- Plugged and/or reclaimed one (1) abandoned well/site.
- Expended approximately \$80,271 from the Abandoned Well Reclamation Fund.
- Conducted 77 abandoned well inspections.
- Conducted 259 underground injection control (UIC) inspections.
- Reviewed and approved 142 UIC mechanical integrity tests. 100% of these were witnessed by OOG staff.

The Shallow Gas Well Review Board hears and rules on objections from coal owners, lessees and operators, regarding the location of proposed shallow gas well drilling sites. It generally administers the requirements of West Virginia Code Chapter 22C, Article 8. It held no hearings in FY19.

The Coalbed Methane Review Board hears and rules on actions associated with the drilling and production of coalbed methane wells. It generally administers the requirements of West Virginia Code Chapter 22, Article 21. It held no hearings in FY19.

Division of Water and Waste Management

The Division of Water and Waste Management (DWWM) strives to meet its mission through implementation of programs controlling surface and groundwater pollution caused by industrial and municipal discharges, as well as oversight of construction, operation, and closure of hazardous, solid waste, aboveground and underground storage tank sites.

In addition, the division works to protect, restore, and enhance West Virginia's watersheds through comprehensive watershed assessments, groundwater monitoring, wetlands preservation, inspection and enforcement of hazardous and solid waste disposal, and proper operation of storage tanks.

During FY19, DWWM accomplished:

Environmental Enforcement

Dam Safety

 Reviewed 15 applications or proposals for dam construction, modification, or removal; reviewed 124 monitoring and emergency action plans; conducted 310 inspections of all types. Oversaw the removal of four dams and remediation to meet Dam Safety standards on six others.

Hazardous Waste

• Completed 400 inspections related to hazardous waste facilities; responded to 12 emergency response situations; investigated 21 citizen complaints related to hazardous materials.

Underground Storage Tanks

• Conducted 15 closure inspections, four installation inspections, and 506 compliance monitoring inspections; investigated 13 citizen complaints.

Water and Waste

• Conducted 2,781 inspections of solid waste and water pollution control facilities; initiated 263 open dump cleanups; responded to 1,719 citizen complaints

Aboveground Storage Tanks

• Conducted 1,094 compliance monitoring inspections and investigated 17 citizen complaints.



Protecting the Environment

Leaking Aboveground/Underground Storage Tanks

• Investigation and cleanup of 80 new LAST/LUST sites and completed investigations and closed the active files on 121 LAST/LUST sites.

Watershed Improvement Branch

- Awarded 43 grants, totaling \$3.8 million to partner agencies, local governments, watershed associations, nonprofit organizations, and universities to implement watershed-related outreach, planning, education, monitoring, and water quality improvement projects. The funding is provided by the EPA through Section 319 Nonpoint Source and Chesapeake Bay Programs, and WVDEP.
- Awarded 23 grants, totaling \$103,655 through the West Virginia Stream Partners Program.
- Expended \$767,909 toward 16 In Lieu Fee stream and wetland mitigation projects for site protection, assessment, design, permitting, monitoring and maintenance.
- Through the West Virginia Save Our Streams (SOS) Program, coordinated 21 streamside workshops for 484 individuals, participated in 18 water festivals/outdoor classrooms for more than 3,400 people, and hosted one stream clean up. Through Project WET (Water Education for Teachers), held 11 educator workshops that certified 175 K-12 educators, six Getting Little Feet Wet Workshops that certified 119 early childhood educators, and one Wonders of Wetlands workshop that certified 19 educators. Conducted 11 Water Festivals for 2,565 students across the state, as well at two STREAM Girls workshops to train 20 girl scouts for the STREAM Badge.

Permitting

• Issued 14 major and 93 minor individual permits, 56 permit modifications to industrial and municipal facilities, 1,438 (510 general permit registrations and 928 stormwater), and 355 modifications (127 general registration and 228 stormwater) for a variety of facilities and activities. There were 137 (111 general permits, six individuals, and 23 stormwater) permits transferred during FY19.

Groundwater/UIC Program

• Issued 41 underground injection control permits, two modifications, transferred seven permits and inspected 309 underground injection control facilities. 465 Groundwater Protection Plans were reviewed and approved.

Hazardous Waste Operating Permits

• Received three and issued three Hazardous Waste Resource Conservation Recovery Act permits; received and reviewed one permit modification.

Solid Waste

• Issued 15 municipal solid waste landfill permits; issued 519 minor permit modifications; and issued 14 Class D Construction/Demolition Landfill registrations.

Clean Water State Revolving Fund

- Disbursed more than \$40.7 million to communities for municipal sewer projects under construction; disbursed \$100,000 to the onsite system loan program; closed new loans on an additional eight municipal construction projects, worth \$39.2 million; and have already issued 10 preliminary binding commitment letters and/or loan agreements for additional projects, worth \$38.6 million.
- Approved 12 sets of plans and specifications; reviewed 31 Infrastructure and Jobs Development Council applications; and funded 39 new onsite systems through the Onsite Systems Loan Program.

Quality Assurance

• Received applications from 112 laboratories for certification; performed onsite inspections at 93 laboratories; and recertified/ certified 123 laboratories.



Watershed Assessment Branch (TMDL)

- Total Maximum Daily Load Development: Collected 4,952* water quality samples from 1,267 sites on 926 streams, providing 86,627 individual parameter results. These samples are primarily from the Tug Fork and Lower Guyandotte River watersheds where pre-TMDL development monitoring was focused in 2018.
- TMDL development for the Hughes River Watershed and the Monongahela River was completed during the summer of 2018 and final TMDL reports were submitted to EPA. TMDL development for the Upper Guyandotte River Watershed had been expected to be completed in early 2019 but has been delayed due to uncertainties in how to address aluminum and biological impairments. TMDL development is well underway for the Twelvepole Creek, Big Sandy River, and Lower Ohio River watersheds and has begun for the Lower Guyandotte River Watershed.
- Watershed Assessment/Long-term Monitoring Sites: collected water quality, habitat, and biological information from 167 targeted sites (including 13 done in duplicate for QA)
 - 64 sites considered Long-term Monitoring Sites and 103 other targeted samples.
- Ambient Water Quality Monitoring Network: collected bimonthly water quality information for more than 30 parameters from 26 sites on the State's major streams and rivers. Six sites in the Monongahela basin were sampled monthly during low-flow season.
- **Probabilistic Monitoring** for 4th 5-year cycle (final 10 sites) was completed in 2018. Monitoring for 5th 5-year cycle began in 2019.
- Water quality continuous data loggers were deployed at 75 sites on 65 streams.
- Fish community data was collected at more than 11 sites. Sites were primarily collected outside of TMDL development areas to enhance data available for regional fish IBI development.
- Benthic Macroinvertebrate Data: 601 samples from 504 streams were collected in calendar year 2018.
- Lakes: In 2018, monitored sites at nine lakes and collected 73 samples, with 7,203 individual parameter results including field parameters that were measured along depth profiles at each site visit.

* This number, as with the other numbers in this section, is derived from WABBASE, our primary database. Because of delays in getting data entered into the database, data collected from the end of state fiscal year 2019 was not available at the time this report was being developed. In order to get a full year's worth of data the results in this section are from calendar year 2018.

Water Quality Standards

- Attended Legislative committee meetings and held 3 public meetings to provide information and obtain input from citizens and legislators regarding Human Health Criteria revisions.
- Continued to work with EPA on approval of WV's Aluminum aquatic life criteria.
- Attended Association for Clean Water Administrators (ACWA) annual and midyear meetings, and participated on its WQS Variance Working Group, Monitoring Standards & Assessment Committee, and PFAS Subcommittee.
- Spoke at conferences and meetings regarding WVDEP and the Water Quality Standards program: WV Rural Waters Association, WV Chamber of Commerce, WVU Engineering lecture, WVU Water Resources Institute, and WV Brownfields.
- Continued to monitor filamentous algae and nutrients in Greenbrier and Cacapon Rivers. Observed corresponding decreases in the amount of phosphorus and subsequent decreases in filamentous algae coverage as compared to previous years.



