

Wyoming Department of Environmental Quality

Annual Report

FY2018

Agency Information

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Statutory References:

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

Basic Information:

- Number of Employees: 265
- Clients Served: The people of Wyoming, Wyoming businesses, Federal, State, local government, non-government organizations and others

Budget Information:

- The FY2017/2018 operating budget for the Wyoming Department of Environmental Quality was \$178M.

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, Water Quality, Solid and Hazardous Waste, Land Quality, Industrial Siting, Abandoned Mine Lands, and Administration. DEQ has 265 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 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 to bring 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 FY2018.

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 25,155 acres of degraded and unproductive abandoned mine land back to beneficial use as wildlife habitat and rangeland. Additionally 2,473 mine openings have been closed, and over 619,124 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 FY2018 alone, AML reclaimed approximately 175 acres of unproductive abandoned mine lands, 137 acres of impacted stream lands, closed 21 mine openings, remediated 4 acres of underground coal mine fires, and mitigated approximately 32 acres of underground mine subsidence.
- In FY2018, the AML Program drilled 940 holes for subsidence evaluation and grout injection, and injected approximately 73,061 cubic yards of grout into underground voids in Glenrock, Rock Springs, Reliance, Superior, Kemmerer and Evanston. In addition to the traditional grout voidfill method, AML also evaluated the effectiveness and cost comparison of using a foamed sand delivery method to inject 2,900 cubic yards of sand fill into a test mine. To date, it is estimated that about 19,267 holes have been drilled to inject approximately 540,788 cubic yards of grout for underground mine subsidence mitigation.
- 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 re-vegetation 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.

Industrial Siting:

- 305 spills and 21 complaints were reported during FY2018.

- 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 bonding staff reviews all agency bonding documents to assure the protection of the state's interest.

ISD completed 425 bonding actions during FY2018.

The bonding program currently manages 1,248 bond instruments with a value of \$3.2B, the break out of those instruments is listed below:

- 991 bonding instruments with a value with \$2.7B for Land Quality
- 100 bonding instruments with a value with \$27.4M for Solid Waste
- 33 bonding Instruments with a value with \$252.5M for Hazardous Waste
- 5 bonding instruments with a value with \$101.3M for Industrial Siting

Land Quality:

- The reclamation of disturbed lands is a focal point for the LQD. The cumulative Phase III bond release application average for evaluation years 1999 – 2007 was 419 acres, and from evaluation years 2008 – 2018 was 1,700 acres. LQD data also indicates that the reclamation acreage completed through Area and Phase I reclamation has increased during recent years and is attributable to market contraction in coal. Land Quality is actively processing 2018 Phase III bond release requests at the time of this report.

Solid and Hazardous Waste:

- The Orphan Sites Remediation Program (OSRP) continues to make significant progress at several sites. Also, legislation passed in the 2018 session provided a source of future funding for ORSP activities. Below is a summary of a few OSRP accomplishments:
 - Innovative remedial technologies implemented at the Casper, Sheridan and Laramie PCE Groundwater Plume sites last year are showing positive results.
 - Soil gas characterization conducted for a Cheyenne PCE Plume site evaluated the extent of soil gas as related to commingling orphan site plumes and potential indoor air impacts to residential and commercial buildings. Evaluation of site plumes along with a number of mitigation systems in residential and commercial buildings installed in 2010 indicate no additional buildings in the area require mitigation.

