Part I - Agency Profile

Agency Overview

The Idaho Department of Environmental Quality (DEQ) was established by the Environmental Protection and Health Act, Chapter 1, Title 39, Idaho Code, to protect human health and the environment. As the state's environmental regulatory agency, DEQ is responsible for implementing and enforcing delegated federal programs under the Clean Air, Clean Water, Safe Drinking Water, and Resource Conservation and Recovery Acts, as well as many state environmental laws and rules. This regulatory responsibility covers a broad range of activities to ensure Idaho's air, water, land, and Idaho citizens are protected from the adverse impacts of pollution.

The Environmental Protection and Health Act also established the Board of Environmental Quality. The board is the administrative body charged with making decisions on rules proposed by the department to carry out provisions of the act and to enforce state environmental laws. DEQ drafts rules with assistance from the Office of the Attorney General following a negotiated rulemaking process involving interested stakeholders. Rules may be adopted, amended, or repealed by the board. All administrative rules adopted by the board are subject to legislative review. The board also functions as the agency's administrative appeals board. Decisions of the agency can be appealed to the board, which may choose to hear the case or designate a hearing officer. Final determinations of the board are subject to judicial review.

To protect human health and the environment, DEQ's primary activities include monitoring, permitting, conducting inspections, performing remediation, and providing a wide range of oversight, technical assistance, and outreach.

- Environmental monitoring is performed to assess conditions and ensure health-based standards are met.
- Permits are issued to facilities that manage wastes or release pollutants to limit discharges to safe levels.
- Inspections of pollution sources are conducted and complaints are investigated to ensure compliance with environmental regulations and standards. When necessary, enforcement action is taken.
- Remediation is conducted to remove or neutralize contaminants in soil and surface waters. Compliance with remedial activities is typically voluntary, but when necessary, enforcement action is taken.
- Oversight is maintained for a variety of projects including environmental cleanups, pollution reduction efforts, and drinking water and wastewater infrastructure improvements.
- Technical support, outreach, and education are offered to facilitate compliance with environmental requirements for air quality, water quality, and waste management.

DEQ works closely and collaboratively with a wide range of public and private partners including the legislature; the Board of Environmental Quality; federal and state agencies; city, county, and tribal governments; businesses; community organizations; and citizens. These partnerships are critical to accomplishing the agency's mission. DEQ's headquarters in Boise is organized into four divisions focused on developing and administering programs and policies, providing technical support to the divisions and regions, and providing agency-wide administrative support. The divisions include Air Quality, Water Quality, Waste Management and Remediation, and Technical Services.

Day-to-day, on-the-ground agency services are provided by six regional offices located in Boise, Coeur d'Alene, Idaho Falls, Lewiston, Pocatello, and Twin Falls. DEQ also maintains smaller satellite offices in Kellogg and Grangeville. Regional and satellite offices are charged with implementing agency programs and policies and providing direct services to citizens, communities, businesses, and industries.

Core Functions/Idaho Code

DEQ's core functions and regulatory authorities are summarized below, followed by a table detailing the department's revenues and expenditures for the past four fiscal years.

■ Air Quality: DEQ ensures compliance with federal and state health-based air quality standards by collecting air quality information, monitoring, developing and issuing permits, conducting inspections at industrial facilities, responding to complaints, and coordinating air quality improvement efforts among communities, citizen groups, businesses, industries, other state agencies, tribes, and the US Environmental Protection Agency (EPA) (Title 39, Chapter 1, Idaho Code; Clean Air Act).

