

OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT

U.S. Department of the Interior



Annual Evaluation Report for the
Regulatory Program Administered by
The Division of Oil, Gas and Mining
of Utah



For Evaluation Year 2017
July 1, 2016 to June 30, 2017
Prepared by The Denver Field Division
September 2017

EXECUTIVE SUMMARY

The following summary captures the major highlights of the Evaluation Year 2017 (EY 2017) Annual Evaluation Report for the Utah regulatory program. While the full report details numerous other achievements, the following summary outlines the significant regulatory program accomplishments that occurred between July 1, 2016 and June 30, 2017.

The Utah Division of Oil, Gas and Mining (DOGGM or the Division) regulates the exploration, and development of, coal in the State of Utah which: supports the existence of a viable coal mining industry to meet the Nation's energy needs; implements standards that safeguard the environment and protect public health and safety; and achieves the successful reclamation of land affected by coal mining activities. During EY 2017, DOGGM continued to achieve the regulatory and reclamation goals of the Surface Mining Control and Reclamation Act of 1977 (SMCRA), including the protection of the public and the environment from the adverse effects of coal mining.

Reclamation

DOGGM continues to effectively administer its Title V reclamation program. During EY 2017, the Division granted Phase I bond release on 21 acres and Phase III bond release on 85 acres. Since the State program was approved, a total of 793 acres have been approved for Phase III bond release. Only 110 acres were disturbed during EY 2017.

During EY 2017, DOGGM demonstrated its persistence and diligence in effectively implementing its approved State program to ensure on-the-ground reclamation and environmental protection at bond forfeiture sites. Specifically, during EY 2017 the Division has made significant progress after reaching an agreement with the Horizon Mine permittee and receiving approval from its Board to authorize the initiation of bond forfeiture procedures at the site. By the end of EY 2017, DOGGM was in the process of acquiring title to the property held as surety and preparing to use proceeds from a sale to begin reclamation of the Horizon Mine site during the next Evaluation Year. Additionally, the Division has continued to monitor iron exceedances at the Crandall Canyon site, to ensure the total iron concentrations discharged continue to decrease.

Resolving Regulatory Program Issues

Throughout EY 2017, OSMRE and DOGGM have consistently worked together to review Utah's bonding practices. After OSMRE issued a determination on a citizen's request for a State program evaluation under 30 C.F.R. Part 733, and subsequently issued its Ten-Day Notice determination, corrective action was taken to address separate issues identified through an internal technical review conducted by OSMRE staff. OSMRE and DOGGM collaboratively developed Action Plan #UT-2017-001 to resolve problems associated with bond calculation methods and consistency. As a result of the discussions between OSMRE and DOGGM, the Team effectively identified solutions and the Division began implementing the changes, both during EY 2017.

TABLE OF CONTENTS

I. INTRODUCTION4

II. OVERVIEW OF COAL MINING INDUSTRY IN UTAH5

III. OVERVIEW OF THE PUBLIC PARTICIPATION AND OUTREACH EFFORTS8

IV. MAJOR ACCOMPLISHMENTS AND INNOVATIONS10

V. SUCCESS IN ACHIEVING THE PURPOSES OF SMCRA13

 A. Off-site Impacts14

 B. Reclamation Success15

 C. Customer Service.....17

VI. NATIONAL PRIORITY AND GENERAL OVERSIGHT TOPIC REVIEWS18

 A. National Priority Reviews18

 B. General Oversight Topic Reviews.....18

VII. PROGRAM PROBLEMS AND ISSUES19

VIII. OSMRE ASSISTANCE.....23

IX. TABLE FOOTNOTES25

APPENDIX 1:

 SUMMARY OF CORE DATA TO CHARACTERIZE THE UTAH PROGRAM.....26

 COMMENTS OF STATE OF UTAH ON THE REPORT43

APPENDIX 2: EY 2017 UTAH RECLAMATION STATUS TABLE44

Cover Page Photograph: Crandall Canyon Mine, 2017

I. INTRODUCTION

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSMRE) in the Department of the Interior. SMCRA provides authority to OSMRE to oversee the implementation of and provide federal funding for the state regulatory programs and abandoned mine land programs that have been approved by the Secretary of the Interior as meeting the minimum standards specified by SMCRA. In addition to conducting oversight of approved state programs, OSMRE provides technical assistance, staff training, financial grants and assistance, and management assistance to each state program. This report contains summary information regarding the Utah program and the effectiveness of the Utah program in meeting the applicable purposes of SMCRA as specified in Section 102. This report covers the EY 2017, spanning July 1, 2016 through June 30, 2017.

Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the OSMRE's Denver Field Branch (DFB), 1999 Broadway, Suite 3320, Denver, Colorado 80202. Contact Howard E. Strand, DFB Manager, at hstrand@osmre.gov or (303) 293-5026.

The reports are also available at the OSMRE Oversight Documents website at <http://odocs.osmre.gov/>. Adobe Acrobat Reader® is needed to view these documents. Acrobat Reader® is free and can be downloaded at <http://get.adobe.com/reader/>. Follow these steps to gain access to the document of interest:

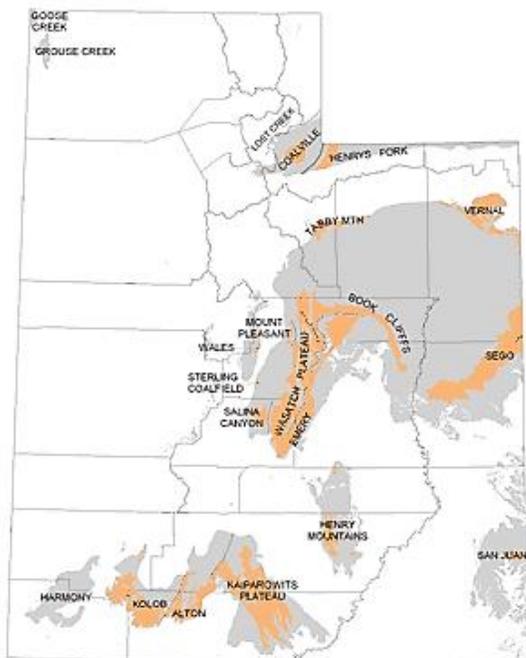
1. Select Utah from the drop down box labeled “State.” Also select EY 2017 as the “Evaluation Year”, and then click “Submit”. The search can be narrowed by choosing selections under the “Keyword” or “Category” headings.
2. The oversight documents and reports matching the selected state and evaluation year will appear at the bottom of the page.
3. Select “View” for the document that is of interest and the report will appear for viewing, saving, and/or printing.

The following acronyms are used in this report:

AML	Abandoned Mine Land
BLM	Bureau of Land Management
BOGM	Utah Board of Oil, Gas and Mining
BTU	British Thermal Unit
CFR	Code of Federal Regulations
DFB	Denver Field Branch (within the Denver Field Division)
DFD	Denver Field Division
DOGM	Utah Division of Oil, Gas and Mining
DO	Division Order

DWRi	Utah Division of Water Rights
EY	Evaluation Year
FY	Fiscal Year
IU	Inspectable Unit
MRP	Mining and Reclamation Plan
NEPA	National Environmental Policy Act
NOI	Notice of Intent to Sue
NOV	Notice of Violation
NTTP	National Technical Training Program
OSMRE	Office of Surface Mining Reclamation & Enforcement
REG-8	OSMRE Directive REG-8
SMCRA	Surface Mining Control and Reclamation Act of 1977
TDN	Ten-Day Notice
TIPS	Technical Innovation and Professional Services Program
UCMRA	Utah Coal Mining and Reclamation Act
UPDES	Utah Pollutant Discharge Elimination System
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
WEG	WildEarth Guardians
WR	Western Region