- Asbestos removal efforts at the Old Lovell Refinery was significant in helping protect trespassers on the property as well as neighbors. Marathon Oil has agreed to join the Voluntary Remediation Program (VRP) and work with DEQ on further remediation at the property.
- The Brownfields Assistance Program (BFAP) had a number of successes in FY18. There are nine brownfield sites in the Voluntary Remediation Program (VRP), five (5) of which are led by BFAP. BFAP provided significant support to communities, economic development organizations and conservation districts in understanding and applying for EPA brownfields grants. In August 2018, BFAP partnered with Nebraska, KSU and EPA to develop and host a Brownfields workshop in Scottsbluff. These activities helped the Wyoming Business Council obtain an \$800,000 Revolving Loan Fund (RLF) grant from EPA. In coordination with the BFAP, the RLF makes available loans and grants to governmental and eligible private entities to clean-up contaminated property and make it ready for re-development. In addition, BFAP was successful in obtaining a \$325,000 assessment grant from EPA for the Sheridan Acme Power Plant site owned by the Sheridan County Conservation District. There is significant community interest in cleanup and re-use of the site. In FY2018, BFAP began an investigation of the Old Thermopolis Airport and cleanup of contaminated soils at the future home of the Cheyenne Children's Museum.
- The Storage Tank Program (STP) continued its work cleaning up contamination from petroleum storage tank leaks around the state. There have been 1,632 known contaminated sites in Wyoming and 1,290 have been remediated to date. The remaining sites are either in the process of being cleaned up or scheduled for remediation.
- In FY2018, the SHWD Landfill Remediation Program continued to make progress. The remediation process is underway at three high priority sites operated by the City of Casper, City of Sheridan, and Campbell County. The Department worked with Casper to extend a flexible membrane cap over a previously uncapped 14 acres of waste thereby reducing the amount of infiltration at that facility. Investigative work at the Sheridan and Campbell County landfills continued in order to determine the nature and extent of contamination and to assess potential remedial actions. Design work began for installation of a flexible membrane cap and an active gas collection and control system at the Campbell County landfill. In addition, the Department began to evaluate two other high priority sites and refine cost estimates in preparation for bringing those sites into the program. The Department is also working at six other sites to collect and evaluate information needed to further define 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.

Water Quality:

- WQD administers grant funds (i.e., Clean Water Act Section 319 and Section 205(j) grant funds) disbursed by the USEPA to support voluntary and locally led projects (selected through the Governor-appointed Nonpoint Source Task Force) that restore and protect waters of the state. WQD completed its 2017 annual report for the Nonpoint Source Program in April 2018. The report is available on WQD’s webpage at <http://deq.wyoming.gov/wqd/non-point-source/resources/reports/>
- 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 2016/2018 Integrated Report (IR). The public was encouraged to review and provide comments on the process and rationale as well as Wyoming’s 2022 vision during the 45-day public comment period for the 2016/2018 Integrated Report. The results (i.e., the “2022 Vision”) are provided in Table 4.1 of the IR. In addition to those waters listed in Table 4.1, DEQ is also actively engaged in a number of other efforts that may not be completed prior to 2022. These include Boysen Reservoir, Little Medicine Bow River, Shoshone River, and Bitter Creek.
- During FY2018, WQD encouraged, facilitated and implemented plans for the reclamation of both orphaned and unused Coal Bed Methane (CBM) on-channel impoundments associated with CBM development.
 - WQD coordinated with the State Engineers Office (SEO) to ensure that all Coal Bed Methane (CBM) on-channel impoundments retained by landowners were properly permitted prior to release of bonds.
 - WQD ensured that all reclaimed reservoirs were inspected for conformance with WQD reclamation and closure criteria prior to release of bond funds.
 - No bonds were forfeited during this period. A bonding company is currently in the process of reclaiming 60 impoundments; bond funds will be released when all have been inspected and accepted by WQD.

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 FY2018, the Air Quality Division (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. Network changes during FY2018 include:

- Relocated a mobile monitoring trailer to Sheridan.
 - Completed and closed out mobile monitoring stations at Laramie, Casper, and Wheatland.
 - Planned moves of mobile monitoring trailers to Jackson, Cody, and Saratoga.
 - Decommissioned the Campbell County monitoring site.
 - Activated the eastern Johnson County monitoring site.
 - Added a camera at the Sheridan Police Department monitoring site.
 - Added Carbon Monoxide monitoring at the Converse County station.
 - Completed the 2018 AQD Network Plan.
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- Ambient monitoring data for 124 AQD ambient monitors was quality assured and submitted to the United States Environmental Protection Agency (EPA) in a timely fashion in accordance with the Code of Federal Regulations and the DEQ-EPA Performance Partnership Agreement (PPA). In addition, the 2017 AQD Data Certification and the 2018 AQD Network Plan were completed. The ambient monitoring reflects compliance with all ambient air quality standards. Ozone monitoring within the Upper Green River Basin Ozone Nonattainment area shows attainment with the 2008 and 2015 national ambient air quality ozone standards for the 2015-2017 calendar year period.
 - The EPA approved Wyoming's request to redesignate the Sheridan PM-10 nonattainment area to attainment and the accompanying limited maintenance plan.
 - For FY2018, the AQD Emissions Inventory Section completed quality assurance and emissions inventory entry for all inventory formats (major, sulfur dioxide (SO₂), minor, oil and gas¹, smoke management, and greenhouse gases) into the respective databases to meet EPA and State reporting requirements and the DEQ-EPA Performance Partnership Agreement.
 - AQD's Planning and Emissions Inventory Sections developed and implemented the FIRE factor import tool, IMPACT to WOGCC connection, and worked with the Impact Technical Committee to develop and implement Standard Operating Procedures for populating American Petroleum Institute (API) well numbers, and use of default parameters for Emission Unit, Control Equipment, and Release Point Information for Oil and Gas Facilities.
 - In FY2018, the AQD compiled and released a report entitled *UGRB "The Power of Partnership" A Tailored Solution to a Unique Air Quality Challenge for Wyoming*, available at

¹ Upper Green River Basin annual and winter, and Southern Powder River Basin

<http://deq.wyoming.gov/aqd/winter-ozone/>. This Report summarizes the DEQ's ozone reduction strategy for the UGRB.

- During the 2018 Winter Ozone Season in the UGRB (January through March), ozone levels did not elevate above the 2008 standard.
- Ozone precursor emissions of Nitrogen Oxide (NOx) and Volatile Organic Compounds (VOC) in the UGRB remain significantly reduced. From 2008 – 2017, NOx has been reduced by 1650.5 tons and VOCs reduced by 6401 tons.

Industrial Siting:

- The extension of the federal production tax credit for renewable energy resources has created increased interest in the industrial siting process from both permit holders and potential new development. PacifiCorp issued a Renewable Resource Request for Proposal (2016R RFP) seeking cost-competitive bids for renewable energy resources that can be used to meet state renewable portfolio standard (RPS) requirements under the applicable laws and regulations of California, Oregon, and Washington. This action has generated a number of meetings with industry to explain statutes and rules.
- ISD coordinated three 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, Uinta, 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 MIDAS e-permitting system include a functional Mining Information Database system (MIDAS), electronic records center, inspection application, electronic permitting, correspondence libraries, and GIS integration. These six system modules support the Governor's

Energy Strategy. Five of the six modules are operational with the GIS module becoming active in Q4 of 2018. The e-permitting system is currently applied to smaller mining permits. LQD is actively working with several coal mine operators to convert their large permits into the MIDAS format as of the time of this report. 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 intensify in FY2018.

Water Quality:

- In accordance with the Governor's Water Strategy #8, which calls for appropriate evaluation and use of surface water quality data for reporting and decision making purposes:
 - WQD developed a document describing current data collection and analysis efforts, and the criteria used for data evaluation;
 - Conducted an internal review of quality assurance and quality control (QA/QC) guidance documents and policies and recommended changes to ensure compliance with current regulations;
 - Developed a list of entities from which data have been used for decision-making purposes by WQD; evaluated current regulations, policies, and guidance documents for specialized training requirements; and
 - Researched training requirements of similar data collection programs. All data and QA/QC materials from non-WQD entities are evaluated against QA/QC procedures established in WQD/WQD regulations, policies, and guidance for regulatory decision-making purposes.

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

The development of a regulatory framework that regulated entities as well as the public can understand is key to efficient regulation.