Protecting the Environment

401 Certification Program

- Reviewed 387 Nationwide 404 permits, of which 143 were for Division of Highways projects.
- Issued e eight individual 401 Water Quality Certifications, 5 modifications, and six waivers.
- Reviewed and approved 11 Nationwide 27 Permit Stream Restoration Plans.
- Reviewed and approved 42 Nationwide 39 Permits for Commercial & Institutional Developments.
- Reviewed and approved three AML Regional Permit projects.
- Reviewed and approved 30 Stream Management Plans from the WV Conservation Agency under their Regional General Permit.
- Reviewed and approved 12 Army Corps of Engineers' issued Letters of Permission.
- Coordinated with the Environmental Protection Agency on seven Environmental Enforcement cases.
- Reviewed various Mitigation Bank documents including prospectus, instrument, mitigation plans, monitoring plans, and modifications.
- Received and reviewed various documents on hydro-electric power projects, in accordance with FERC licensing requirements.
- Modified 401 WQC conditions for the USACE Nationwide Permits.

Water Use Section

Data Research

In 2017 the Water Use Section received a grant from the United States Geological Survey (USGS) to provide information in support of their national Water Use Data Research (WUDR) Program. Since that time, the Section has conducted a total of 41 field audits of Large Quantity Users across all water use sectors to determine the consumptive portion of their water withdrawal, e.g. the portion that does not immediately return to the local watershed. Current estimates suggest consumption is approximately 9 percent of the total statewide water withdrawal. A report compiling the results of these audits and recommending new "consumption coefficients" that can be applied to water use in West Virginia, will be submitted by September 2020.



Water Management Plans for Horizontal Well Operations:

- Received and reviewed 556 individual water management plans.
- 75 new pad-level plans were created, along with the reviewal and approval of 94 Water Management Plan modifications, all relating to the withdrawal of surface and groundwater used in horizontal well drilling operations regulated by W.Va. Code §22-6a.

Large Quantity Users (LQU) Survey:

Any entity that withdraws more than 300,000 gallons in 30 days from state water resources is considered a Large Quantity User (LQU) under the Water Resources Protection and Management Act. These LQUs use the WV DEP Electronic Submission System to report their withdrawals annually to the Water Use Section. The Section has been collecting LQU information since 2006 and monitoring trends in water use. We share water withdrawal information with the State Legislature and research partners including universities and the U.S. Geological Survey.

In 2018, 372 Large Quantity Users withdrew water from 725 individual sites. Total water exhibited a slight decline (-7.3%), due primarily to the decrease in water used by thermoelectric operations, the largest water use sector overall. However, water used by the public supply and oil & gas operations experienced substantial increases (+11.6% and +32.4% respectively). Groundwater withdrawals remain relatively consistent, comprising approximately 5% of the total water use in West Virginia. The public water supply is the single largest user of groundwater (contributing 20% of all PWS withdrawals), followed by the chemical and industrial sectors. Groundwater use is concentrated in the alluvial aquifers along the Ohio River, southern coalfields, and karst aquifer systems of eastern West Virginia.

Geophysical Groundwater Well Logging:

The Water Use Section and the United States Geological Survey (USGS) have continued a collaborative five-year project to assess geophysical and hydrologic properties of groundwater wells throughout West Virginia. The data from this project will be used to characterize the aquifers within the State through a better understanding of the bedding planes, joints, faults, and other fractures through which most of our groundwater flows or is stored. This research will increase knowledge of the depth and location of these water bearing fractures throughout the state.

Fieldwork for the project should be complete on September 30, 2019 with more than 120 well logs completed with geological and hydrological data. At the conclusion of the fieldwork the Water Use Section and USGS will collaborate on the final report and data models, expected in fall 2021.



Restoring the Environment

Division of Land Restoration

The Division of Land Restoration's (DLR) mission is to reclaim and remediate contaminated and disturbed land to a condition protective of public health and safety and suitable for productive reuse and economic development.

Office of Environmental Remediation

Through its various environmental cleanup programs outlined below, the Office of Environmental Remediation (OER) provides for clean, safe, and productive West Virginia communities by assessing and remediating environmental resources and restoring contaminated properties to beneficial use.

During FY19, OER accomplished:

Brownfields Assistance Program

The Brownfields Assistance Program empowers communities, developers, and stakeholders to assess, cleanup, and sustainably reuse brownfields. During FY19, the program:

- Created and distributed citizens' guides and handouts, which provide an easy understanding of the brownfield assessment and remediation process.
- Provided free guidance and technical assistance to various stakeholders to assist with the assessment, cleanup, and redevelopment of brownfields. Specific services included
- reviewing and explaining environmental reports; providing technical and program guidance to assess and remediate sites; educating stakeholders and conducting community outreach, including participation in a grant-writing workshop; and identifying potential funding sources for assessment and remediation.
- Administered environmental site assessments at six brownfield properties to determine presence and levels of contamination and ultimately return the properties back to productive use.
- Completed the preparation of documents to begin the Brownfields Revolving Fund, which will provide low interested loans for the cleanup of contaminated properties across the state to allow for economic redevelopment. These documents included a Guidance
- Manual, a Pre-Qualification Questionnaire, a Loan Application Form, and a Loan Agreement Template.

Federal Facilities Program

WVDEP serves as the lead regulatory agency at Department of Defense (DOD) restoration sites not on the Superfund NPL. The Federal Facilities Restoration Program oversees the investigation and cleanup of active, closing, and formerly used military installations at which hazardous substances and/or petroleum products were used, stored, or disposed of during past operations, as well as military munitions response sites known or suspected to contain unexploded ordnance, discarded military munitions, or munitions constituents. During FY19, the program:

• Collaborated with the U.S. Air Force, U.S. Army, U.S. Army Corps of Engineers, U.S. Army National Guard, and U.S. Navy to actively assess and remediate six (6) Formerly Use Defense Sites (FUDS), Military Munitions Response Program (MMRP) sites, and Installation Restoration (IR) sites:

- Allegany Ballistics Laboratory
- Camp Dawson KD Range
- Dolly Sods Maneuver Area
- Shepherd Field Air National Guard Base
- Yeager Field Air National Guard Base
- West Virginia Ordnance

UECA-LUST Program

The Uniform Environmental Covenants Act–Leaking Underground Storage Tank (UECA-LUST) Program is an alternative remediation option for releases from underground storage tanks (USTs). Through the UECA-LUST Program, responsible parties may remediate LUST sites to risk-based standards utilizing engineering and institutional controls, such as covers, caps, and land use restrictions, in accordance with the Uniform Environmental Covenants Act. During FY19, the program:

Accepted 12 (LUST) sites to participate in the program.
Issued five "No Further Action" letters to sites which successfully completed risk-based remediation.



Voluntary Remediation Program

The Voluntary Remediation Program encourages voluntary cleanup and redevelopment of abandoned or under-utilized contaminated properties by providing certain environmental liability protections under state law to parties completing remediation under WVDEP oversight. During FY19, the program:

• Accepted nine new applications for voluntary remediation projects in Berkeley, Doddridge, Harrison, Kanawha, Mercer, Mineral, Preston, and Randolph counties.

• Issued 16 Certificate of Completion for 138.43 remediated acres of land ready for reuse. Cumulatively, 201 Certificates of Completion have been issued for 2,655 remediated acres of land, including Weirton's Pietro Fiorentini site, which will add over 100 new jobs to the area, and the Historic Grafton B&O Freight Station, which is being redeveloped into a Farmer's Market in Grafton.