II. OVERVIEW OF COAL MINING INDUSTRY IN UTAH



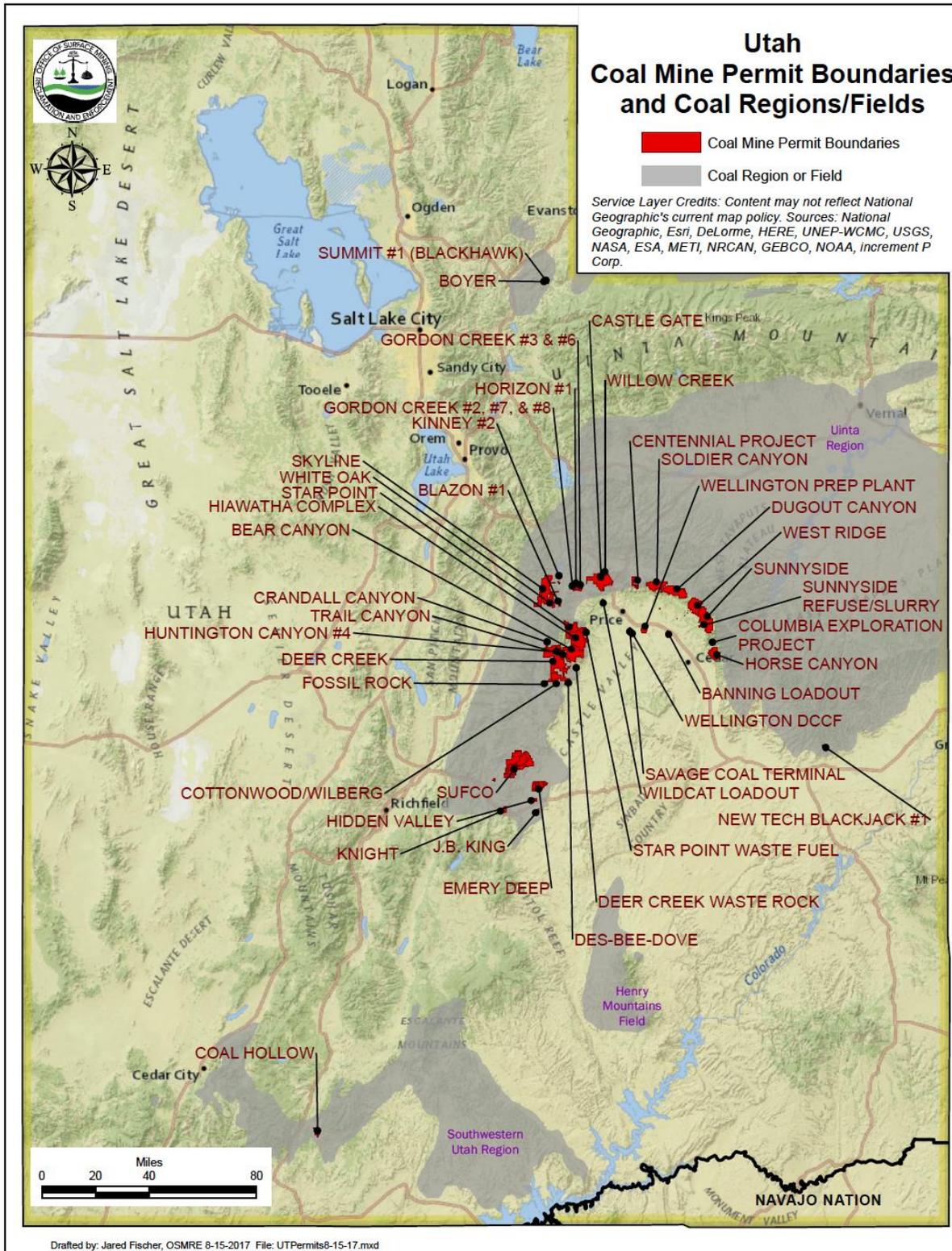
Coal is found beneath approximately 18% of the State of Utah, but only 4% is considered mineable based on economic viability at this time. The demonstrated coal reserve base ranges from 5.4 to 14 billion tons. The Federal government holds most of Utah’s coal resources. Utah coal fields are shown on the figure below (Utah Geological Survey web site, Coal & Coalbed Methane at <http://geology.utah.gov/utahgeo/energy/coal/index.htm>, August 2016). In EY 2017, the Wasatch Plateau, Book Cliffs, Emery, and Alton coalfields were actively being mined. This includes operations in Carbon, Emery, Kane, and Sevier Counties. The climate of the Wasatch Plateau and Book Cliffs Coal Fields is characterized by hot, dry summers, the late-summer (so-called *monsoon*) rains, and cold, relatively moist winters. Normal precipitation varies from six inches in the lower valleys to more than 40 inches on some high plateaus. The growing season ranges from five months in some valleys to only 2½ months in mountainous regions.