Air Quality:

- The Air Quality Division (AQD) State Implementation Plan (SIP) and Rule Development Section continues to review air quality regulations for reduction and/or streamlining opportunities. The division submitted two (2) State Plan updates to EPA. One update included changes to Chapter 14 of the Wyoming Air Quality Standards and Regulations (WAQSR) that were necessary in order for Basin Electric to report sulfur dioxide emissions in accordance with an EPA regional haze settlement agreement. The other update consisted of incorporation by reference of new and updated EPA New Source Performance Standards

(NSPS).

- 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 FY2018, the AQD prepared or submitted comment on more than ten federal actions, including:
 - Cement Asbestos Pipe Replacement Alternative Work Practice – Docket ID EPA-HQ-OAR-2017-0427
 - Interstate Transport Prongs 1 and 2 for the 2010 Sulfur Dioxide (SO₂) Standard for Colorado, Montana, North Dakota, South Dakota and Wyoming – Docket ID EPA-R08-OAR-2018-0109
 - Air Stationary Source Compliance and Enforcement Information Reporting – Docket ID EPA-HQ-OECA-2018-0248
 - Increasing Consistency and Transparency in Considering Costs and Benefits in the Rulemaking Process – Docket ID EPA-HQ-OA-2018-0107
 - EPA Memorandum on Information on the Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards under Clean Air Act Section 110(a)(2)(D)(i)(I)
 - Oil and Natural Gas Exploration and Production Facilities – New Owner Audit Program
 - Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units – Docket No. EPA-HQ-OAR-2017-0355
 - Notice of Proposed Withdrawal of the Control Techniques Guidelines for the Oil and Natural Gas Industry – Docket No. EPA-HQ-OAR-2015-0216
 - State Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Advance Notice of Proposed Rulemaking – Docket No. EPA-HQ-OAR-2017-0545
 - Provided testimony to the U.S. Senate Committee on Environment and Public Works, Subcommittee on Clean Air and Nuclear Safety, Hearing on “Cooperative Federalism Under the Clean Air Act: State Perspectives”, April 10, 2018

Industrial Siting:

The Industrial Siting Division completed rulemaking to incorporate changes promulgated in Wyoming Department of Administration and Information Rules regarding public records requests.

Land Quality:

- Additional statutory changes were approved in 2017 to the Uranium Recovery Program (URP). The LQD completed rulemaking and guidance document development for the URP during the report period.
- The LQD completed guidance document and public notice format changes. These included updates to Guideline 12A Financial Assurance, and non-coal Public Notice Format #6, In situ permit/amendment technical notice.
- The LQD initiated financial assurance rule and regulation revisions to the coal and non-coal programs in FY2018.
- The LQD initiated statutory, rule and regulation, and guidance revisions to Limited Mine Operation and Small Mine Operation permitting in FY2018.

Solid and Hazardous Waste:

- As part of Governor Matt Mead's Streamlining Rules Initiative, the Solid Waste Permitting and Corrective Action Program is revising Chapters 4 (Construction/Demolition Landfill Regulations) and 6 (Transfer, Treatment, and Storage Facility Regulations) of the Solid Waste Rules and Regulations and anticipates presenting a final rule package to the Environmental Quality Council (EQC) 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 is currently in the process of drafting regulations and it is anticipated that DEQ will make the draft regulations available to the public in the summer of 2018 to receive feedback on these rules. DEQ hopes to present the rule package to the Water and Waste Advisory Board in either December of 2018 or early 2019.
- The Environmental Quality Council adopted proposed revisions to the SHWD Storage Tank Program Rules and Regulations at a public hearing held on May 23, 2018 and Governor Mead signed the final rule on June 28, 2018. These revisions: 1) updated the standards, publications, and references; 2) made editorial, formatting, and technical corrections; and 3) made changes necessary for Wyoming to apply for delegated status of the Storage Tank Program (STP) from the USEPA.