- Water Quality: DEQ protects the surface and ground waters of the state to support beneficial uses and provide safe drinking water supplies by setting water quality standards, certifying project compliance with standards, monitoring, reporting on water quality, developing and implementing improvement plans, issuing wastewater reuse permits, and providing grants and loans for constructing drinking water and wastewater treatment facilities (Title 39, Chapters 1, 36, 64, 66, 76, Idaho Code; Title 37, Chapter 21, Idaho Code; Clean Water Act).
- Waste Management and Remediation: DEQ ensures management and disposal of waste generated in or entering Idaho is conducted in a manner protective of human health and the environment. DEQ responds to releases of hazardous substances to surface waters, ground waters, or soils and conducts, oversees, and negotiates cleanups of contaminated sites. DEQ works with communities to rehabilitate contaminated sites to return them to a safe and developable condition (Title 39, Chapters 1, 44, 58, 65, 71, 74, 81, Idaho Code; Resource Conservation and Recovery Act; Comprehensive Environmental Response, Compensation, and Liability Act).
- INL Oversight: DEQ oversees activities at the Idaho National Laboratory (INL) to ensure compliance with legal agreements and environmental regulations for waste treatment, remediation, and removal. DEQ maintains an independent environmental monitoring program designed to verify and supplement monitoring programs carried out by the INL. Working with other state agencies, DEQ assists local governments statewide in planning and responding to emergencies involving radiological materials. DEQ also routinely informs the public about INL activities impacting Idaho's environment (Title 39, Chapter 1, Idaho Code).

Revenues and Expenditures

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Revenue		FY 2014	FY 2015	FY 2016	FY 2017
Air Quality Permitting		\$1,599,417	\$876,273	\$1,009,266	\$1,110,118
Public Water System Oversight		\$1,622,637	\$1,592,697	\$1,585,711	\$1,627,025
Water Pollution Control		\$4,803,399	\$4,802,565	\$4,804,394	\$4,810,218
Environmental Remediation		\$1,801,896	\$1,821,475	\$1,846,547	\$1,869,668
Cooperative DEQ-Federal		\$29,968,418	\$31,496,530	\$24,645,797	\$24,536,640
Cooperative DEQ-General		\$14,839,100	\$15,636,200	\$16,449,600	\$17,908,000
Cooperative DEQ-Other		\$1,699,390	\$1,777,616	\$2,131,707	\$2,342,849
Bunker Hill Consent Decree		<u>\$307,916</u>	<u>\$440,349</u>	\$470,27 <u>2</u>	<u>\$480,546</u>
	Total	\$56,642,173	\$58,443,705	\$52,943,294	\$54,685,064
Expenditures		FY 2014	FY 2015	FY 2016	FY 2017
Personnel Costs		\$25,391,100	\$26,161,800	\$27,402,600	29,859,100
Operating Expenditures		\$22,475,000	\$21,079,300	\$16,405,500	13,209,200
Capital Outlay		\$430,100	\$515,400	\$450,800	640,700
Trustee/Benefit Payments		\$4,264,400	<u>\$7,099,900</u>	\$5,149,800	7,558,500
	Total	\$52,560,600	\$54,856,400	\$49,408,700	51,267,500

Profile of Cases Managed and/or Key Services Provided

The following table summarizes some of the key services DEQ provides to communities, businesses, industries, and the citizens of Idaho.

Cases Managed and/or Key Services Provided Air Quality Division	FY 2014	FY 2015	FY 2016	FY 2017
	Т	1	Т	
Air Quality Permits to Construct Issued	53	54	56	89
Air Quality Tier I (Title V) Permits Issued	13	12	9	15
Air Quality Tier II Permits Issued	8	2	2	1
Inspections of Stationary and Portable Air Pollution Sources	126	146	161	193
Number of Crop Residue Acres Approved and Burned	51,859	43,345	36,760	41,411