Most of the coal is bituminous and is of Cretaceous age. The BTU value is high compared to most other western States. Sulfur content ranges from low to medium in the more important coal

fields, and is comparatively elevated in the Alton coalfield.

Coal production steadily increased from the early 1970s, peaked in 1996 at 28.9 million tons, and has generally declined since. Coal production in calendar year 2016 was approximately 14.89 million tons (Table 1) (OSM-1 quarterly coal production reporting). This production level represents a 2.7% increase from 2015 levels and ranks Utah tenth among coal producing states. The majority of the coal is produced by underground mining operations.

As of June 30, 2017, there were 32 IUs in Utah including 16 active operations, 9 inactive operations which include 7 sites in temporary cessation and 2 reclaimed sites, and 7 abandoned sites (Table 2). For these operations, permitted acreage totaled 2,860 acres (Table 2) and bonded acreage approved for disturbance totaled 2,531 acres (Table 6). The total amount of bond dollars held as of June 30, 2017, was \$64,620,362.00. Of the 11 operations actively producing coal as of June 30, 2017, six were underground mines, one was a private surface mining operation, and four were surface mining operations that extract coal from an underground mine refuse pile. Three of the six underground mines use the longwall mining method and three employ the room and pillar mining method. As of June 30, 2017, Utah had also reclaimed 469 acres of disturbance for the seven abandoned sites.



III. OVERVIEW OF THE PUBLIC PARTICIPATION AND OUTREACH EFFORTS

The term “public” includes all stakeholders (i.e. citizenry at large, industry, other federal, state or local agencies, and environmental groups). Opportunities for public participation occur at significant points in the Utah regulatory program and involve the ability of the public to:

- Request that areas be designated as unsuitable for mining;
- Receive notification by advertisement of Division receipt of applications for new permits, permit revisions, and bond release;
- Review applications for new permits, permit revisions, and bond release;
- Contest Division decisions on applications for new permits, permit revisions and bond releases to the Board;
- Request an inspection of a mine site;
- Submit complaints if the public believes a violation of regulations is taking place;
- Object to proposed permits, permit revisions, and bond releases;
- Initiate civil suits; and
- Petition to initiate rulemaking.

OSMRE’s Denver Field Division (DFD), located in the Western Region (WR), and the Utah Division of Oil, Gas and Mining (DOGM or the Division) formed an Evaluation Team (the Team) to conduct annual evaluations of Utah’s coal regulatory program (the Utah program). The Team evaluates how effective DOGM is in ensuring that coal mining and reclamation is successful, preventing off-site impacts, and providing service to its customers. The Team makes recommendations for improving the administration, implementation, and maintenance of the Utah program. The Team structure is comprised of four to five members from both DFD and DOGM. The Team cooperatively solicits public participation, conducts joint inspections, selects evaluation topics, and reports, discusses, and tracks off-site impacts. This evaluation method fosters a shared commitment to the implementation of SMCRA.