Water Quality:

- With input from the Wyoming Nutrient Work Group, a broad group of stakeholders, WQD developed draft nutrient criteria for lakes and reservoirs during FY2018. Working with USEPA, drafts were provided to three external peer-reviewers for review and comment. Staff are currently modifying the draft criteria based upon comments received from the peer reviewers.
- WQD worked with the Wyoming Department of Health and State Parks and Cultural Resources to develop guidelines (Action Plan) describing the roles and responsibilities of each agency with respect to responding to harmful algae blooms (HABs), and action levels that trigger responses from the agencies. The Harmful Algal Bloom Action Plan is available on WQD's website at http://deq.wyoming.gov/media/attachments/Water%20Quality/Nutrient%20Pollution/Harmful%20Algal%20Blooms/2018-0606_Wyoming_HAB_Action-Plan.pdf
- WQD developed draft regulations to require financial assurance for Class V CBM-produced water injection wells during FY2018. The draft rules were presented before the Water and Waste Advisory Board at its public hearing in Laramie on June 21, 2018. The Board recommended moving the draft rules to the Environmental Quality Council for adoption later this year.
- WQD worked on completing the required Class VI primacy package documents and worked through the process to achieve primacy approval from the USEPA to implement the Class VI program. This included the review of the existing Memorandum of Agreement with EPA and Memorandum of Understanding with DEQ's Land Quality Division, the Wyoming Oil and Gas Conservation Commission (OGCC) and State Engineers Office, and update those agreements as necessary. WQD submitted its application for primacy of UIC Class VI injection wells in January 2018. The application has been deemed complete by the USEPA and is now under review for technical adequacy.
- The Wyoming Pollution Discharge Elimination System (WYPDES) Program has been working to complete enhancements to existing data management systems to comply with the Electronic Reporting Rule by December 2020. Staff will provide training at the Wyoming Water Pollution Control Association (WWPCA) annual meeting in Casper in October 2018. DEQ continues to work on enhancements to comply with the Electronic Reporting Rule.

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 (WGFD) and the State Historic Preservation Office (SHPO) and with federal agencies such as the BLM and the Forest Service to preserve important resources, and establish appropriate seed mixes for sensitive wildlife species, such as sage grouse.

Air Quality:

- AQD's IMPACT development continued on schedule and within budget during FY2018. Development tasks included: 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.
- During FY2018, AQD's IMPACT continued to enhance industry use of the system:
 - IMPACT user accounts increased by 30 percent since FY2017.
 - Over 97 percent of Title V facilities have obtained secure access to IMPACT to submit permit applications and reports. During FY2018, 17 of the 21 Title V applications received (81%) were through the portal.
 - The total number of portal submissions increased by 39 percent since FY2017, with the most notable increases occurring in the categories of compliance (54%) and stack test (16%) reports.
 - 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 1149 permitting actions. Of those, 548 were for oil and gas production sites.
- The AQD's Title V Permitting Program issued 35 Title V operating permits – a 25% increase over the 28 permits issued in FY2017. The increase was due in part to the “basis date” approach initiated in 2017 to promote efficiency and timely permit issuance.

Industrial Siting:

- In FY2018, the Pollution Prevention (P2) program continued contractual work with Wyoming engineering firms to perform ten pollution prevention and source reduction assistance audits for slaughterhouses, meat processing facilities, and other small business entities.
- The P2 Program continued to promote the Environmental Stewardship Award program in 2018. The program recognizes voluntary efforts that businesses take towards reducing environmental impacts. Businesses are nominated for the award by WYDEQ staff and selected by the Compliance Advisory Panel (CAP). Four businesses were recognized with this award in FY2018.
- The Diesel Emissions Reduction Act Program executed agreements with the City of Cheyenne and Campbell County School District. The program funded 25% of the purchase of two new clean diesel buses and five propane-fueled buses.
- The Small Business/Environmental Assistance Program (SBEAP) assists small businesses through the permitting and compliance processes.
- The Outreach program provided Best Management Practice (BMP) information to meat processing, packing, and slaughterhouse facilities.