Cases Managed and/or Key Services Provided	FY 2014	FY 2015	FY 2016	FY 2017			
Water Quality Division							
Wastewater Grants Awarded	\$327,393	\$396,524	\$246,152	\$325,000			
Wastewater Loans Awarded	\$15,934,713	\$28,800,000	\$27,876,605	\$18,305,461			
Drinking Water Grants Awarded	\$250,000	\$237,420	\$293,443	\$331,172			
Drinking Water Loans Awarded	\$15,219,193	\$11,348,000	\$14,985,992	\$6,165,007			
401/404 Water Quality Certifications Issued	50	60	43	40			
Wastewater Reuse Permits Issued	22	20	19	n/a ^a			
Total Wastewater Engineering Plan and Specification Reviews Completed	213	234	233	238			
Total Drinking Water Engineering Plan and Specification Reviews Completed	253	334	315	279			
Source Water Assessments Completed	133	139	102	94			
Drinking Water Sanitary Surveys Completed	439	456	397	417			
Active Nonpoint Source Projects Administered (Previous Calendar Year)	61	61	57	49			
Nonpoint Source Projects Completed (Previous Calendar Year)	15	15	15	20			
Beneficial Use Reconnaissance Program (BURP) Sites Surveyed	282	231	284	240			
Waste Management and Remediation Division							
Leaking Underground Storage Tank Cleanups Completed	19	12	7	31			
Underground Storage Tank Training and Inspections Completed	399	392	357	399			
Hazardous Waste Inspections Conducted	110	117	93	95			
Total Phosphate Mine Projects with Agreements for Remediation and/or Operations with DEQ Involvement	27	37	26	123			
Snake River Plain Environmental Samples Analyzed (for INL)	5,073	5,062	4,713	7,100			
Pollution Prevention Technical Assistance Efforts	116	96	93	104			

a. In FY 2017, DEQ removed this as a key service and made it a benchmark performance measure (see the Performance Measurement table).

FY 2017 Performance Highlights

Air Quality

In July 2017, DEQ received a \$2.47 million grant from EPA to help improve air quality in the Logan Utah/Idaho Cache Valley community. The valley is both unique and complex with respect to topographical features and jurisdictional authority issues (the area spans two states and two EPA regions). The Idaho side of the border is rural, with a population of around 13,000 people, while the Utah side is more urban and contains roughly 117,000 people.

Elevated 24-hour particulate matter 2.5 ($PM_{2.5}$) concentrations in the nonattainment area have been observed in winter, typically from November through February. $PM_{2.5}$ air quality data suggest local meteorological conditions often play a significant role during these episodes by providing adverse dispersion conditions or favoring the formation of secondary aerosols. Particulate matter air pollution can have significant impacts on public health, particularly for people with heart or lung diseases, children, and older adults. Even healthy people may experience temporary symptoms from exposure to elevated levels of particle pollution.

DEQ is using the grant to implement various measures to help decrease particulate pollution, including changing out old woodstoves for newer EPA-certified heating devices; providing equipment for the county to reduce road dust; purchasing newer, cleaner buses for the commuter bus service; installing Stage I vapor recovery systems on underground gasoline storage tanks; and increasing education and outreach efforts to residents. DEQ will continue to work closely with Cache Valley citizens to improve air quality.

Waste Management and Remediation

Tracy General Store Underground Storage Tank—When the Tracy General Store, located in Almo, removed its underground storage tank system in 1989, a leak was discovered. Gasoline was found in a homeowner's domestic well, and investigations began immediately because other wells were in the area, including one at the Almo School. While no gasoline was present in these wells, soil and ground water were impacted on the general store's property.

After the owner and subsequent owners attempted several times to clean up the contamination, DEQ installed and operated a remediation system targeting gasoline-impacted ground water. Postremediation monitoring of indoor air and subslab soil vapor determined that vapor intrusion was not a concern. Residual concentrations of benzene remain in the ground water that are above allowable risk-based concentrations protective of unrestricted use, so the property owners signed an environmental covenant preventing any ground water from being extracted from the property. The Tracy General Store was closed as a leaking underground storage tank site in 2017 and is now a functioning general store and houses the Almo Post Office.