Each year, the Team solicits comments or suggestions from persons and groups who may have an interest in coal mining and, specifically, an interest in the oversight process through an annual mailing. On February 25, 2016, the Team mailed outreach letters to coal mining stakeholders (State, Federal, and local governmental agencies, coal mine permittees, environmental groups, consulting firms, and coal mining trade groups), soliciting input for topics to evaluate during EY 2017, and soliciting any questions or comments on previous oversight reports or the OSMRE/DOGM oversight process. In addition, DOGM posted a notice on its webpage requesting suggestions for oversight topics from the public, industry, and environmental groups.

For EY 2017, the Team received one response from the Bureau of Land Management (BLM). In its letter dated March 16, 2016, BLM notes its appreciation of the ongoing efforts to maintain

open communication. BLM also commented on the effectiveness of the monthly Interagency Coordination Meeting teleconferences. The Team also received a response from the Public Lands Director, Roads and Access Administrator, that message, however, only pertained to the public outreach process. The Roads and Access Administrator did not submit any further comments. Although the responsive comments did not result in a topic-specific oversight review this year, the Team always appreciates stakeholder input.

The public can access OSMRE Annual Reports and Performance Agreements via the internet at the OSMRE Oversight Documents website at <http://odocs.osmre.gov/>. The introduction section of this report details how to access information using this website. Additional data used by OSMRE in its evaluation of the Utah program are available for review in the evaluation files maintained at the WR-DFD-DFB. Contact Howard E. Strand, Manager, DFB, at hstrand@osmre.gov or (303) 293-5026.

Public participation for this year includes:

A. Board of Oil, Gas and Mining Meetings

The approved SMCRA program for the State of Utah is administered by DOGM. The Utah Board of Oil, Gas and Mining (BOGM or the Board) is a multi-interest citizen board which establishes the regulations, standards, and policies that guide DOGM. The Board was created and under the authority of the Utah Oil and Gas Conservation Act, at Title 40, Chapter 6 of the Utah Code. The Board consists of seven members appointed by the Governor, with the advice and consent of the Senate, who are knowledgeable in oil, gas, mining, environmental, geology, and royalty matters. BOGM convened 11 hearings during this Evaluation Year. The meetings were all held in Salt Lake City, with the exception of the May hearing, which was held in Vernal.

B. Education and Community Outreach

DOGM has implemented the use of Collaborative Meetings usually rotated each quarter between Carbon and Emery Counties. This innovative forum has provided opportunities for information exchange and increased education among the citizens, operators, and agencies in these counties. DOGM representatives meet with county water user associations, coal operators, Utah Division of Water Rights (DWRi), U.S. Forest Service (USFS), BLM, County Commissioners and other interested parties to discuss issues relating to coal mining in the Carbon / Emery County areas. In addition to general updates, this past year included presentations on the Federal Coal Lease Moratorium, the Oil and Gas Leasing Process on Federal Lands, County Resource Management Planning and the White Oak Mine Reclamation Project.

The Division maintains information on their website at <http://www.ogm.utah.gov/>. This information includes: DOGM's Water Quality Database, announcements of pending rules, mine information, contact information, additional links to other informative web pages, technical information, amendment tracking information, and access to a File Transfer Protocol site for authorized users.

DOG M provides leadership and outreach in the coordination with other State and Federal agencies involved in coal resource recovery.

- DOGM participates in monthly interagency conference calls or meetings to coordinate permitting issues. Agencies who participate in these calls include the BLM, State of Utah School and Institutional Trust Lands Administration, OSMRE, USFS, DWRi, Utah Division of Wildlife Resources, USFS and the United States Army Corps of Engineers. The Division's cooperative agreement, which authorizes the State regulation of surface coal mining and reclamation operations on Federal lands, is somewhat unique as compared to other Federal lands states. The Utah cooperative agreement requires the State to obtain Federal agency concurrence, rather than OSMRE performing this coordination effort.
- The DOGM and the Utah Department of Environmental Quality meet periodically to review their existing Memorandum of Understanding. The discussions include Utah Pollutant Discharge Elimination System (UPDES) and other water-related compliance issues concerning coal mines.