Superfund Program

The WVDEP is a support regulatory agency for the U.S. EPA at removal, pre-remedial, and remedial sites subject to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which requires meaningful state participation. The WVDEP Superfund Program represents state interests; ensures compliance with applicable state laws and regulations; provides oversight of data and data collection activities; and acts as a liaison between the U.S. EPA and the citizens of West Virginia, local officials, community representatives, and other stakeholders. During FY19, the program:

- Supported EPA/led O&M efforts at 10 National Priorities List sites:
- Allegany Ballistics Laboratory (Rocket Center) Ravenswood PCE (Ravenswood)
 - · Sharon Steel Corp (Fairmont)

· Paden City PCE Site (Paden City)

· Route two PCE Site (Weirton)

• Anchor Hocking (Clarksburg)

• Anmoore Zinc (Anmoore)

· Don's Disposal (Charleston)

• Fleming Landfill (Charleston)

· Glen Dale TCE Site (Glen Dale)

• Lin Electric (Bluefield)

- Big John Salvage—Hoult Road (Fairmont) • West Virginia Ordnance (Point Pleasant) • Shaffer Equipment (Minden)
- Hanlin-Allied-Olin (Moundsville)
- Vienna Tetrachloroethene (Vienna) • North 25th Street Glass and Zinc (Clarksburg) • Fike Chemical, Inc. (Nitro)
- Assisted EPA with removal assessments/actions at seven sites:
- · Coyne Textile (Huntington)
- Kanawha River Dioxin Site (Nitro)
- Kincaid Lumber (Kincaid)
- · W&G Electroplating Project (Boothsville)
- Led or supported pre-remedial assessments for EPA at 13 sites:
- · AES-Monsanto (Nitro)
- · Elkem Metals (Alloy, WV)
- Braxton Industries (Ireland, WV)
- · Dalzell Viking (New Martinsville)
- Sloan Glass (Culloden)
- White Park (Morgantown)
- · New Cumberland Landfill (New Cumberland)
- · Reedsville Scattered Foundry Waste (Reedsville)

- Long-Term Monitoring of Institutional Controls
- Received and processed 1,494 notifications of excavation from WV811 to monitor sites with established environmental controls that contain activity and use limitations and/or engineering controls.

Office of Special Reclamation

DLR's Office of Special Reclamation (OSR) eliminates abandoned mine hazards due to post-1977 mining operations. This may entail anything from minor to major land restoration and temporary to perpetual water treatment. Its reclamation funds come from coal taxes, civil penalties and bond forfeitures.

During FY19, the OSR accomplished:

- Provided quarterly progress reports to the Special Reclamation Fund Advisory Council.
- Conducted a consensus coal forecast.
- · Conducted an actuarial study.
- Monitored water quality on 37 permits for acid mine drainage determination (AMD) and design purposes.
- Performed 3,683 land and water inspections and 943 construction inspections.
- · Issued 4 water reclamation purchase orders, totaling approximately \$12 million.
- Had three permits in the retrofit reclamation process.
- · Completed two retrofit projects that will allow OSR to meet more stringent national pollutant discharge elimination system (NPDES) limits.
- Completed land reclamation on 15 permits.
- Reclaimed approximately 139 acres.
- Began construction on 4 water treatment systems
- Completed design of 3 projects using outside consulting firms (continued work on one).
- Ribbon cutting ceremony for the T&T plant was held in May 2019. Attendees included Governor Justice and Secretary Caperton, also representatives from the US EPA, Southwestern Energy, WVU's Water Research Institute, Friends of Cheat, WVDEP, the Office of Surface Mining, the Special Reclamation Advisory Council, landowners and general public.
- Completed construction on two in-stream treatment sites. One on the Left Fork of Little Sandy and the other on Maple Run. These treatment sites are part of the Sandy Creek Watershed Restoration Project.



Restoring the Environment

- OSR obtained three of the first ever issued watershed based NPDES permits. This allowed OSR to use the proven approach of in-stream treatment to restore Muddy Creek of the Cheat River and Sandy Creek of the Tygart River.
- Continued the cost-share partnership with Southwestern Energy (SWN). As part of the Muddy Creek Watershed Restoration Project, SWN continues to contribute \$375,000 toward operation and maintenance costs for water treatment.
- Continued the partnership with the Land Stewardship Corp., for the management of design, and construction, of seven OSR projects.
- OSR now has five licensed drone pilots. OSR uses drones for aerial mapping and photography. Current drones used are DJI Phantom 4 Advanced with integrated HD camera, and a Matric 600 Pro with infrared technology. The infrared mapping will be used to detect ground water discharges, mine seeps, subsurface cracks, and coal seam fires. Additionally, a hydro drone (boat), which uses sonar, is used in determining pond depths. This information is used for reclamation purposes.
- OSR collaborated with WVU's Water Research Institute (WRI) to conduct a trial for Rare Earth Element extraction (REE) at an OSR acid mine drainage (AMD) treatment site in Monongalia County. REEs were extracted from the sludge that is generated during the treatment of AMD. REEs are a valuable resource that are essential for advanced technologies such as smart phones and robots to classified national defense systems. The United States currently imports almost all of its REE from China.
- OSR began working with WRI on the design of a full-scale REE extraction project that will be incorporated into the designs of an OSR AMD treatment facility near Mount Storm. Construction is expected to begin in the summer of 2020.

Abandoned Mine Lands

DLR's Office of Abandoned Mine Lands and Restoration (AML) mends damage that occurred from mining operations prior to Aug. 3, 1977. Abandoned mines impose social and economic costs to residents and impair environmental quality. AML restores land and improves water quality at abandoned or forfeited sites using funding from federal coal taxes.

During FY19, AML accomplished:

PLANNING

AMD Water Treatment	213,636 gallons per minute
Clogged Streams	0.62 miles
Dangerous Highwalls	6,595 feet
Dangerous Impoundments/Portals	39 acres
Dangerous Piles and Embankments	23.59 acres
Subsidence	25.1 acres
Dangerous Slides	10.25 acres
Vertical Openings	10 acres
Equipment/Facilities	2
Industrial/Residential Waste	0.25 acres
Surface Burning	NA
Underground Mine Fires	NA
Bench	2.5 acres

Planning accomplishments:

- Sent 32 Environmental Assessments to OSMRE for Authorization to Proceed with projects.
- Submitted, completed and incorporated into the National Enhanced Abandoned Mine Lands Inventory System (eAMLIS) 72 Problem Areas (PADs)

Design accomplishments:

- · Completed two projects by the Northern section
- Completed six In-House projects by the Southern section



Waterlines:

- Completed three projects serving 563 customers.
- Awarded 10 projects serving 230 customers.
- Completed Exploratory Right of Entry on three Regular grant projects.
- Completed Construction Right of Entry on 19 Regular grant projects.
- Completed Exploratory Right of Entry on five Emergency projects
- Completed Construction Right of Entry on 22 Emergency projects.
- Completed Construction Right of Entry on 10 Maintenance projects.

Emergencies:

- Northern section: 331 investigations; 35 emergencies.
- Southern section: 132 investigations; 11 emergencies.

Supporting Offices

Office of Environmental Advocate

The Office of Environmental Advocate assists the public in obtaining agency information and technical data, encourages citizen participation during public comment periods, and works closely with DEP offices to develop informational workshops and public forums to address state environmental concerns.

During FY19, OEA accomplished:

- Continued participation with government and non-government stakeholder-based workgroups to address state and regional environmental concerns.
- Continued assistance to citizens and environmental groups by providing technical assistance and clarification of DEP regulations and policies.
- Served as lead for DEP Pipeline Working Group to provide forum between citizen groups and DEP permitting and enforcement staff.
- Serve as co-lead for the ongoing interagency review of the citizen complaint response and tracking system within DEP.
- Addressed public inquiries regarding environmental concerns that are received on a daily basis in the Office of Environmental Advocate. Also referred to the OEA via Gubernatorial, Congressional, and Legislative Offices.