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.
- The LQD continues to move forward ahead of schedule and below budget projections for the standup of the Uranium Recovery Program (URP). The statutory language requirements, the development of the rules and regulations, and the development of the guidance documents were all completed in FY2017. A final Commission paper was submitted to the Nuclear Regulatory Commission in Q4 2017. The completion of the URP stand-up is forecast for October of 2018. The stand-up of the URP program will provide the State with direct oversight of the uranium mining and milling operations. This will result in more efficient and accurate permitting, reclamation bond oversight, and a reduction in permitting costs to the uranium industry.

Solid and Hazardous Waste:

- During FY2018, SHWD's Cease and Transfer Program, in conjunction with Office of State Lands and Investment, evaluated and recommended funding for two transfer station projects and three landfill closures. The estimated construction cost for these five projects exceeds \$8.3 million dollars. 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 43 significant permit actions.

Water Quality:

- WQD has been working to update and streamline groundwater monitoring requirements for permitted commercial oilfield waste disposal facilities. During FY2018, WQD staff continued to develop the inventory of permitted commercial oilfield waste disposal facilities' monitoring requirements.

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 73 major source and three synthetic minor source inspections that are identified in AQD's annual Compliance Management Strategy submitted to EPA for Federal FY2018.
- During FY2018, the AQD compliance program performed 690 site inspections, 220 of these site inspections were minor source inspections. AQD compliance responded to 98 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 also 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 (e.g. 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 (i.e., Notices of Violation) 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 16 and closed 13 Notices of Violations, and wrote 13 Letters of Violation.

- AQD's Compliance Program developed an Enforcement Notice designed to proactively prevent potential non-compliance that may affect ambient attainment status.
- Throughout FY2018, the AQD's Monitoring Section and Compliance Program completed oversight of continuous monitoring systems (CMS) 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 seven construction permits. Two projects completed construction, one remained in active construction, one started construction, one decided not to move forward with construction, and two are scheduled to start construction within the next year. Staff reviewed nineteen quarterly reports and four 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, Industrial Siting holds \$101.3M 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 (ISC).
- The ISD monitored and maintained other compliance commitments, such as compliance officer training, permit amendments, impact assistance payments, compliance and termination. The Division received and processed ten permit conditions and two permit changes. The Division also presented a proposed rule revisions to Chapter 1 of the ISC Rules and Regulations. The proposed rules were approved by the ISC at its Q2 2018 meeting.
- The Division ensures that the distribution and termination of impact assistance is communicated to the Department of Revenue. Impact assistance was initiated for one additional project (Boswell Springs Wind Energy Project) and continued impact assistance for Chokecherry Sierra Madre Wind Energy. Impact

assistance ceased for two projects due to completion of the projects (Simplot Phosphates and Pioneer Wind Park). 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 28 active coal operations are inspected twelve times per year, with eight monthly/partial inspections and four quarterly/complete inspections. Inactive coal mines are inspected quarterly. LQD will conduct 336 coal mine inspections for FY2018, and will meet OSMRE requirements for mine and records inspection primacy.
- Non-coal operations are inspected and reviewed for reclamation liability annually. For FY2018, 432 non-coal operations were inspected.

Solid and Hazardous Waste:

- During FY2018, SHWD Inspection & Compliance (I&C) group, performed 221 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. There was an increase in inspection numbers primarily as a result of an increase in complaints (198 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 & gas pipelines, type 1 and 2 landfills and various other oil & gas and business facility sectors. The program responded and followed up on 198 complaints related to open waste dumping, illegal hazardous waste disposal, abandoned tire dumps, etc. In FY2018, I&C issued three (3) Notices of Violation (NOV).
- The Storage Tank Program (STP) ensures that tank owners and operators properly operate regulated tanks throughout the State. There are 681 active facilities within Wyoming. STP issued 13 enforcement actions during the fiscal year. The STP compliance rate was 94%.

Water Quality:

- During FY 2018, WYPDES inspectors completed 747 total inspections. These inspections include 291 compliance inspections, 277 records reviews and 179 storm water inspections. The WYPDES program is on track to meet their commitments with the EPA.