C. Information and Technology Exchanges

DOG M participates on the steering committees for the OSMRE National Technical Training Program (NTTP), National Technology Transfer, the Technical Innovation and Professional Services Program (TIPS), and is a member of the Western Region Technology Transfer Team. DOGM exchanged information with other states through participation in the Interstate Mining Compact Commission annual meetings and as a representative of the Reclamation Committee for the Western Interstate Energy Board. DOGM staff attended several professional conferences, meetings, and workshops during the Evaluation Year. DOGM also participates in various local venues including the State Resource Development and Coordinating Council, the Emery County Public Lands Council, the Canyon Country Partnership, and various Utah Partners in Conservation Development projects.

IV. MAJOR ACCOMPLISHMENTS AND INNOVATIONS

This year marks the 36th anniversary since the State of Utah achieved primacy. The maturation of the program has helped protect the public and minimize environmental impacts within the Utah coalfields.

Over the past year, OSMRE monitored DOGM performance in meeting the goals and objectives of the approved State program. Once again, OSMRE finds that DOGM is successfully implementing its State program. A list of the oversight reviews used to reach this conclusion is included in Section VI of this report. OSMRE looks forward to maintaining the positive working relationship in the upcoming Evaluation Years and continuing to work cooperatively with DOGM.

Major accomplishments and innovations for this year include:

A. Accomplishments

1. Final Bond Releases

DOGM fully releases a reclamation performance bond (Phase III bond release) when a permittee demonstrates that a site meets or exceeds all DOGM program requirements for the disturbed land. During EY 2017, DOGM granted Phase III bond release for 83 acres at the Hiawatha Mine, and two acres at the Dugout Canyon Mine. As of June 30, 2017, Utah has approved full and final Phase III bond release under its permanent regulatory program on nine mine sites.

2. Staffing and Workload

During the past year, the Division workload has remained fairly steady. Even with the soft coal market, the Division's workload has remained active with the existing mines adding new leases along with the required permit changes. The Division continues to function with a reduced staff of 14 full time equivalent employees assigned to the coal program and a continued reduction in State General funds and Federal funding. New employees are trained and are quickly able to contribute to the efforts of the coal regulatory program. The Division continues to improve work processes and electronic information transfer to manage the workload. Even with the reduced staff, DOGM continues to complete the necessary reviews and permitting actions required under its approved State program. The timeliness of actions is measured on a quarterly basis and reported on the DOGM website. DOGM's timeliness for meeting permit review deadlines during EY 2017 was 91%, down slightly from EY 2016 which was 92%.

3. Earth Day Awards

The BOGM sponsors an Earth Day Awards Program to recognize operators or individuals for going beyond what is required by regulation to protect the environment while providing society with essential natural resources. In April of 2017, the BOGM presented an Earth Day Award to six different companies for their environmental stewardship. Among the award winners was one coal-related award winner, Canyon Fuel Company's SUFCO Mine, which was recognized for coordination efforts with several wildlife preservation organizations, livestock organizations, and USFS biologists in implementing techniques to protect the critical wildlife habitat and develop a healthy environment for wildlife and livestock within the adjacent area. These projects included building sediment ponds that could be utilized as watering holes for wildlife and livestock and providing materials and constructing four guzzler systems on the Fishlake National Forest. Also included in the projects was the engineering and installation of a gravity feed pipeline for distribution of water to ponds and troughs. These improvements greatly enhanced the availability of water to both wildlife and livestock in the Fishlake forest.