- Served as DEP primary contact for public outreach and coordination with local governments and the EPA for the new Minden area Superfund site in Fayette County.
- Represented agency interests at annual meeting with West Virginia University Extension Service Alternative Wastewater Coalition.
- Participated as a member of DEP's team that was charged with determining candidates for the Governor's Lakes Initiative.
- Served as DEP co-lead in FERC relicensing of Hawks Nest Hydro facility, including coordination for the public benefit projects associated with that process.
- Delivered DEP presentations to civic, environmental organizations, community groups, and the West Virginia Youth Conservation Camp.



Supporting the Environment

Rehabilitation Environmental Action Plan (REAP)

The OEA's Rehabilitation Environmental Action Plan – The Next Generation works to make West Virginia the cleanest state in the nation. Pollution Prevention and Open Dump, Make-It-Shine, Adopt-A-Highway/Adopt-A-Spot, Clean Streams Initiative, Statewide Recycling and Operation Wildflower are the state's cleanup and beautification programs. They are all housed within DEP, providing citizens with a control location to learn about and participate in volunteer cleanup initiatives.

For FY19, REAP accomplished:

	PPOD	AAH/AAS	WVMIS	OPERATION WILDFLOWER	RECYCLING	REAP TOTAL
Dumps eradicated	1,553		48			1,601
Acres reclaimed	840		11			840
Miles roadway cleaned		2,236	319			2555
Miles stream cleaned	79		132			211
Acres park cleaned			261			261
Miles trail cleaned			114			114
Active AAH groups		596				596
OWF plots				78		78
Tons litter/waste collected	2,632	216	187			3,035
Tons scrap recycled			10.30			10
Appliances recycled			97			97
Waste tires collected	141,000		1,994			142,994
Tons plastic recycled		0.27				0.27
Tons glass recycled		0.14				0.14
Tons aluminum recycled		0.46	0.50			0.96
Tons paper recycled (tons)						
Volunteers participating	2,632	8,144	5,721			16,497
Recycling Grants Awarded					37	\$2,021,873.85
CED Grants Awarded					10	\$121,151.00
Litter Control Grants					31	\$85,117.72
Recycling Bin Loan Program					4	4.00

Youth Environmental Program

The OEA's Youth Environmental Program (YEP) provides an opportunity for the youth in West Virginia to participate in environmental projects within their communities. It is designed to unite existing youth groups such as 4-H clubs, scouts, FFA chapters, elementary, middle and high schools, and others toward the common goal of protecting our environment. The program offers an annual Junior Conservation Camp, Youth Environmental Conference and Youth Environmental Day and awards \$15,000 in cash and other prizes – including a college scholarship.

For FY19, the Youth Environmental Program:

- Had 962 Clubs enrolled represented by 107,834 members
- Had volunteers log a total of 35,348 volunteer hours
- Contributed \$853,301 total dollar amount through volunteering (based from the Independent Sector's estimated value of a volunteer hour)



Business Operations Office

The Business Operations Office (BOO) provides financial, procurement, and propperty management services to all of DEP's programs, divisions, and offices.

During FY19, BOO accomplished:

- Provided 57 training opportunities between January and June to DEP staff.
- Provided support for building and launching the new DEP Intranet.
- Launched the use of Microsoft Stream as a learning platform for DEP by launching 24 new stream videos.
- Over \$36 million in procurement activity.
- Processed 4,053 documents.
- Advertised and awarded 43 exempt reclamation construction contracts.
- Developed new agency contracts for employee physicals with a mobile unit and Division of Water and Waste Management mitigation credits
- Conducted additional training for two offices that are new to the exempt construction contracts.
- Reviewed, processed and paid 9,670 P-Card transactions totaling \$110,695,881.42
- Worked on the P-Card QAT Team to improve the efficiency of the P-Card use within the agency and streamlined the audit process to eliminate redundancy and to allow a more time for intensive audit to be conducted of all transactions for 341 Purchasing Cards.
- Reviewed the P-Card Internal controls and made revisions and updates.
- Automated Purchasing Card and Paid Transmittal Reports to go out monthly to office financial staff and P-Card Sub Coordinators.
- Submitted and received approval for two vehicle orders due to high maintenance cost and high mileage even though the moratorium is still on for vehicle orders. The order for high expense maintenance was for 35 vehicles and the one to replace high mileage was for 55 vehicles.
- Processed and approved 368 vehicles repairs and maintenance for \$611,000.00,
- Utilized a large portion of the pool vehicles and unassigned vehicles to offices with a need for a vehicle.
- Worked to inform the staff of the Enterprise/Hertz car rental statewide contract that is available for their use.
- Worked to implement the license plate conversion for all vehicles.
- Licensed and added all trailers to inventory.

- Worked with IT to develop Mileage Logger to track vehicle use and information required by Legislative Rules and Fleet Management Division.
- Revised the building lease breakdowns process for collecting coding and revising space allocations annually. They have been changed so that they are compiled by space for lease/utilities and supplies and other building items are now determined by number of employees.
- Create processed for ordering all facility supplies for all DEP sites from the Administrative Services section to relieve this duty from field staff and ensure supplies are comparable.
- All leases have been added to fixed assets in wvOASIS.
- Implemented the Purchasing Authorization forms approved by Governor's Office for purchases over \$25,000.
- Bullet Proof window and door film added to the lobby reception area for security purposes.
- Upgraded the audio in the Coopers Rock training center.
- Updated the Cheat River Conference Room with a TV.
- Received AEP award for LED conversion.
- West Virginia room furniture upgrade.
- Created a database to streamline computer receiving process.
- Submitted all vehicles exemption reports.
- Revised the NEO for fleet, safety and added Inventory.
- Replaced rollers on large vehicle gate.
- Real Estate Division moved into vacant spaced and reduced the lease at KC by: \$10,454.08 a month for an annual savings of \$125,448.96.
- Created several trainings and held multiple trainings for office staff on P-Card's and Purchasing.
- Continued to partner with the DWWM Permitting Program to adjust and correct various water permit billings. This process will result in a more accurate accounting of outstanding receivables. This work is on-going as we move through the various types of water permits.
- Assisted DAQ in recouping and restoring the funds that were swept from the Air Pollution Control Fund.
- Continued the agency's investment strategy of maximizing investments earnings through various portfolios and investment pools, annual yields in FY19 totaled \$ 10,755,806. Market conditions resulted in a 15 percent decrease in investment earnings compared to FY18.
- Initiated the use of an electronic coding sheet, in order make coding more efficient and more error-free. Although the form continues to be a work-in-progress, this has already begun to achieve its initial purpose.



Supporting the Environment

Human Resources

Human Resources (HR) manages all employment matters for the DEP. Two units within the division manage pre-hire matters (recruiting, interviewing, assessment and offers of employment) and post-hire (transaction processing, time and attendance, benefits, disciplinary matters, training and succession planning).

During FY19, HR accomplished:

- Processed 196 job postings.
- Received 689 applications.
- Completed 247 applicant assessments.
- Processed 177 recommendations.
- 90 new hires.
- Processed 1,725 employee transactions and 42 pay progressions.
- Attended 8 job fairs.
- Disbursed \$34,226 in tuition reimbursement.
- Closed 18 disciplinary actions, and processed 6 terminations, 20 resignations, and 4 suspensions.

Information Technology (IRIS)

The Information Technology Support Office (IRIS) develops and implements applications needed by the divisions and offices of the DEP. Our applications are designed to support the DEP vision and mission.

