

Wyoming Department of Environmental Quality

Annual Report

FY2019

Agency Information

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- Other Locations: Casper, Lander, Rock Springs, Sheridan and Pinedale

Statutory References

- The Environmental Quality Act and the Industrial Development Information and Siting Act.

Basic Information

- Number of Employees: 264
- Clients Served: The people of Wyoming, Wyoming businesses, Federal, State, local government, non-government organizations and others.

Budget Information

- The FY2019/2020 operating budget for the Wyoming Department of Environmental Quality was \$175.4 million.

Primary Functions

The Department of Environmental Quality (DEQ) was established by the Wyoming Environmental Quality Act and Industrial Development Information and Siting Act pursuant to W.S. § 35-11-101 through 2001 and W.S. § 35-12-101 through 119, respectively. As Wyoming's environmental regulatory agency, DEQ is responsible for the implementation and enforcement of delegated federal programs under the Clean Air Act, Clean Water Act, Safe

Drinking Water Act, Resource Conservation and Recovery Act and Surface Mining Control and Reclamation Act, as well as other state environmental regulatory programs.

DEQ consists of seven divisions: Air Quality (AQD), Water Quality (WQD), Solid and Hazardous Waste (SHWD), Land Quality (LQD), Industrial Siting (ISD), Abandoned Mine Lands (AML) and Administration (ADM). DEQ has 264 employees located in Sheridan, Lander, Casper, Rock Springs, Pinedale and headquartered in Cheyenne.

Together we ensure that Wyoming's natural resources are managed to maximize the economic, environmental and social prosperity of current and future generations. DEQ does this through a combination of monitoring, permitting, enforcement, remediation and restoration activities which protect, conserve and enhance the environment while supporting responsible stewardship of Wyoming's resources. Other important DEQ functions include human resources, accounting and emergency response. Together, DEQ's programs serve over 5,000 businesses operating thousands of facilities across the state.

Over the past decade, the overall workload of DEQ has grown. To effectively deal with that growth and the on-going environmental management requirements associated with expanding regulatory oversight from federal agencies, DEQ continually works to identify efficiency opportunities in programs. DEQ has implemented a paperless office initiative and worked with outside consultants to improve performance in targeted areas. DEQ continually looks for opportunities to re-structure programs in a manner that brings added focus to priority areas and make concerted efforts to collaborate with stakeholder groups to make the agency more efficient.

- DEQ's Mission: To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.
- DEQ's Values: The success of this mission requires our shared commitment to values that define and guide who we are, what we do and how we do it. These values are:
 - We are proactive by anticipating future impacts on Wyoming's environment and taking actions to minimize those impacts.
 - We are innovative by encouraging people from both inside and outside the agency to consider new approaches to protecting, preserving and enhancing a healthy environment.
 - We are consistent by fairly applying and implementing regulatory requirements.
 - We are responsive through timely and open communications with the public, the regulated community and other stakeholders who are affected by our work.
 - We are committed to a culture and work environment where everyone is treated respectfully, professionally developed and continuously challenged.
 - We are decisive and make decisions in a rigorous and timely manner supported by thorough analysis, quality data and sound rationale.

- DEQ's Vision Statement: The Wyoming Department of Environmental Quality envisions a future where vibrant economic development and prosperity is achieved while providing sound and sensible environmental protection for the benefit of Wyoming and its citizens.

Performance Highlights: DEQ developed goals that describe the broad environmental responsibilities with which the various Divisions are tasked. Below, these goals have been incorporated into the department performance highlights for FY2019.

Goal 1 – To investigate, remediate and restore contaminated and disturbed sites

DEQ investigates, remediates and restores contaminated and disturbed sites in order to protect the health, welfare and safety of Wyoming's citizens and to preserve, reclaim and enhance air, land and water resources of the state.

Abandoned Mine Lands

- Since the initiation of the Wyoming Abandoned Mine Land (AML) reclamation program in 1983, reclamation activities have included restoration of approximately 28,374 acres of degraded and unproductive abandoned mine land back to beneficial use as wildlife habitat and rangeland. Additionally, 2,476 mine openings have been closed and over 621,917 linear feet of dangerous highwalls have been remediated. Since its inception, AML has restored over 127 miles of impaired streams and 2,121 acres of impaired lands adjacent to streams. In FY2019 alone, AML reclaimed approximately 184 acres of unproductive abandoned mine lands, closed three mine openings, remediated four acres of underground coal mine fires and mitigated approximately 22 acres of underground mine subsidence at 11 different sites.
- In FY2019, the AML Program drilled 561 holes for subsidence evaluation and grout injection. It injected approximately 67,882 cubic yards of grout into underground voids in Glenrock, Rock Springs, Reliance, Superior, Kemmere, and Evanston, as well as an area in Carbon County where the Gateway West Transmission line is being built. To date, it is estimated that about 19,828 holes have been drilled to inject approximately 608,669 cubic yards of grout for underground mine subsidence mitigation. AML is continuing to investigate subsidence in all the locales listed above as well as Hanna, WY where preparations are underway to start subsidence mitigation grouting on several phases of work in the Hanna/Elmo areas.
- In recent years, AML has implemented a geomorphic design into the reclamation of areas with surface disturbance. This process seeks to match the surrounding undisturbed landform and create areas that will capture snow, control erosion and result in more successful revegetation of those sites. This process has been further refined and modified to achieve significant success on the ground, including the establishment of new and enhanced revegetation techniques. All AML projects outside of developed towns and cities are designed to better support Wyoming's wildlife.