- During FY2018, WQD's Inspection and Compliance work group evaluated the current spill response program, developed and recommended draft elements 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 800,000 miles during FY 2018. DEQ leadership stresses the importance of Safety and Defensive Driving. However, due to a new defensive driving system, DEQ's completion rate for Defensive Driving is unavailable.
- 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 and released Vehicle Inspection SOP and Checklist
- AQD's Compliance Program created standardized training objectives for basic through advanced inspectors
- AQD is one of the more than 40 state and local air agency members of the Association of Air Pollution Control Agencies (AAPCA). 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 (WESTAR) 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 represented 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 on to USEPA's Board of Scientific Counselors' Air, Climate, and Energy Subcommittee
- During FY2018, the AQD met with the Wyoming Department of Health, Wyoming Oil and Gas Conservation Commission staff, and the Public Service Commission staff to discuss respective roles and responsibilities.
- 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.
- At post-winter ozone season open house held in Pinedale, released the UGRB "*The Power of Partnership*" *A Tailored Solution to a Unique Air Quality Challenge for Wyoming*, available at <http://deq.wyoming.gov/aqd/winter-ozone/>.

Land Quality:

- In FY2018 LQD conducted a Lean Six Sigma process on the coal program. LQD is implementing several of the report recommendations in FY2018 (i.e. 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).
- In FY2018, the Division provided new employee training and orientation classes through OSMRE Technical Innovation and Professional Services (TIPS) 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 insure 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:

- Over the course of the year, SHWD staff attended relevant and applicable training events when funds were available. SHWD programs also 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 training events when possible. SHWD staff also participated and completed performance evaluations to identify areas of improvement for staff and acknowledge high achievement.

Water Quality:

- During FY2018, WQD's Watershed Section staff coordinated in the development of a strategic plan to establish priorities to guide the efforts of the section, including monitoring and TMDL development. The strategic plan is expected to be finalized in the fall of 2018.
- 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 (SOPs). The lab is consistently meeting 30-day turn-around times with an increased sample load from the ambient monitoring group and a small decrease in the sample load from the compliance and enforcement group. Most instrument and sampling methods have been re-evaluated and several refinements and updates are resulting in better precision and turn-around time. About 1/2 of the SOPs have been updated or rewritten in the last year-and-a-half during slower times. We are continuing to bring costs down for purchasing supplies and plan to reduce the number of maintenance contracts. We are continuing to make significant improvements to quality assurance and quality control.

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 to perform field work, design and construction management for reclamation projects. Reclamation construction is competitively bid. All large construction contracts include the 5% 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. To date, it is estimated that 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.

Air Quality:

- To ensure DEQ is timely with all budget requests, AQD met all budget submittal deadlines for FY2018.
- AQD utilized IMPACT's project management module and worked closely with the Department's accounting staff to assure that grants and contracts were timely formulated and completed.
- To help implement the 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
- AQD's Biennial Report on Air Quality Fees for the Title V and New Source Review permits was submitted to the Joint Minerals, Business and Economic Development Committee on October 26, 2017. The Report notes that the Title V permit fee of \$34.50/ton and the NSR standard application fee of \$464 and additional hourly rate of \$58/hour were anticipated to generate sufficient income to meet program needs.
- To ensure all permit fees and emission inventory invoices are promptly processed, the NSR and Emissions Inventory program implemented modified billing and invoice procedures with an added emphasis on timely collection which led to a reduction in pending accounts receivable

Administration:

- Administration has reviewed the Statewide Single Audit and other financial reviews conducted since publication of the last annual report. The Single Audit identified two findings and DEQ has fully implemented corrective action plans to address each finding. To address subrecipient notification, DEQ sent a letter to each sub-recipient containing information required by rule. To address Federal Financial Reporting, DEQ established controls and reports to keep track of all necessary grant reporting.