During FY19, IRIS accomplished:

Infrastructure Support

- Increased security through reacting to vulnerability scans, patching, improved logging, new and improved firewalls and system upgrades.
- Increased speed and features of Citrix.
- Faster and better backups.
- Eliminated costs for Red Hat servers.
- Automated Fleet reporting and Fleet dashboard, P-Card and Personnel Services reporting

Application Development and Support

- 397 bugs fixed.
- Fleet mobile web application.
- Developed online DAQ E-Permitting, PPOD, WATERBF and WABASE mobile applications, and OSR Realty Module.
- Created audit reporting tool for PPOD.
- Upgraded Dam Safety, 5G Book and Order Tracking databases from MS Access back end to Oracle back end.
- Created Large File Upload functionality for DLR.
- Moved ~230,000 AML, Special Rec, and OMR Files from Precision to AX.
- Made significant AMLNET and DLR File Request Handler security improvements.

TAGIS

- Flew 30 Unmanned Aerial Missions with spatial data products created.
- Completed a multivariable analysis of 25,000 potential sites for new lakes in the state.

Public Information Office

The Public Information Office (PIO) provides the public with access to public records, environmental information and educational resources. This includes writing and issuing news releases, coordination public outreach events, acting as the agency point-of-contact for the media, producing educational materials in traditional print format, as well as multimedia projects, and facilitating responses to Freedom of Information Act (FOIA) requests.

During FY19, PIO accomplished:

- Researched, composed and published 69 press releases regarding agency dealings and regulatory actions.
- Processed and tracked 1,191 FOIA requests since Jan. 1, 2018.
- Handled the Contact Us requests generated from the website.
- Published employee profile-articles to the DEP Intranet.
- Published the 27th issue of the DEP Annual Report, involving planning, coordinating and editing entries from environmental and support offices, and boards.
- 58 videos were produced specifically for Facebook in FY2019, totaling 75,643 total views (up 276 percent from the previous year) for a total of 30,986 minutes viewed (up 322 percent from the previous year).
- Produced more than 150 unique videos for Facebook, Twitter, and YouTube.
- In October 2018, Environment Matters switched production of our monthly half-hour broadcast to a weekly, web-based format on the DEP's Twitter, Facebook and YouTube platforms.
- DEP's YouTube channel surpassed 500 subscribers and 100,000 total video views. The channel had 32,300 video views for the period, an increase of 12 percent over the previous one-year period. Watch time (the average length viewed) increased by 24 percent. For the period, the channel had a total of 256,900 impressions. Our largest demographic is males, age 18 to 24. 67 percent of our audience is in the United States, the rest is outside of the U.S. with Canada, India, Australia, the Netherlands, and the United Kingdom making up the largest share of our international audience. 62 videos were produced specifically for YouTube in FY2019.
- PIO gained 292 followers on Twitter this year, bringing our total number of followers to 2,164. We also gained 851 followers on Facebook, bringing our total number to 3,597.



Office of Legal Services

The Office of Legal Services (OLS) represents the agency in permitting and enforcement actions before administrative boards, circuit courts and appellate courts, and provides counsel to DEP offices on regulatory and legislative matters. OLS works with all divisions and offices in the department to assist with the implementation of regulatory programs.

During FY19, OLS accomplished:

- Entered into a settlement agreement with the Town of Chesapeake through a Consent Decree to rectify the problems at their sewage treatment facility. The town paid DEP a civil penalty of \$172,755.
- Collected a \$60,622.50 civil penalty from Intercontinental Export Import, Inc. based on their failure to comply with DMR reporting requirements from earlier DEP consent orders.
- Won a decision in Lewis County Circuit Court involving Lakefront Development's sewage treatment facility. The court ordered Lakefront to comply with the consent order, rectify issues regarding the facility, and awarded DEP a default judgment of \$10,130.
- Instituted civil enforcement action against a noncompliant dam owner, which resulted in the dam owner agreeing to take all necessary steps to bring the dam into compliance with the applicable statutes and regulations.
- Defended DEP before the Environmental Quality Board against the Town of Eleanor. Municipal appellant appealed DEP's requirement of sampling as a condition of a waiver of program requirements. Pursuant to a completed evidentiary hearing and at the direction of the EQB, the parties reached a settlement agreement favorable to DEP.
- Negotiated ongoing settlement and development of joint complaint with EPA and
- U.S. Department of Justice against Berkeley County Public Service Sewer District for multiple water quality violations at the wastewater treatment facilities.
- Negotiated ongoing settlement and development of joint complaint with EPA and DOJ against Koppers Inc. for multiple violations for federal law and the West Virginia Aboveground Storage Tank Act.

Economic Development Director & Ombudsman

During FY19, the Economic Development Director:

- Assisted approximately 200 businesses (including 'mom and pop's' to major multinationals), and organizations on permits and enforcement issues including air, oil and gas, groundwater, storm water, industrial wastewater, hazardous and solid waste, climate change, SPCCs, EPCRA/CERCLA, aboveground and underground storage tanks, radiation, wetlands, voluntary remediation, brownfields, and numerous other topics.
- Participated, assisted, and worked with a variety of businesses and organizations, many specializing in Economic Development, within the state, including: the WV Department of Commerce, Development Office (domestic and international), the WV Small Business Development Centers, West Virginia Economic Development Authority, U.S. Environmental Protection Agency, US Small Business Administration, Marshall University, West Virginia University, West Virginia Manufacturing Extension Partnership, Technology Park, U.S. Geological Survey, U.S. Forest Service, and many other entities.
- Gave numerous talks and speeches, regarding environmental issues around the state and nation to a variety of groups. Many of these were aimed at enhancing the knowledge and assisting businesses of all sizes, with compliance in state and federal laws.



Supporting the Environment

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Economic Develoment Director & Ombudsman

The Economic Development Director and Ombudsman, formerly the Small Business Office, is the liaison between the small business community, DEP program offices, and other government entities. The Ombudsman assists small businesses throughout the state understand and comply with existing and pending state and federal environmental rules, enhance the environment, and prosper in West Virginia.

During FY19, the Economic Development Director:

- Assisted approximately 200 businesses (including 'mom and pop's' to major multinationals), and organizations on permits and enforcement issues including air, oil and gas, groundwater, storm water, industrial wastewater, hazardous and solid waste, climate change, SPCCs, EPCRA/CERCLA, aboveground and underground storage tanks, radiation, wetlands, voluntary remediation, brownfields, and numerous other topics.
- Participated, assisted, and worked with a variety of businesses and organizations, many specializing in Economic Development, within the state, including: the WV Department of Commerce, Development Office (domestic and international), the WV Small Business Development Centers, West Virginia Economic Development Authority, U.S. Environmental Protection Agency, US Small Business Administration, Marshall University, West Virginia University, West Virginia Manufacturing Extension Partnership, Technology Park, U.S. Geological Survey, U.S. Forest Service, and many other entities.
- Gave numerous talks and speeches, regarding environmental issues around the state and nation to a variety of groups. Many of these were aimed at enhancing the knowledge and assisting businesses of all sizes, with compliance in state and federal laws.



Boards and Commissions

Air Quality Board

The Air Quality Board (AQB) is a quasi-judicial body responsible for hearing appeals regarding the issuance or denial of permits, permit conditions, or enforcement decisions rendered by the Division of Air Quality. Citizens and the regulated community file appeals with the board.

Board members:

• J. Michael Koon, chairman; R. Thomas Hansen, Ph.D., vice chairman; Grant Bishop, Department of Agriculture; Jon Blair Hunter; Walter M. Ivey, P.E., Bureau for Public Health; Robert C. Orndorff, Jr.

During FY19, the AQB accomplished:

- Filed two new appeals and entered two orders.
- Held one administrative meeting, one evidentiary hearing, and one conference call to deliberate.
- Downloaded notices of appeal, certified records and orders to the board's website.