- In FY2019, AML worked with the Bureau of Land Management (BLM) to create the AML Native Plants Project. This project focuses on restoring sagebrush in AML reclamation project areas.

Industrial Siting

- 251 spills and 30 complaints were reported during FY2019.
- The Industrial Siting Division (ISD) continues to implement the centralized bonding program. This has been a significant undertaking requiring the transfer of existing files from the other divisions, review for adequacy and development of standardized bonding documents. The transfer of responsibility to the centralized bonding program has been completed and the initial record review of all bonding actions will be completed in the coming year. The bonding staff reviews all agency bonding documents to ensure the protection of the state's interest.
- ISD completed 425 bonding actions during FY2019.
- The bonding program currently manages 1,222 bond instruments with a value of \$3.5 billion, the breakout of those instruments is listed below:
 - 960 bonding instruments with a value with \$3.18 billion for Land Quality;
 - 86 bonding instruments with a value with \$25.1 million for Solid Waste;
 - 33 bonding Instruments with a value with \$252.7 million for Hazardous Waste;
 - 5 bonding instruments with a value with \$76.1 million for Industrial Siting; and
 - 138 bonding instruments with a value of \$114.6 million for Water Quality.

Land Quality

- The reclamation of disturbed lands is a focal point for the Land Quality Division (LQD). The cumulative Phase III bond release for coal in FY2019 was 20,495 acres. As of FY2019, 107,000 acres of the 147,000 eligible disturbed acres are in phase I, phase II, phase III reclamation, or have met all criteria and received termination of jurisdiction. A total of 50,000 acres of the 107,000 acres in reclamation are back in agricultural production and joint wildlife productive use. Presently, LQD data indicates that the reclamation acreage completed through phases I, II, and III has continued to increase during recent years as the mine operations mature. LQD continues to work with industry to actively process bond release applications and termination of jurisdiction requests.

Solid and Hazardous Waste

- The Orphan Sites Remediation Program (OSRP) continues to make significant progress at remediating sites. Legislation passed in the 2018 Legislative Session provided a source of future funding for OSRP

activities and the OSRP anticipates that several investigation and cleanup projects will be initiated in 2019 and 2020 as a result of that funding. Summary of OSRP accomplishments are listed below:

- Evaluation of innovative remedial technologies implemented at the Casper and Sheridan PCE Groundwater Plume sites continue to show positive results in 2019.
 - An innovative and green remedial technology to remediate groundwater at the Mountaineer site in Lincoln County was constructed and continues operation.
 - Soil gas characterization was conducted for the Cheyenne PCE Plume site which evaluated the extent of soil gas and potential indoor air impacts to residential and commercial buildings. Current results indicate no additional buildings require mitigation.
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- Funding that became available in the winter 2018 is currently being used to conduct Phase 1 and Phase 2 activities at orphan sites that were previously not investigated. There are currently 11 inactive ranked orphan sites and another potential 30 orphan sites not yet ranked due to lack of information.
 - The Brownfields Assistance Program (BFAP) had a number of successes in FY2019. There are eight open brownfield sites in the Voluntary Remediation Program, four of which are led by BFAP. BFAP also made significant contributions in supporting communities, economic development organizations and conservation districts to provide assistance in understanding and applying for Targeted Brownfields Assistance from EPA. BFAP also collaborated with the City of Casper, Kansas State University and United States Environmental Protection Agency (EPA) to develop and host a national Brownfields workshop in Casper. In addition, the BFAP continues outreach and education to Wyoming communities and facilities to highlight the availability of an \$800,000 Revolving Loan Fund (RLF). The RLF makes available loans and sub-grant funds to governmental and eligible private entities for clean-up of contaminated property and make it ready for redevelopment. In addition, BFAP was successful in obtaining a \$325,000 site-specific assessment grant from EPA in 2018 for the Sheridan Acme Power Plant site owned by the Sheridan County Conservation District. There is significant community interest in cleanup and reuse of the site and assessment activities continue under that grant.
 - The Storage Tank Program continued its work cleaning up contamination from petroleum storage tank leaks around the state. There have been 1,635 known contaminated sites in Wyoming and 1,306 have been remediated to date. The remaining sites are either in the process of being cleaned up or scheduled for remediation.
 - In FY2019, the SHWD Landfill Remediation Program continued to make progress. The remediation process is underway at three high priority sites (the City of Casper, City of Sheridan and Campbell County). The Department completed a flexible membrane cap over a previously uncapped 14 acres of waste thereby reducing the amount of water infiltration at that facility. Investigative work at the

Sheridan and Campbell County II landfills continued efforts to determine the nature and extent of contamination and to assess potential remedial actions. Installation of a flexible membrane cap and an active gas collection and control system has begun at the Campbell County I landfill. In addition, the Department began to evaluate four other high priority sites (Newcastle, Guernsey, Buffalo, and Riverton) and refine cost estimates in preparation for bringing those sites into the program. The Department is also working at six other sites (Sundance “old dump”, Pinedale #2, Boulder, Daniel Junction, Midwest/Edgerton #2, and Hulett) to collect and evaluate information needed to further refine the priority for remediation at those facilities. The Department continues to evaluate the remaining landfills on the Remediation priority list for entry into the program.