Bunker Hill Superfund Site: Mine and Mill Site—More than 1,000 mine and mill sites are catalogued for the Bunker Hill Superfund Site. DEQ and EPA recognized that full characterization of these sites would be a lengthy process and decided to prioritize sites that are more likely to impact human health. From 2014 to 2016, DEQ's field crews visited 75 mine and mill sites in the Upper Basin and 22 sites in the Bunker Hill "Box." Their task was to characterize remaining contamination that may require cleanup to protect people's health. This characterization was conducted as part of an EPA cooperative agreement.

In addition, 84 mine and mill sites were identified in drainage basins upstream of four public drinking water systems. DEQ's field crews characterized surface water upstream of the intakes and directly after treatment for each drinking water system. Results show that impacts of mining-related activities and remaining historic mine wastes are minimal. This source water evaluation was completed by DEQ and EPA with coordination and support from DEQ's Source Water and Drinking Water Programs and the Coeur d'Alene Regional Office and local water systems.

During 2017, these findings were used to prioritize sites for further action to address human health risks. This prioritization will help with project sequencing as DEQ and EPA determine next steps for each site, which include further characterization, remedial action, referral to other programs, or categorization as a current low priority for human health. Although some sites will be rated as a low priority based on the current observations, the status may change in the future based on changes in site use (e.g., new residential buildings and new recreational uses). Human health concerns may be reevaluated based on these changes.

Water Quality

Idaho Pollutant Discharge Elimination System Program—DEQ submitted the Idaho Pollutant Discharge Elimination System (IPDES) Program's application for delegated permitting authority to EPA on August 31, 2016. This application seeks EPA's authorization for a state-operated pollutant discharge elimination system permitting program. The goal of IPDES is to address water pollution by regulating point sources that discharge pollutants to waters of the United States. DEQ expects this new state-run program to be a positive development both for the environment and regulated entities. The full program will require approximately 29 positions located in DEQ's state and regional offices and an annual budget of \$3 million. While permittees must expect that protective, substantive permitting requirements will remain, they can look forward to gaining access to permit writers and other staff with local experience and knowledge and experiencing a streamlined timeline for issuing permits. IPDES currently employees 10 staff and will add an additional 9 next year. DEQ anticipates issuing its first permits in 2018.

Idaho's 2014 Integrated Report—EPA approved *Idaho's 2014 Integrated Report*, a biennial status report on water quality in Idaho's rivers, streams, lakes, and reservoirs. The 2014 report was submitted to EPA for review on February 15, 2017, and approved in record time on June 5, 2017. EPA acknowledged DEQ's work in developing the final 2014 Section 303(d) list and complimented staff on their teamwork and communication with EPA to ensure an approvable integrated report. The integrated report is a comprehensive analysis of state waters to determine if they meet state water quality standards and support beneficial uses, or if additional pollution controls are needed. It serves as a guide for developing and implementing water quality improvement plans known as total maximum daily loads. These plans are designed to protect water quality and achieve federal and state water quality standards. An integrated report must be approved by EPA before it can be used by a state to guide its management decisions.

Idaho Water Reuse Conference—The Idaho Water Reuse Conference has become nationally recognized as one of the most attended conferences in the nation and one of the least expensive to attend (\$150 per person). In 2015, the conference was the third largest conference of its kind in the nation (approximately 400 attendees), and the 2017 conference boasted similar attendance. In addition for the past four water reuse conferences, DEQ organized a nationally recognized regulators session (one full day) where regulators from eight states address national reuse topics. Idaho was the first state to initiate a regulator's session as part of their conference.

Part II - Performance Measures

DEQ's target performance measures are used to track and report progress in meeting the overall agency goal of protecting public health and the environment. These targets were chosen because each tracks measurable agency actions and reflects an actual environmental or public health outcome or result. Each performance measure is revisited annually through the strategic planning process to ensure its continued relevance. General descriptions of DEQ's target performance measures are given below.