Environmental Quality Board

The Environmental Quality Board is a quasi-judicial body responsible for hearing appeals regarding the issuance or denial of permits, permit conditions, or enforcement decisions rendered by the Division of Water and Waste Management. Citizens and the regulated community file appeals with the board.

Board members:

• Edward M. Snyder, Ph.D., chairman; Charles C. Somerville, Ph.D., vice chairman; William H. Gillespie; Marybeth Winters, P.E.; Stephen G. Capelli, Sr., P.E.

During FY19, the EQB accomplished:

- Filed 16 appeals and entered 16 orders.
- Held six evidentiary hears, three stay hearings, three conference calls, and two administrative meetings.
- Downloaded notices of appeal, certified records and orders to the board's website.

Oil and Gas Conservation Commission

The Oil and Gas Conservation Commission (OGCC) regulates the drilling of deep oil and gas wells in the state. The OGCC approves drilling permits and conducts hearings on matters relating to the exploration for or the production of oil and gas from deep wells. Hearings are held to determine the optimum spacing of wells, as well as to pool the interests of royalty owners and operators of a drilling unit. Additionally, the OGCC conducts hearings on matters using lands for the secondary recovery of oil and/or natural gas. The OGCC also serves as technical advisers on oil and gas issues to the chief of the OOG, to the DEP, and to other state agencies having responsibility to the oil and gas industry.

Mission points of the OGCC

- Foster, encourage, and promote exploration for and development, production, utilization, and conservation of oil and gas resources;
- Prohibit waste of oil and gas resources and unnecessary surface loss of oil and gas and their constituents;
- Encourage the maximum recovery of oil and gas; and
- Safeguard, protect, and enforce the correlative rights of operators and royalty owners in a pool of oil or gas to the end that each such operator and royalty owner may obtain his or her equitable share of production from such pool of oil and gas.

Commission members:

• Barry K. Lay, chairman and commissioner; Robert Radabaugh, member; Michael McCown, member; Austin Caperton, ex-officio; James Martin, ex-officio.

During FY19, the OOGC accomplished:

- Approved 74 deep wells;
- Held 24 administrative hearings;
- Collected \$174,894.63 in leased acreage taxes.



Surface Mine Board

The Surface Mine Board (SMB) conducts hearings on appeals presented to the board by any party that believes it is aggrieved by a decision of the DEP's Cabinet Secretary. Decisions appealed include permits issued, permit applications denied, notices of violation and failure to issue notices of violation for alleged violations of law or regulations.

Board members:

 James Smith, chairman, engineering; Mark Schuerger, coal industry; Ed Grafton, vice chair, forestry; Steve Butler, agriculture; Sen. Jon Blair Hunter, advocacy of environmental protection; Dr. Henry Rauch, water pollution control; Ronald L. Crites, general public interest; Charles K. Meadows II, quarry operations.

During FY19, SMB accomplished:

- Filed no new appeals, so it did not meet.
- Entered two orders: 1. Appeal No. 2015-04-SMB (Howard Workman v. WVDEP and Brooks Run Mining Company, LLC) was dismissed for failure to prosecute.; 2. Appeal No. 18-03-SMB (Panther Creek Mining, LLC v. WVDEP) was dismissed by agreement of the parties.

Solid Waste Management Board

The Solid Waste Management Board (SWMB) develops solid waste management plans, disburses loans and grants for solid waste disposal projects, and provides program implementation and technical assistance to 50 county and regional solid waste authorities (SWAs) and other government entities in solid waste management. This includes municipalities that have been mandated by the Legislature to establish source separation and curbside recycling programs.

During FY19, the SWMB accomplished:

- Met 12 times, evaluated and approved 10 Commercial Solid Waste Facility Siting Plans and ten Comprehensive Litter and Solid Waste Control Plans, met or made contact with 48 local solid waste authorities (SWA's) and municipalities to conduct program reviews, provide technical, financial and business assistance, promoted recycling, market development, and planning functions.
- Distributed \$1.4 million in solid waste assessment fees to 50 local and regional solid waste authorities; awarded \$404,286 in grant funds to 39 local SWA's for a variety of improvement projects, including landfill and recycling processing equipment, financial examinations, educational training and certifications.
- Completed 28 quarterly performance measures two biennial performance reviews on SWA's operating commercial solid waste facilities to gauge productivity, determine effectiveness and efficiency of facility operations and identify serious impairments. The SWMB revised the category placement of the Nicholas County Solid Waste Authority to satisfactory and returned full legal authority back to the Nicholas County Solid Waste Authority.
- The Board published the 2019 West Virginia Solid Waste Management Plan two year update and it is available online at http://www.state.wv.us/swmb/State%20Plans/2019%20Complete %20State%20Plan.pdf .



west virginia department of environmental protection

3310 - Oil and Gas Trust Deposit Fund		
Beginning Cash at July 1, 2018		104,711
Revenues: Interest on Investments TOTAL REVENUE	2,502_	2,502
Ending Cash at June 30, 2019		107,213
Fund 3312 - Special Reclamation Water Quality Fund	I	
Beginning Cash at July 1, 2018		2,029,960
Revenues: Royalty Income Other Collections/Fees/Licenses Gift-Donation (SWN) Statutory Transfers (Intra-Agency) TOTAL REVENUE	0 0 375,000 <u>21,789,000</u>	22,164,000
Expenditures: Personal Services and Benefits Grants Reclamation Other TOTAL EXPENDITURES	1,878,776 5,318,374 15,493,068 1,185,808	23,876,026
Ending Cash at June 30, 2019		<u> </u>
3317 - Special Reclamation Administration Fund		
Beginning Cash at July 1, 2018		580,712
Revenues: Fees Statutory Transfers (Intra-Agency) TOTAL REVENUE	0 1,455,000	1,455,000
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES	955,664 836,198	1,791,862
Ending Cash at June 30, 2019		243,850

25,667,888

Fund 3004 - Above Ground Storag	e Tank Administrative Fund

Beginning Cash at July 1, 2018		1,703,911
Revenues: Other Collections/Fees/Licenses Fines & Penalties Interest on Investments TOTAL REVENUE	1,032,590 199,519 65,561	1,297,670
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES	635,528 144,887	780,415
Ending Cash at June 30, 2019		2,221,166
Fund 3016 - Protect Our Water Fund Beginning Cash at July 1, 2018		1,218,101
Revenues: Other Collections/Fees/Licenses Interest on Investments TOTAL REVENUE	37,950 45,054	83,004
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES	8,726 1,371	10,097
Ending Cash at June 30, 2019		1,291,008

790,512

Fund 3023 - Hazardous Waste Management Fee Fund	l	
Beginning Cash at July 1, 2018		2,057,586
Revenues: Fees Interest on Investments TOTAL REVENUE	689,350 71,507	760,857
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES	634,723 138,177	772,900
Ending Cash at June 30, 2019		2,045,543
Fund 3024 - Air Pollution Education and Environment Fund		
Beginning Cash at July 1, 2018		1,085,369
Revenues: Fines and Penalties TOTAL REVENUE	851,083	851,083
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES	365,508 232,448	597,957
Ending Cash at June 30, 2019		1,338,495
Fund 3206 - The Dam Safety Fund		
Beginning Cash at July 1, 2018		422,010
Revenues: Permits Interest on Investments Other Collections/Fees/Licenses TOTAL REVENUE	14,425 15,240 25,530	55,195
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES	0 55,668	55,668
Ending Cash at June 30, 2019		421,537