- The Hazardous Waste Permitting/Corrective Action Program (HWPCA) made significant accomplishments in permitting by collaborating with two facilities to develop ten-year renewal permit applications that during the reporting period resulted in issuance of one final permit renewal and a renewal permit application received and reviewed. A revised permit application will be submitted in FY2020. There are eight HWPCA facilities undergoing corrective action. HWPCA conducted a significant amount of remediation work that resulted in constructing and/or completing remedies at 14 contaminated areas at two permitted facilities. There are also seven sites in investigation and/or remediation being conducted under administrative orders. In FY2019, one site with administrative order had the order replaced with a VRP remedy agreement. HWPCA also issued a letter of concurrence of investigation completed and no remedy needed for three Wyoming Army Reserve National Guard Non-Department of Defense Owned, Non-Operational, Defense Sites, as well as a letter of concurrence of a remedial alternative at one site.
- The Voluntary Remediation Program added four new sites, selected remedies at four sites and completed remediation at six sites. There are 101 sites actively undergoing investigation and/or remediation; ten of which are complex sites that cover a significant number of acres and have soil, groundwater and potentially other media impacted by a number of contaminants.

Water Quality

- WQD administers grant funds (i.e., Clean Water Act Section 319 and Section 205(j) grant funds) disbursed by the EPA to support voluntary and locally led projects (selected through the Governor-appointed Nonpoint Source Task Force) that restore and protect waters of the state. The 2019 report is available on WQD’s webpage at <https://wdeq.maps.arcgis.com/apps/Cascade/index.html?appid=cde205ea41fd4416837b1f83c0113162>
- DEQ has included a description of the rationale and process for prioritizing waters for the Total Maximum Daily Load (TMDL) development as part of Wyoming’s 2022 Vision in its 2018/2020 Integrated Report

(IR). The results (i.e., the “2022 Vision”) are provided in the IR. In addition to those waters listed in the IR, DEQ is also actively engaged in a number of other water quality and watershed protection efforts that will be completed by or after 2022. These include Boysen Reservoir, Little Medicine Bow River, Shoshone River and Bitter Creek.

- During FY2019, WQD facilitated and implemented plans for the reclamation of both orphaned and unused Coal Bed Methane (CBM) on-channel impoundments associated with CBM development. As of FY2019:
 - 404 total reservoirs are bonded for a total of \$16,078,833
 - 87 reservoirs are currently under a reclamation contract
- WQD coordinated with the State Engineers Office to ensure that all Coal Bed Methane (CBM) on-channel impoundments retained by landowners were properly permitted prior to release of bonds.

Goal 2 - To collect, manage and monitor the environmental data needed to accomplish agency responsibilities

DEQ continues to strive for excellence in developing and maintaining scientifically based and quality controlled data to support the DEQ’s diverse programs, activities and regulatory responsibilities.

Air Quality

- Throughout FY2019, the AQD Monitoring Section focused on operating and maintaining an effective and efficient network of ambient air quality monitors. To do so, the Monitoring Section continually employed efficient use of available staff and fiscal resources in conjunction with identifying monitoring priorities.
- Ambient monitoring data for 124 AQD ambient monitors was quality assured and submitted to EPA in a timely fashion in accordance with the Code of Federal Regulations and the DEQ-EPA Performance Partnership Agreement (PPA). In addition, the 2018 AQD Data Certification and the 2019 AQD Network Plan were completed. The ambient monitoring reflects compliance with all ambient air quality standards. Ozone monitoring within the Upper Green River Basin (UGRB) Ozone Nonattainment area shows attainment with the 2008 and 2015 national ambient air quality ozone standards for the 2016-2018 calendar year period.
- For FY2019, the AQD Emissions Inventory Section completed quality assurance and emissions inventory entry for all inventory formats (major, sulfur dioxide (SO₂), minor, oil and gas, smoke management and greenhouse gases) into the respective databases to meet EPA and State reporting requirements and the DEQ-EPA Performance Partnership Agreement.

- During the 2019 Winter Ozone Season in the UGRB (January through March), ozone levels elevated above the 2015 standard on ten (10) days.
- Ozone precursor emissions of Nitrogen Oxide (NOx) and Volatile Organic Compounds (VOC) in the UGRB remain significantly reduced. From 2008-2018, NOx has been reduced by 1,561 tons and VOCs reduced by 6,721 tons through New Source Review permitting.

Industrial Siting

- ISD, through the Industrial Siting Council, approved four wind energy generation projects and two transmission project in FY2019.
- ISD coordinated two meetings of the Renewable Energy Coordination Committee (RECC). RECC meetings help identify emerging issues and developments and coordinate activities with other state and federal agencies.
- ISD maintained communication with the Commissioners and County Clerks in Albany, Sweetwater, Natrona, Converse and Carbon counties and municipalities within the area primarily affected by current and proposed projects.
- ISD met all statutory deadlines for permit actions conducted.

Land Quality

- The LQD IT initiative advanced with the testing of electronic permit applications in FY2016. The modules of the Mining Information Database system (MIDAS) e-permitting system include a functional system, electronic records center, inspection application, electronic permitting, correspondence libraries and GIS integration. Five of the six modules are operational with the GIS module becoming active in Q4 of 2018. The e-permitting system has been expanded to include annual reports, correspondence, 32% of the active coal permits, Limited Mine Operation and small mine permits. Land Quality continues to actively work with coal mine operators to convert their large permits into the MIDAS format as of the time of this report. Land Quality also formed a trona working group to standardize trona reporting formats and begin to move the trona permitting to an electronic format. The records center, electronic inspection application and correspondence applications are operational and being used by LQD staff for coal and non-coal inspection reports and correspondence tracking.
- The LQD is moving forward with outreach and operator training for the MIDAS system. Training activities will continue in FY2020.