- 1. Air quality permits to construct issued, on average, in 99 days. DEQ recognizes the importance of issuing timely permits to construct so facilities can plan and make strategic business decisions. DEQ streamlined its permitting process in 2007 and developed a performance objective to issue minor source permits to construct, on average, in 99 days. DEQ tracks the amount of time it takes to issue a permit to construct on a two-year, monthly rolling average and reports annually the actual average number of days to issue these permits.
- 2. Air Quality Index category correctly forecasted 100% of days. The Air Quality Index is a tool to help citizens understand the severity of air pollution and potential health implications so they can take steps to protect their health and reduce their contribution to air pollution. The index is calculated using actual monitoring data compared to health-based standards. It is reported daily in selected cities on a scale of increasing pollution and health concerns, according to the following six categories: good, moderate, unhealthy for sensitive groups, unhealthy, very unhealthy, and hazardous.
- **3. Hazardous waste permits and reviews.** Permits and reviews associated with hazardous wastes are completed annually according to established schedules. Time frames are established from a variety of sources, including federal regulations, project schedules, construction seasons, and company requests.
- **4. Brownfields site assessments.** A brownfields site is a vacant or underutilized property where redevelopment or reuse is complicated by actual or perceived environmental contamination. Site assessments are completed to provide environmental information necessary for proceeding with redevelopment or reuse. This information is used to guide site cleanup to minimize public health risks and bolster the community's economic vitality.
- **5. Monitoring of INL conditions.** Continuous air quality monitors and real-time radiation monitors on and around the INL track environmental conditions and must be operational at least 97% of the time.

- **6. Ground water sampling events conducted.** Ground water is vulnerable to contamination. Once ground water becomes contaminated, it is difficult to clean up. The contamination may impair ground water for use as drinking water and other beneficial uses and may affect the quality of the surface waters where it discharges. DEQ is responsible for monitoring, assessing, and protecting the quality of ground water in Idaho in partnership with numerous other agencies and organizations.
- **7. Wadeable streams monitored following Beneficial Use Reconnaissance Program protocols**. As the agency responsible for protecting Idaho's surface water, DEQ continually monitors and assesses the quality of the state's rivers, streams, and lakes. Each summer, DEQ BURP technicians follow standardized procedures to collect aquatic insects and water samples, conduct fish surveys, and document habitat conditions in streams and rivers.
- 8. Wastewater loan recipients that complete their project and will be better positioned to sustain operations. The Water Pollution Control State Revolving Loan Fund provides below-market-rate interest loans to help build new or repair existing wastewater treatment facilities.
- **9. Recycled water reuse permits issued.** Treated wastewater can be applied to land for irrigation and further supplemental treatment. The treated wastewater is suitable for reuse as recycled water providing both nutrients and water to crops. Through soil filtration and absorption, additional treatment of the recycled water occurs. DEQ issues reuse permits to facilities treating wastewater and sludge for reuse purposes.
- **10.** Regulating community water systems to provide safe drinking water. The total population of Idaho was estimated at 1,683,140 in 2016. Idaho has 737 community water systems, serving a total of 1,290,065 people. Rigorous monitoring requirements for community water systems must be met to ensure safe drinking water is provided and public health is protected.

DEQ's annual performance on these target performance measures is shown in the table below. Targets for FY 2018 are also provided, where applicable.

	Performance Measure		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018		
	Air Quality Goal								
	Manage air quality in Idaho airsheds to ensure compliance with National Ambient Air Quality Standards								
1.	, , , , , , , , , , , , , , , , , , ,	actual	97 days	103 days	117 days	148 days			
	issue a permit to construct	target	99 days	99 days	99 days	99 days	99 days		
2.	Percentage of days the Air	actual	92%	89%	89%	88%			
	Quality Index category is correctly forecasted	target	100%	100%	100%	100%	100%		
	Waste Management and Remediation Goal 1 Through proper waste and product management, prevent and protect soil and water from contamination								
	resulting from solid and hazardous waste, petroleum products, and mining-related activities.								
3.	Percentage of scheduled	actual	100%	100%	100%	100%			
	hazardous waste permits or reviews completed within established time frames	target	100%	100%	100%	100%	100%		
	Waste Management and Remediation Goal 2								
P	Protect human health and the environment through proper waste management, mitigation, and remediation of contaminated areas.								
4.	Number of brownfields site	actual	12	12	16	13			
	assessments completed	target	10	10	10	10	10		