Fund 3217 - Leaking Underground Storage Tank Response Fund

Beginning Cash at July 1, 2018		667,959
Revenues: Other Collections/Fees/Licenses Interest on Investments TOTAL REVENUE	93,319 23,526	116,846
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES	65,814 27,928	93,742
Ending Cash at June 30, 2019		691,063
Fund 3218 - Underground Storage Tank Insurance Fund Beginning Cash at July 1, 2018 Expenditures:		3,002,722
Personal Services and Benefits Other TOTAL EXPENDITURES	4,214 251,552	255,767
Ending Cash at June 30, 2019		2,746,955
Fund 3220 - Groundwater Protection Fund Beginning Cash at July 1, 2018		3,184,316
Revenues: Fees Interest on Investments TOTAL REVENUE	1,127,272 106,291	1,233,563
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES	839,724 620,522	1,460,247
Ending Cash at June 30, 2019		2,957,632

1,809,756

Fund 3222 - Groundwater Remediation Fund			
Beginning Cash at July 1, 2018		740,221	
Revenues: Interest on Investments Fines and Penalties TOTAL REVENUE	28,969 43,080	72,049	
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES	25,728 1,926	27,654	
Ending Cash at June 30, 2019		784,616	
3255 - Performance Bond Monongalia Co. Landfill Fur	<u>ıd</u>		
Beginning Cash at July 1, 2018		648,754	
Revenues: Interest on Investments TOTAL REVENUE Ending Cash at June 30, 2019	15,503	<u>15,503</u> 664,257	
Fund 3301 - Operator Permit Fees Fund Beginning Cash at July 1, 2018		2,550,252	
Revenues: Other Collections/Fees/Licenses Fines and Penalties TOTAL REVENUE	1,350,950 31,864	1,382,814	1,507,469
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES	1,111,552 368,262	1,479,815	
Ending Cash at June 30, 2019		2,453,251	

Fund 3321 - Special Reclamation Trust Fund	I	
Beginning Cash at July 1, 2018		44,695,202
Revenues: Other Collections/Fees/Licenses Interest on Investments Fines and Penalties Court Settlement Revenues TOTAL REVENUE	12,193,331 1,774,142 976,343 250,088	27,440,123
Expenditures: Personal Services and Benefits Statutory Transfers (Intra-Agency) Reclamation Other	898,045 4,845,000 3,298,285 711,832	
TOTAL EXPENDITURES		9,753,163
Ending Cash at June 30, 2019		62,382,162
Fund 3322 - Oil and Gas Reclamation Trust	1	
Beginning Cash at July 1, 2018		374,988
Revenues: Well Work Permit Fees TOTAL REVENUE	84,450	84,450
Expenditures: Personal Services and Benefits Reclamation TOTAL EXPENDITURES	304 90,760	91,064
Ending Cash at June 30, 2019		368,374
3323 - Oil and Gas Operating Permits		
Beginning Cash at July 1, 2018		3,040,891
Revenues: Fines & Penalties Well Work Permit Fees Horizontal Well Permit Fees Other TOTAL REVENUE	98,208 482,800 2,722,000 0	3,303,008
Expenditures: Personal Services and Benefits Reclamation Other	2,455,538 119 1,081,063	
TOTAL EXPENDITURES		3,536,720
Ending Cash at June 30, 2019		2,807,179

13,380,947

Fund 3324 - Mining and Reclamation Operations Fund			
Beginning Cash at July 1, 2018		4,349,886	
Revenues: Other Collections/Fees/Licenses Interest on Investments Fines and Penalties Court Settlement Revenues TOTAL REVENUE	1,882,370 1,390,995 323,422 637	2,345,523	
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES	1,810,168 444,765	2,254,933	
Ending Cash at June 30, 2019		4,440,476	
Fund 3325 - Underground Storage Tank Administrative Fund			
Beginning Cash at July 1, 2018		723,636	
Revenues: Fees/Permits Interest on Investments Fines and Penalties TOTAL REVENUE Expenditures:	278,866 21,672 47,051	347,589	
Personal Services and Benefits Other TOTAL EXPENDITURES	272,266 105,634	377,899	2,949,392
Ending Cash at June 30, 2019		693,326	
3326 - Hazardous Waste Management HG1479 Fund			
Beginning Cash at July 1, 2018		527,541	
Revenues: Other Collections/Fees/Licenses Fines and Penalties TOTAL REVENUE	20,924 161,491	182,415	
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES	297,017 19,542	316,560	
Ending Cash at June 30, 2019		393,396	

Fund 3327 - Water Quality Management Fund		
Beginning Cash at July 1, 2018	-	46,721,450
Revenues: Departmental Fees Fines and Penalties Interest on Investments Court Settlement Revenues TOTAL REVENUE	6,274,821 5,129,153 1,029,400 373	12,433,746
Expenditures: Personal Services and Benefits Grants/Loans Other TOTAL EXPENDITURES	4,835,805 757,468 2,771,422	8,364,694
Ending Cash at June 30, 2019	_	50,790,502
Fund 3328 - Closure Cost Assistance Fund		
Beginning Cash at July 1, 2018		18,248,740
Revenues: Solid Waste Assessment Fees Interest on Investments TOTAL REVENUE	8,450,950 443,420	8,894,370
Expenditures: Personal Services and Benefits Reclamation Other TOTAL EXPENDITURES	918,150 2,360,881 3,363,511	6,642,543
Ending Cash at June 30, 2019		20,500,567
3329 - Water Pollution Control Revolving Fund		
Beginning Cash at July 1, 2018		112,249,811
Revenues: Fees Interest on Investments Interest - Loans Interagency Fed Payments TOTAL REVENUE	41,844,495 3,943,775 2,685,794 25,020,000	73,494,064
Expenditures: Grants/Loans TOTAL EXPENDITURES	40,843,293	40,843,293_
Ending Cash at June 30, 2019		144,900,582

55,850,530

Fund 3331 - Hazardous Waste Emergency and Response Fund	<u>1</u>	
Beginning Cash at July 1, 2018		567,755
Revenues: Interest on Investments Solid Waste Assessment Fees Gain/Loss Sale or Disposition Court Settlement Revenues TOTAL REVENUE	18,089 928,387 0 53,015	1,034,301
Expenditures: Personal Services and Benefits Reclamation Other TOTAL EXPENDITURES	229,639 14,020 448,391	692,050
Ending Cash at June 30, 2019		910,006
Fund 3332 - Solid Waste Reclamation and Environmental Resp	oonse	
Beginning Cash at July 1, 2018		408,691
Revenues: Operating Funds Transfer Solid Waste Assessment Fees Fines and Penalties TOTAL REVENUE	824,831 1,158,692 30,803	2,050,058
Expenditures: Personal Services and Benefits Reclamation Grants/Loans Fund Transfer Other TOTAL EXPENDITURES	472,554 662,236 71,432 0 527,767	1,733,989
Ending Cash at June 30, 2019		724,760
3333 - Solid Waste Enforcement Fund		
Beginning Cash at July 1, 2018		5,320,691
Revenues: Operating Funds Transfer Fines & Penalties Solid Waste Assessment Fees TOTAL REVENUE	0 2,242 3,456,061	3,606,210
Expenditures: Personal Services and Benefits Statutory Transfers (Intra-Agency) Other	2,017,719 0 637,699	
TOTAL EXPENDITURES		2,655,418
Ending Cash at June 30, 2019		6,271,483

is the reclamation on vienna site not considered part of this

5,081,457

Fund 3336 - Air Pollution Control Fund		
Beginning Cash at July 1, 2018		5,710,289
Revenues: Fees TOTAL REVENUE	6,830,135	6,830,135
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES	4,233,156 1,390,859	5,765,015
Ending Cash at June 30, 2019		6,775,409
Fund 3337 - Gifts and Donations Fund		
Beginning Cash at July 1, 2018		109,991
Revenues: Other Collections/Fees/Licenses Gifts and Donations TOTAL REVENUE	1,004 53,843	54,847
Expenditures: Other TOTAL EXPENDITURES	57,509	57,509
Ending Cash at June 30, 2019		107,329
Fund 3340 - Environmental Laboratory Certification Fund		
Beginning Cash at July 1, 2018		1,082,782
Revenues: Audit Fees Interest on Investments TOTAL REVENUE	350,673 39,018	389,692
Expenditures: Personal Services and Benefits Other	287,823 124,198	
TOTAL EXPENDITURES		392,021
Ending Cash at June 30, 2019		1,080,453