Water Quality

- In accordance with former Governor Mead's Water Strategy Initiative #8, which calls for appropriate evaluation and use of surface water quality data for reporting and decision making purposes, WQD completed its policy regarding the criteria used for water quality data acceptance and use, including training requirements of third party data collection programs. All data and QA/QC materials from non-WQD entities will be evaluated against QA/QC procedures established in WQD's new policy.
- In accordance with former Governor Mead's Energy Strategy Initiative #6C, WQD will expand implementation of its Unified Groundwater Data Management System to provide for efficient data management and data analysis. Progress toward completion of this objective was delayed due to software issues within the data management system. Issues have since been resolved. Implementation strategies for outreach, education and use of the system will be carried forward in WQD's strategic plan.

Goal 3 - To develop a clear, concise and consistent regulatory framework

The development of a regulatory framework that regulated entities and the public can easily understand with certainty is key to efficient regulation.

Air Quality

- The AQD State Implementation Plan (SIP) and Rule Development Section continues to review air quality regulations for reduction and/or streamlining opportunities. The division submitted three State Plans or updates to EPA. The first update included changes to the Regional Haze SIP that were necessary for the PacifiCorp Naughton facility. The second SIP submittal was for the Infrastructure SIP for the 2008 Ozone National Ambient Air Quality Standards (NAAQS). The third SIP submittal was for the 2015 Ozone NAAQS Infrastructure SIP.
- AQD's Asbestos Section is nearing completion of its review of rules and proposed revisions to address Asbestos and incorporation by reference in order to streamline, simplify and better organize the existing regulations.
- The AQD continues to participate and comment on federal rule revisions or development opportunities. During FY2019, the AQD prepared or submitted comment on four federal actions, including:
 - Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program – Docket ID EPA-HQ-OAR-2017-0355;

- Agency Information Collection Activities; Proposals, Submissions, and Approvals: Ambient Air Quality Surveillance (Renewal) – Docket ID EPA-HQ-OAR-2002-0091;
- Review of Standards of Performance for Greenhouse Gas Emissions From New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units – Docket ID EPA-HQ-OAR-2013-0495; and
- National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units - Reconsideration of Supplemental Finding and Residual Risk and Technology Review – Docket ID EPA-HQ-OAR-2018-0794.

Industrial Siting

- The Industrial Siting Division continues to provide assistance to industry, government and the public in understanding and operating efficiently within the divisions' regulatory framework.

Land Quality

- The Agreement State between the U.S. Nuclear Regulatory Commission (NRC) and Wyoming was signed into place by former Governor Mead and became effective on October 1, 2018. The Uranium Recovery Program (URP) has been in operation under LQD since that time. The URP will be formally audited by the NRC in the fourth quarter of 2019.
- The LQD completed the coal and non-coal financial assurance rules and regulation revisions, which were signed by Governor Gordon on May 3, 2019.
- The LQD initiated a trona industry working group to standardize permits and reporting. This initiative will set the groundwork to facilitate moving the trona permits into a digital permit format in MIDAS.

Solid and Hazardous Waste

- As part of former Governor Mead's Streamlining Rules Initiative, the Solid Waste Permitting and Corrective Action Program completed revisions to Chapters 4 (Construction/Demolition Landfill Regulations) and Chapter 6 (Transfer, Treatment, and Storage Facility Regulations) of the Solid Waste Rules and Regulations in FY2019.
- On December 16, 2016 the Water Infrastructure Improvements for the Nation Act was signed by the President. The law (Title II, Subtitle C, Section 2301) amends RCRA Subtitle D to give states the authority to establish permit programs for the EPA Coal Combustion Residuals from Electric Utilities (CCR) rule. In order for EPA to delegate authority to DEQ for the CCR program, DEQ will need to

develop regulations that are at least as protective as the 40 C.F.R. 257 CCR rules. These regulations must be in place before EPA will consider delegating authority to DEQ. DEQ drafted regulations that incorporate by reference the standards found in 40 C.F.R. 257. DEQ originally presented this rule to the Water & Waste Advisory Board in June 2019 and will continue the rulemaking process in FY2020.

- HWPCA's 2015 Incorporation by Reference of the federal RCRA rules and regulations were updated to be current with the June 30, 2018 federal regulations. The rule package was approved by the Environmental Quality Council and was signed by Governor Gordon on May 3, 2019. Development of the authorization package began and will be submitted to EPA in FY2020.