	Performance Measure		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	
	Idaho National Laboratory Oversight Goal							
	Protect public health and	d the environ	ment at and	around the lo	daho Nationa	I Laboratory.		
5.	Percentage of time air	actual	97%	96%	98%	97%		
	monitoring stations and radiation monitoring stations are operational to monitor INL conditions	target	97T	96%	97%	97%	97%	
			er Quality G					
		d improve su	rface and gro	ound water qu	uality in Idah)		
6.	Number of ground water sampling events conducted	actual				177		
		target	n/aª	n/aª	n/aª	250	270	
7.	Number wadeable streams	actual				240		
	monitored following BURP protocols	target	n/aª	n/aª	n/aª	240	280	
8.	Percentage of wastewater loan recipients that complete their project and will be better positioned to sustain their operations into the future	actual				92% wastewater grants 47% wastewater loans		
		target	n/aª	n/aª	n/aª	100%	100%	
9.	Number of recycled water reuse permits issued	actual				12		
		target	n/aª	n/aª	n/aª	20	18	
	Protect human health through th		er Quality G safe and reli		water from p	oublic water s	systems.	
10.	. Percentage of people served act	actual	98%	98%	97%	98%		
	by community water systems provided drinking water meeting health-based standards	target	95%	95%	95%	95%	95%	

a. Data are not available. In FY 2017, DEQ modified existing target performance measures for water quality and added one new measure.

Performance Measure Explanatory Notes

Performance Analysis

Over the past four fiscal years, DEQ has met or exceeded a majority of its performance measurement targets. During FY 2017 specifically, DEQ achieved performance near most of the outlined targets while surpassing several as discussed below.

Air Quality—The average amount of time needed to issue a permit to construct (PTC) remained near the target of 99 days in FY 2014; however, increased slightly in FY 2015, and increased more significantly in FY 2016 and 2017. The average is calculated using a 2-year, monthly rolling average. Staffing changes in FY 2015 and 2016 along with increased complexity of permit applications due to stricter health-based standards and increased public interaction have slowed average turn-around times. As a result, DEQ requested an additional permit writer, which was approved by the legislature in 2017. This addition will assist DEQ in improved permit issuance time frames.

DEQ's second air quality performance target measures the percentage of days the Air Quality Index (AQI) is correctly forecasted. While the ultimate goal is to correctly predict these numbers every day, extraneous factors such as wildfire can be challenging to model and greatly impact actual observations. Further, DEQ has installed additional air quality monitors across the state that has increased the amount of data and the number of forecasts made for particular areas. A total of 3,210 forecasts were made in FY 2014 compared to 4,047 forecasts in FY 2017. This increased number of forecasts impacts the total number made correctly. Accuracy at higher AQI

observations (driven by wildfire events and winter stagnation events) are the primary cause of decreased accuracy for the agency.

Wastewater Grants and Loans—Each year the goals for State Revolving Fund loans and State Planning grants are set based upon interest expressed by Idaho communities. During the course of the fiscal year, communities will sometimes change their plans for funding, by either pursuing a different funding option or by not moving forward with their plans. When communities change their plans, the DEQ Loans and Grants Program makes every effort to commit the financial resources to a new funding applicant. In FY 2017 the program was unable to redirect the funding resources to fully meet the goals.

Wastewater Permits—DEQ experienced substantial staff turnover in the Wastewater Program that resulted in a reduced number of permits issued in FY 2017.

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