6,214,545

eginning Cash at July 1, 2018		11,264,382
evenues:		
Administrative Fees	3,206,282	
Interest on Investments	413,257	
OTAL REVENUE		3,619,539
xpenditures:		
Personal Services and Benefits	1,248,792	
Grant/Loans	101,056	
Other	434,367	
OTAL EXPENDITURES	<u>.</u>	1,784,215
ding Cash at June 30, 2019		13,099,706
345 - Special Reclamation Tax Clearing Account		
eginning Cash at July 1, 2018		2,822,067
evenues:		
Interest on Investments	3,004	
Coal Tonnage Fees	203,584	
DTAL REVENUE		206,588
DTAL EXPENDITURES		0
nding Cash at June 30, 2019		3,028,655
und 3347 - Voluntary Remediation Administrative Fund		
eginning Cash at July 1, 2018		1,506,906
evenues:		
Other Collections/Fees/Licenses	485,810	
Interest on Investments	57,076	
DTAL REVENUE		542,886
penditures:		
Personal Services and Benefits	153,022	
	134,306	
Other		
Other DTAL EXPENDITURES		287,328

2,071,543

Fund 3349 - Stream Restoration Fund		
Beginning Cash at July 1, 2018		3,561,110
Revenues: Interest on Investments Fines and Penalties Other Collections/Fees/Licenses & Incm TOTAL REVENUE	100,506 203,000 4,220	307,726
Expenditures: Grants/Loans Other TOTAL EXPENDITURES	70,612 702	71,314_
Ending Cash at June 30, 2019		3,797,522
Fund 3480 Covered Electronic Devices Takeback Fund		
Beginning Cash at July 1, 2018		211,265
Revenues: Other Collections & Fees Departmental Collections TOTAL REVENUE	10,433 91,500	101,933
Expenditures: Other TOTAL EXPENDITURES	111,482	111,482_
Ending Cash at June 30, 2019		201,716
Fund 3482 - Special Reclamation Water Trust Fund		
Beginning Cash at July 1, 2018	-	113,364,467
Revenues: Interest on Investments Coal Tonnage Fees TOTAL REVENUE	1,108,064 14,286,367	15,394,431
Ending Cash at June 30, 2019		128,758,898

3484 - Highway Litter Control Program		
Beginning Cash at July 1, 2018		782,467
Revenues: Fees TOTAL REVENUE	375,000	375,000
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES Ending Cash at June 30, 2019	335,772 31,323	<u>586,914</u> 570,553
Fund 3486 - Litter Control Fund		
Beginning Cash at July 1, 2018		59,799
Revenues: Other Collections-Fines & Fees Prior Year Expiring Funds TOTAL REVENUE	22,064 10,613	32,677
Expenditures: Grant /Loans TOTAL EXPENDITURES	59,474	59,474
Ending Cash at June 30, 2019		33,002

646,388

3487 - Recycling Assistance Fund			
Beginning Cash at July 1, 2018		2,067,179	
Revenues: Prior Year Expiring Funds Solid Waste Assess Fees TOTAL REVENUE	103,574 2,380,959	2,484,533	
Expenditures: Grants/Loans Personal Services & Benefits Reclamation Other TOTAL EXPENDITURES	1,741,933 388,698 0 210,095	2,350,339	
Ending Cash at June 30, 2019		2,201,373	
Fund 3488 - Shiloh Environmental and Landfill Trust			
Beginning Cash at July 1, 2018		157,859	
Revenues: Interest on Investments TOTAL REVENUE	2,975	2,975	
Expenditures: Other TOTAL EXPENDITURES	44,674	44,674	
Ending Cash at June 30, 2019		116,160	
Fund 3490 - Mountain Top Removal	I		
Beginning Cash at July 1, 2018		1,938,326	
Revenues: Interest on Investments Fees TOTAL REVENUE	66,035 696,842	762,878	
Expenditures: Personal Services and Benefits Other Transfers to Coalfield Development TOTAL EXPENDITURES	354,465 184,110 181,108	719,683	
Ending Cash at June 30, 2019		1,981,521	

3,114,696

Fund 3492 - Bond Pooling Fund	l i i i i i i i i i i i i i i i i i i i	
Beginning Cash at July 1, 2018		1,689,430
Revenues: Performance Bonds TOTAL REVENUE	89,438	89,438
TOTAL EXPENDITURES		0
Ending Cash at June 30, 2019		1,778,868
Fund 3493 - Quarry Reclamation Fund	l	
Beginning Cash at July 1, 2018		355,532
Revenues: Fines & Penalties Interest on Investments. TOTAL REVENUE	0 80,329	82,929
TOTAL EXPENDITURES		0
Ending Cash at June 30, 2019		438,461
Fund 3494 - Quarry Inspection and Enforcement Fund	I	
Beginning Cash at July 1, 2018		105,353
Revenues: Interest on Investments Operating Permit Fees TOTAL REVENUE	4,000 8,100	12,100
Expenditures: Other TOTAL EXPENDITURES	6,234	6,234

6,234

Fund 3275 - Special Revenue Operating Fund		
Beginning Cash at July 1, 2018		52,357
Revenues: Operating Funds Transfer TOTAL REVENUE	42,909	42,909
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES	17,387 14,447	31,834_
Ending Cash at June 30, 2019		63,432
Fund 3287 - Facilities Operating Expense Fund Beginning Cash at July 1, 2018 Expenditures: Other TOTAL EXPENDITURES	(171,441)	2,647,901 (171,441)
Ending Cash at June 30, 2019 Fund 3288 - Planning Fund		<u></u>
Beginning Cash at July 1, 2018	_	2,878,243
Revenues: Solid Waste Assessment Fees Court Settlement-Litigation Awards Other Collections TOTAL REVENUE	2,849,047 0 0	2,849,047
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES	557,539 1,978,105	2,535,644
Ending Cash at June 30, 2019		3,191,646

2,396,037

Fund 3371 -Special Oil and Gas Conservation Fund				
Beginning Cash at July 1, 2018		1,040,076		
Revenues: Special Conservation Tax TOTAL REVENUE	174,895	174,895		
Expenditures: Personal Services and Benefits Other TOTAL EXPENDITURES Ending Cash at June 30, 2019	75,964 94,697	<u> </u>		
Fund 8708 - Federal Funds				
Beginning Cash at July 1, 2018		9,633,004		
Revenues: Federal Grant Direct DOD Prior Year Expiring Funds Fees & Micellaneous TOTAL REVENUE Expenditures: Personal Services and Benefits Reclamation Grants/Loans Fund Transfer Other TOTAL EXPENDITURES Ending Cash at June 30, 2019	90,461,584 0 76,294 19,566,138 13,361,875 29,214,618 10,726,293 10,407,156	90,537,878 <u>93,276,080</u> <u>6,894,802</u>		94,979,657
Fund 8796 - Acid Mine Drainage Abatement & Treatment Fund				
Beginning Cash at July 1, 2018		84,835,594		
Revenues: Operating Funds Transfer Fees Interest on Investments TOTAL REVENUE	10,726,293 0 1,137,796	11,864,089		
Expenditures: Reclamation Other TOTAL EXPENDITURES	320,659 1,212,257	1,532,916	94,979,657	
Ending Cash at June 30, 2019		95,166,767		