Water Quality

- Based upon comments received from a peer review group and EPA, WQD completed its draft nutrient criteria for lakes and reservoirs. Initial plans are underway for development of a rule package for nitrogen and phosphorous for lakes and reservoirs in south-central Wyoming.
- WQD worked with the Wyoming Department of Health and State Parks and Cultural Resources to develop and implement guidelines describing the roles and responsibilities of each agency with respect to responding to harmful cyanobacterial blooms (HCBs), and action levels that trigger responses from the agencies. The Harmful Cyanobacterial Bloom Action Plan is available on WQD's website at <https://www.wyohcbs.org/>
- WQD finalized and implemented regulations requiring financial assurance for Class V CBM-produced water injection wells during FY2019.
- WQD Section Managers provided one-day training to appropriate staff in reviewing existing Section policies, guidance documents and applicable regulations.
- WQD completed the required Class VI primacy package documents and worked through the process to achieve primacy approval from the EPA to implement the Class VI program. EPA has identified some technical deficiencies with WQD's Class VI rule that are now being resolved through DEQ's rule development process involving the Water & Waste Advisory Board and the EQC.
- The Wyoming Pollution Discharge Elimination System (WYPDES) Program has been working to complete enhancements to existing data management systems to comply with EPA's Electronic Reporting Rule by December 2020.

Goal 4 - To apply environmental standards and requirements that protect the environment while allowing for responsible economic development

DEQ strives to make the application of environmental standards easier for stakeholders to understand and for the regulated community to comply.

Abandoned Mine Lands

- AML has worked closely with other state agencies such as the Wyoming Game & Fish Department and the State Historic Preservation Office, and with federal agencies like the Office of Surface Mining Reclamation and Enforcement, the U.S. Fish and Wildlife Service, the Bureau of Land Management and the U.S. Forest Service to preserve important resources and establish appropriate seed mixes for sensitive wildlife species, such as the Greater-sage grouse.

Air Quality

- AQD's IMPACT enhancement and implementation continued on schedule and within budget during FY2019, including coordination and partnership with Maricopa County, New Mexico Air Quality Department on a related information management system project.
- The IMPACT data system was selected for an Association of Air Pollution Control Agencies (AAPCA) 2018 Best Practice Award.
- Award of a 2018 National Environmental Information Exchange Grant to automate the IMPACT to ICIS-Air data flow to EPA to the AQD in partnership with Maricopa County, New Mexico Air Quality Department.
- During FY2019, AQD's IMPACT continued to enhance industry use of the system with the total number of portal submissions increased by 18 percent since FY2018.
- During FY2019, the AQD released the Open Air website, as part of the IMPACT data system, to provide the public with access to data, public records, and other information about AQD-permitted facilities.
- IMPACT Team provided targeted training and documentation to support implementation of external and internal users including webinars, emails, phone calls and in-person meetings.
- The AQD's New Source Review Permitting Program reviewed and/or completed 1,312 permitting actions. Of those, 583 were for oil and gas production sites.
- The AQD's Title V Permitting Program issued 25 Title V operating permits.

Industrial Siting

- DEQ unveiled an Emissions Reduction Program in January 2018. Under this program, DEQ has worked with 19 school districts to replace 86 school buses using \$1,241,870 of Diesel Emission Reduction Act funds and \$1,336,556 of Volkswagen Mitigation Funds.
- Projected Annual Reductions of Tons Per Year (TPY) from those 86 buses:

NOx	PM 2.5	HC	CO	CO ₂
11.08	.8	1.14	2.7	703.8

- The Outreach Program created Sustainability and Innovative Practices program that focuses on pollution prevention activities at Wyoming Breweries and Distilleries to help reduce energy, water and waste usage while focusing on sustainability.
- The Outreach Program also has a Pollution Prevention Audit process that will assess environmental impacts at a facility. The conservation efficiency measures identified in the audit process may help achieve cost savings help identify opportunities to reduce energy, water and waste usage. Audits are offered to facilities at a reduced cost.

Land Quality

- The Land Quality Division met its statutory obligations for both coal and non-coal operation inspections throughout the state during the report period. The advancement and use of the MIDAS system is a key part of meeting this goal. The MIDAS system provides an efficient digital platform for inspection reports, records review and correspondence templates that facilitate faster and more efficient reviews of mining operations within the state.

Solid and Hazardous Waste

- During FY2019, SHWD’s Cease and Transfer Program, in conjunction with Office of State Lands and Investment, evaluated and recommended funding for four Landfill Closures. The estimated construction cost for these projects exceeds \$3.4 million. DEQ will continue to work with local communities to assist them in evaluating options for waste disposal.
- The Solid Waste Permitting Program reviewed, evaluated and completed 62 significant permit actions.
- One ten-year renewal permit for a Hazardous Waste Site was issued within the regulatory time frame.

- HWPCA collaborated with two facilities to develop ten-year renewal permit applications that during the reporting period resulted in issuance of one final permit renewal and receiving/reviewing an application received in January 2019. A revised application will be submitted in FY2020.
- HWPCA conducted a significant amount of remediation work that resulted in constructing and/or completing remedies at 14 contaminated areas at two permitted facilities. There are also seven sites in investigation and/or remediation being conducted under administrative orders. HWPCA issued a letter of concurrence of investigation completed and no remedy needed for three Wyoming Army Reserve National Guard NDNOD training sites, as well as a letter of concurrence of a remedial alternative at one site. The Voluntary Remediation Program had four new sites added, selected remedies at four sites and completed remediation at six sites.

Water Quality

- WQD continues work updating and streamlining groundwater monitoring requirements for permitted commercial oilfield waste disposal facilities and has developed the inventory of permitted commercial oilfield waste disposal facilities' monitoring requirements.
- Through rulemaking, WQD developed a procedure for surface water discharger-specific variances and provided opportunity for public review and comment.