- 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 Content Management Systems to move the current website. This system will make it easier to maintain and provide enhancements.
- DEQ created a Standardization and Efficiency Management Committee (SEMC). The 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 presents recommendations to DEQ's senior leadership for consideration and implementation. The SEMC is working with ETS to optimize the shared network drive by reducing clutter. Additionally, the SEMC worked to improve the agencies responsiveness to public records requests.
- DEQ continues to improve its online public records request process. In FY2018, DEQ went live with their new records request online portal. This system makes it easier for the public to request DEQ records and assists staff with fulfilling the requests in a timely manner. For FY2018, DEQ received 733 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. DEQ plans to provide a public link once the Site Profiler is synced with the agency's internal spill and complaint system.
- DEQ continues to be actively involved in the State Auditor's Office (SAO) WOLFS Chart of Accounts upgrade. DEQ attended all meetings held by SAO and participated in all opportunities to test the new system.
- DEQ began implementing electronic time sheets in October 2017. To date, DEQ has transitioned 74 employees out of the Cheyenne office to the new system. Due to fiscal year-end and the upgrade to the WOLFS, Payroll and ESS systems, DEQ has suspend the transition pending completion of the upgrades. Once upgrades are complete, DEQ will convert the remainder of the agency to electronic time sheets.
- In FY2018, DEQ began the effort to incorporate by reference A&I's Uniform Rule, Uniform Procedures, Fees, Costs and Charges for Inspecting, Copying and Producing Public Records. To date, DEQ has been successful in attaining the recommendation for approval from the Air Quality, Land Quality and Water and Wastewater Advisory Boards. DEQ will present the rule to the Environmental Quality Council for adoption before the end of CY2018.

- Administration IT program has been working on completing and enhancing various IT projects:
 - WyWaste originated in 2014 as a three-phased project:

Phase I began in November 2016 and is currently in the production environment. Phase I includes the management of site data and program-specific data for the Solid Waste, Hazardous Waste, and Voluntary Remediation Programs.

Phase II began in December 2017 and is currently in the production environment. Phase II includes the Inspections & Compliance Program with the development of inspection forms, management of compliance and enforcement data, and tracking of complaints. Additionally, the team conducted a gap analysis for the Solid Waste program to evaluate potential data needs for annual reporting. The data includes municipal landfills, the Cease and Transfer Program and the Landfill Remediation Program.

Phase III began in August 2018. Phase III is scheduled for completion by the end of FY2019. This phase 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, and to date over 15,000 Class III wells have uploaded into GEM.
- IMPACT development continued on schedule and within budget during FY18. 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 fourth full year of implementation shows increases in adoption by industry. During the FY18, portal accounts increased by 30 percent over FY17 and now 97.5 percent of Title V facilities have obtained secure access to IMPACT to submit permit applications and reports. The total number of portal submissions increased by 39 percent over FY17, with the most notable increases occurring in the categories of compliance reports and stack test reports. Portal submissions of compliance reports increased by 54 percent and stack test reports increased by 16 percent over FY17. Overall, electronic submissions allow AQD to receive higher quality data, which reduces processing times.

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, in-person meetings, etc. 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 Administration has been leading agency efforts to upgrade and migrate the SharePoint system.
 - DEQ contracted with a third party to host the 2016 SharePoint solution. The upgrade from SharePoint 2010 to SharePoint 2016 is complete within the test environment. DEQ will move to production in the updated environment by the end of September 2018.

Land Quality:

- The LQD has reorganized its District operations, and has maintained 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 better system for managing 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. The Solid Waste Program will begin Phase III of the WyWaste project which will manage environmental data collected by consultants at sites. DEQ anticipates completing this phase in FY2019.

Water Quality:

- During FY2018 WQD developed an IT business case for the design and development of a permit management system for the Water and Wastewater Section. ETS has approved the business case. The Agency will request funding at the 2020 budget session.

- WQD has developed 10 SharePoint libraries, 6 electronic document record centers, and has entered into a \$30,000 contract to have hard copy permit files, monitoring reports, and other records scanned to electronic format.