Goal 5 - To ensure adherence with environmental standards and other requirements

In administering compliance programs, DEQ will promote a culture that engages both the regulated community and public to achieve attainment of environmental standards and laws.

Air Quality

- AQD's Compliance Program is on track to complete all 58 major source and five synthetic minor source inspections identified in AQD's annual Compliance Management Strategy submitted to EPA for Federal FY2019.
- During FY2019, AQD compliance program performed 401 Full Compliance Inspections on minor sources along with 1,169 site visits. AQD compliance responded to 80 citizen complaints. The purpose of the inspections is to ensure compliance with permit and regulatory requirements by observing facility operation and maintenance, air pollution control devices, emissions records and pertinent environmental documentation for the facility. Compliance staff provided assistance to facilities to improve adherence with environmental standards and other requirements. Inspections regularly include meeting with facility staff on site, a written report to the facility ownership and post-inspection discussions to help the facility attain or retain compliance. AQD's Compliance Program utilizes informal and formal enforcement to

ensure adherence with environmental standards and other requirements. Informal enforcement (Letters of Violation) alert companies to areas of noncompliance. The Letters of Violation encourage dialogue between AQD Compliance staff and the regulated community to expedite a return to compliance. Formal enforcement (NOVs) includes settlement meetings, civil penalties, mandated actions to return to compliance and supplemental environmental projects. Formal enforcement encourages companies to return to compliance quickly and encourages companies to take proactive action to remain in compliance. AQD issued 37 NOVs, closed 20 NOVs and wrote 32 Letters of Violation.

- AQD's Compliance Program has furthered the Environmental Audit Statute with formal recognition from EPA in October 2018. During FY2019, 14 companies have initiated Environmental Audits covering 357 Facilities.
- Throughout FY2019, the AQD's Monitoring Section and Compliance Program completed oversight of continuous monitoring systems required at facilities throughout Wyoming to document compliance with State and Federal regulations and permits. This included review of quality assurance plans, design and installation requirements, performance testing, ongoing compliance, reporting, corrective actions, alternative monitoring plans and alternative testing methods. Through these efforts, the AQD ensured use of high quality data to determine pollutant concentrations or emission rates for comparison to the applicable emission limitations or standards at stationary sources.

Industrial Siting

- ISD reviewed the quarterly and annual reports for five construction permits. Five projects started construction, one project suspended construction and three are scheduled to start construction within the next year. Staff reviewed 25 quarterly and annual reports, communicated with each Permittee and took necessary compliance measures. The Division also ensured that adequate bonding was in place for the Wind facilities that require a reclamation bond. Currently, ISD holds \$76.1 million in surety performance bonds. The Division documented its compliance actions for these permits in the Division's Quarterly Construction Status Report and presented its report to the Industrial Siting Council.
- The Division ensures that the distribution and termination of impact assistance funding is communicated to the Department of Revenue. In addition, the Division communicates monthly with the Department of Revenue to track the payment distribution and amounts for its Quarterly Construction Status Reports submitted to the ISC.

Land Quality

- The LQD inspects both coal and non-coal mines within the state. LQD inspects all coal operations monthly. The 26 active coal operations are inspected twelve times per year, with eight monthly/partial inspections and four quarterly/complete inspections. LQD conducted 312 inspections in FY2019 and 105

coal permitting actions. Inactive coal mines are inspected quarterly. LQD estimates conducting 336 coal mine inspections for FY2020 and will meet OSMRE requirements for mine and records inspection primacy.

- Non-coal operations are inspected and reviewed for reclamation liability annually. For FY2019, 465 non-coal operations were inspected.

Solid and Hazardous Waste

- During FY2019, with a recorded 3,304 facilities, SHWD Inspection & Compliance (I&C) group performed 238 inspections. These inspections evaluated compliance with the hazardous waste generator, hazardous waste treatment, storage and disposal facility and used oil management standards and the state solid waste landfill and transfer, treatment and storage requirements. Much of the increase in inspection numbers was due to an increase in complaints (over 200 during the period). The following business sectors were inspected during this time period: vehicle service, oilfield service, petroleum refineries, contractors, mines, dry cleaners, power plants, oil and gas pipelines, type 1 and 2 landfills and various other oil and gas and business facility sectors. The program responded and followed up on approximately 200 complaints related to open waste dumping, illegal hazardous waste disposal, abandoned tire dumps, etc. In FY2019, I&C issued three Notice of Violations.
- The Storage Tank Program (STP) ensures that tank owners and operators properly operate regulated tanks throughout the State. There are 683 active facilities within Wyoming. STP issued 11 enforcement actions during the fiscal year. The STP compliance rate was 94 percent in FY2019.

Water Quality

- During FY2019, WYPDES inspectors met or exceeded its inspection commitments for all facility categories except for MS4 facilities.
 - WYPDES completed 588 inspections in FY2019
 - WYPDES issued 167 Letters of Violation and no Notices of Violation
 - Based on inspections versus LOV/NOV's issued, WYPDES compliance rate for FY2019 was 72%.
- The Underground Injection Control (UIC) program inspected 35 of 49 wells or 71% in FY2019. The program plans to increase inspections to 85% in FY2020.
- During FY2019, WQD's Inspection and Compliance work group developed and provided recommendations for a new spill response database, identified roles and responsibilities of the Spill

Response Coordinator and the WQD and developed procedures for the WQD on spill response and complaints.

Goal 6 – To develop and maintain an outcome oriented workforce and culture

DEQ is committed to developing and maintaining an outcome oriented workforce and culture.

Administration

- DEQ employees drove over 870,000 miles during FY2019. DEQ leadership stresses the importance of Safety and Defensive Driving and ensures compliance with the program and safety of its workforce.
- DEQ completed 100% of Performance Management Initiative by the established deadlines.
- DEQ completed 100% of Substance Abuse Awareness training.

Air Quality

- AQD provided new employee training and orientation opportunities to staff.
- AQD Safety Committee developed risk management and safety gear matrix to aid in providing proper Personal Protective Equipment (PPE) to staff.
- AQD's Compliance Program purchased five Infrared Cameras bringing the total to eight cameras allowing more field investigations to occur simultaneously and enhance protection of Wyoming's air resources.
- AQD's Compliance Program is currently working with EPA in the development of an outlet only combustor test method. Initial field tests are scheduled to commence early October 2019. Outlet only testing would provide a more efficient method for ensuring combustors meet state destruction efficiencies.
- AQD is one of the more than 40 state and local air agency members of the Association of Air Pollution Control Agencies. AQD staff participate in monthly calls, hold committee and organizational leadership roles and attend semi-annual meetings. Information is distributed via emails, weekly newsletters, calls and through various Division meetings.
- AQD is one of fifteen state members in the Western States Air Resources Council to discuss western regional air quality issues and share resources. AQD staff participate in monthly calls, hold committee and organizational leadership roles and attend semi-annual meetings. Information is distributed via emails, calls and through various Division meetings.

- AQD staff represent Wyoming's interests through participation in a leadership role in the EPA's national Facility Team and Combined Air Emissions Reporting projects designed to improve facility information and streamline emissions reporting processes. Those projects are expected to reduce the cost to industry and government for providing and maintaining environmental data and improve decision-making capacity through more accurate and timely data availability.
- AQD staff also represent Wyoming's interests through their appointment to EPA's Board of Scientific Counselors' Air, Climate and Energy Subcommittee
- Air Quality Awareness Month activities included press and video releases, emails, presentations to elementary schools and monitor station tours.
- AQD provided a Winter Ozone Season education and outreach video series to the public.

Industrial Siting

- Division Staff attended four training opportunities related to the bonding functions.

Land Quality

- In FY2018, LQD conducted a Lean Six Sigma process on the coal program. LQD continues to implement the report recommendations in FY2020 (e.g., journey boards to track permit processes, standardization of correspondence templates between districts, pre-application meetings to improve permit submission quality and expedite the permit review process, and develop a federal government-working group). LQD has implemented internal working groups, standardized correspondence documents and implemented document control protocols.
- In FY2019, the Division provided new employee training and orientation classes through OSMRE Technical Innovation and Professional Services training.
- LQD considers the safety of its employees a priority. LQD continues to use a vehicle pre-operation inspection checklist that is required to be completed prior to using any state vehicle. Vehicle safety is emphasized given the extensive travel employees perform throughout the state. LQD annually evaluates the presence and condition of each vehicle's basic safety equipment. This is done in order to ensure employees have the necessary equipment to be safe when operating in remote areas in consideration of weather and unexpected environmental variables.

Solid and Hazardous Waste

- SHWD staff attended relevant and applicable trainings when funds were available. SHWD programs met throughout the year to discuss workload distributions, emerging issues and unique program needs. Staff members took advantage of SHWD membership in national organizations, participated in workgroups and attended trainings when possible. SHWD staff also participated and completed performance evaluations to identify areas of improvement for staff and acknowledge high achievement.

Water Quality

- During FY2019, WQD's Watershed Section finalized its strategic plan to establish priorities to guide the efforts of the section, including monitoring and TMDL development.
- WQD's lab developed an instrument replacement schedule and plan for meeting sample analysis turn-around time and continues to work on updating Standard Operating Procedures. The lab has reduced its turn-around times for samples from an average of 25 days to 15 days. Most instrument and sampling methods have been reevaluated and several refinements and updates are resulting in better precision and turn-around time.

Goal 7 - To administer and manage the resources of the agency in a responsible manner

DEQ is committed to managing its resources in the most efficient and effective manner.

Abandoned Mine Lands

- AML contracts with consultants, through a competitive selection process, to perform fieldwork, design and construction management for reclamation projects. Reclamation construction is competitively bid. All large construction contracts include the 5 percent in-state bidder's preference. These reclamation activities have resulted in work for Wyoming contractors, jobs for Wyoming residents and positive economic impact to Wyoming communities. Since 1983, Wyoming AML has awarded 244 consulting contracts and 812 reclamation construction contracts along with funding 53 Public Facilities projects that helped small communities with critical needs through special grant funding. In addition to the economic impact from AML's regular business, there have been 22 educational contracts, one of which was active in 2018, that have allowed students research and learning opportunities and provided reclamation data to AML. In 2018, AML held 129 active consulting and construction contracts. In 2019, approximately 550 individuals were employed at least part of the year on AML projects, including construction and consultant services.

Air Quality

- AQD met all budget submittal deadlines for FY2019.

- AQD utilized IMPACT's project management module and worked closely with the Department's accounting staff to ensure that grants and contracts were timely formulated and completed.
- To help implement the agency paperless office initiative, AQD continued to expand industrial source familiarity and use of IMPACT through education and training outreach efforts to specific sources and industry groups

Administration

- Administration has reviewed the Statewide Single Audit and other financial reviews conducted since publication of the last annual report. The Single Audit identified zero findings during this past audit.
- DEQ continues the development and upgrade of its public web page to provide the public with current and accurate information. Currently, the agency is reviewing new website software that will make it easier to maintain and provide enhancements.
- The Standardization and Efficiency Management Committee (SEMC) consists of representatives from each division. The goal of the SEMC is to identify agency processes for standardization and areas for improving efficiency. The SEMC, working with the Department of Enterprise Technology Services, led efforts to optimize the shared network drive by reducing clutter. Additionally, the SEMC is developing an agency policy outlining data management best practices for staff.
- DEQ continues to improve its online public records request process. In FY2019, DEQ received 790 public records requests. The average time to close a public records request was eleven days. During FY2019, DEQ spent approximately 1,200 hours fulfilling public records requests.
- DEQ's Site Profiler is a map based facility warehouse of the agency's primary databases allowing the public to view facilities and their environmental interests. Searches are available by permit number and or address. Site Profiler has been accessible to the public since the end of 2017. The Site Profiler is synced with the agency's internal spill and complaint system. Currently, DEQ is planning on connecting facility data using IMPACT with the Site Profiler application.
- DEQ implemented the State Auditor's Office (SAO) WOLFS Chart of Accounts upgrade. DEQ provided key input to the SAO as the upgrade was tested and ultimately incorporated.
- Working with the SAO, DEQ implemented electronic time sheets for staff. The conversion improved the efficiency of the time sheet process.

- In FY2019, DEQ finalized the incorporation by reference of A&I's Uniform Rule, Uniform Procedures, Fees, Costs and Charges for Inspecting, Copying and Producing Public Records. The Rule allows the Agency to charge fees for certain public records requests meeting specific thresholds.
- Administration IT program has been working on completing and enhancing various IT projects:
 - WyWaste originated in 2014 as a three-phased project: Phase I included the management of site data and program specific data for Solid Waste, Hazardous Waste and Voluntary Remediation Program. Phase II includes Inspection and Compliance program with the development of inspection forms. Both Phase I and Phase II are complete.
 - Phase III is on schedule for completion by the end of this fiscal year. Phase III includes environmental monitoring.
 - DEQ contracted with a third party to upgrade the Graduated Environmental Monitoring (GEM) system so that the Uranium Recovery Program could bulk upload Class III well data, including location, mechanical integrity testing and abandonment status. The upgrades have been implemented as of July 2018.
 - IMPACT development is complete and in production. Development tasks in the fiscal year included the following new features in IMPACT: public interface to view air quality data, permit conditions tool, compliance inspection tool, FIRE factor import tool, permit condition event tracking, IMPACT to WOGCC connection and linkage between IMPACT and Site Profiler.
 - The IMPACT Team continues to provide targeted training efforts and documentation to support implementation of external and internal users, with an emphasis on quality and consistency. The IMPACT Team utilizes a variety of training and support options, such as webinars, emails, phone calls and in-person meetings to help external and internal users.
- DEQ Administration has prioritized paperless projects. The agency continues to look for paperless opportunities while being mindful of budgetary considerations. DEQ has scanned over 800 boxes of paper documents and eliminated over 80 filing cabinets. The scanning effort has provided additional space to staff as well as providing faster access to electronic files. The agency will continue with ongoing efforts to scan remaining paper documents.
- DEQ Administration has been leading agency efforts to upgrade and migrate the SharePoint system.
 - SharePoint migration from "out of the box" Sharepoint has been fully migrated. The SharePoint contractor is working with the application vendors to migrate SharePoint applications. This should be complete by July 2020.

Land Quality

- The LQD has reorganized its District operations, maintained and improved the required workflow with current FTE resources. The LQD MIDAS application has a critical role in maintaining the workflow and required activities of the Division. The Lean Six Sigma review highlighted the need to continue to move to the digital permitting platform.

Solid and Hazardous Waste

- In FY2017, the Solid and Hazard Waste Division completed Phase I of its WyWaste project that created a system to better manage permit workflows and timelines for the Solid and Hazardous Waste Programs. In FY2018, DEQ completed Phase II of this project for the Inspection and Compliance program to allow for better tracking and management of inspections and compliance activities. In FY2019, the Solid Waste Program began Phase III of the WyWaste project that manages environmental data collected by consultants at sites. DEQ anticipates completing this phase in FY2020.
- The Brownfields Assistance Program (BFAP) also made significant contributions in supporting communities, economic development organizations and conservation districts to provide assistance in understanding and applying for Targeted Brownfields Assistance through EPA. BFAP also collaborated with the City of Casper, Kansas State University and EPA to develop and host a well-attended Brownfields workshop in May in Casper. In addition, the BFAP continues outreach and education to Wyoming communities and facilities to highlight the availability of an \$800,000 Revolving Loan Fund. The RLF makes available loans and sub-grant funds to governmental and eligible private entities to clean-up contaminated property through BFAP, to help make it ready and environmentally safe for redevelopment.

Water Quality

- During FY2019, WQD developed an IT business case for the design and development of a Division wide permit, compliance, monitoring and enforcement data management system.
- WQD has developed ten SharePoint libraries, six electronic document record centers and has converted 242 file boxes of hard copy records to electronic records.