4. State Program Amendments

On February 24, 2012, OSMRE submitted a letter to DOGM requiring that it submit a program amendment pursuant to 30 C.F.R. § 732.17(e)(2) after OSMRE was notified of then recent

changes made to Utah State law. Such changes included revisions to the Utah Judicial Code, specifically at Utah Code Ann. § 78B-5-828, which established a new requirement that plaintiffs in environmental actions must post a surety bond or cash equivalent before a court may issue a preliminary injunction and/or before an agency may grant an administrative stay in the action. By letter dated April 18, 2012, DOGM submitted a State program amendment in response to OSMRE's 732 letter. OSMRE published the proposed rule notice on June 12, 2012. 77 Fed. Reg. 34892 (June 12, 2012). Following the initial submission of the final rule notice for internal review, OSMRE was required to further revise the Federal Register notice for the final rule to ensure any changes to the State law will be in accordance with the Utah program and consistent with SMCRA. The final rule remains under review pending further discussions between OSMRE and the Regional Solicitor.

B. Innovations

1. Innovative Reclamation Practices

Reclamation of the White Oak Mine: The White Oak Mine is a bond forfeiture site that has undergone various stages of reclamation with limited success. The Division was able to develop a scope of work and secure a contract to complete additional reclamation at the site during EY 2011 and EY 2012. This included establishing terraces on steep slopes, backfilling sink holes, reworking and stabilizing the stream channel, placing bio-solids on much of the site, and reseeding and planting vegetation. This additional work included stabilizing two sink holes, installing drop structures in the stream channel, planting containerized stock and tublings, and supplemental seeding and mulching. The reclamation work, all completed with bond forfeiture money, has greatly improved the conditions at the site as well as the landowner's satisfaction. In October of 2012 additional seeding and mulching and some thistle control was completed. There are plans for additional musk thistle treatment in the future. During EY 2014 and EY 2015, the site was monitored for vegetation growth and stability. The terraces appear to function as designed and the stream channel was stable. Weed control continues to be an issue and the Division has partnered with the Skyline Cooperative Weed Management Association in conjunction with the Utah Department of Agriculture to spray the musk thistle in the area. One final stage of the reclamation at this site was completed during EY 2016 which involved the removal of the access culvert and fill at Eccles Creek. Plans were developed in conjunction with the Army Corp of Engineers and the Utah Division of Wildlife Resources and the project was contracted out to Nelco Contractors Inc. out of Price, Utah. The project was finished during October of 2015. Subsequent inspections at the site revealed some erosion occurring at the site as a result of highway runoff. After consulting with UDOT, a grant was applied for through the Watershed Restoration Initiative, which would help re-route the runoff and correct the erosion. The project, WRI #4130, was funded in the amount of \$5,000 and the work was completed in the Spring of 2017. With the conclusion of this project, reclamation of the White Oak mine is now complete.

Reclamation of the Wellington Prep Plant: During EY 2017, there has been an ongoing effort to remove coal fines from the slurry ponds at the Wellington Prep Plant site. The coal fines are being utilized as fuel for the Sunnyside Cogen power plant. This is an effective method of

reducing the reclamation liability and footprint at this Wellington site. At the end of Fiscal Year 2016, approximately 197,367 tons of coal had been removed from the North slurry cell. During the July 1, 2016 to July 31, 2017 period, an additional 145,000 tons were removed.

2. Electronic Permitting

DOG M maintains a database and data processing for electronic permitting. Elements of the database include permit review tracking, automated inspection reports, document indexing, and annotation of digital photographs.

DOG M is converting files and mining plans from paper to electronic PDF files stored in the database. The electronic database provides DOGM staff and the public with easy access to those files. A secure access portal is available to view mine files for other agencies, companies, and the public at <http://linux3.ogm.utah.gov/WebStuff/wwwroot/division/tabs.html>; access to the general public is more restricted. With this database:

- Inspections and compliance information are tracked;
- Staff permitting tasks are assigned, scheduled and tracked;
- Mine operators can track submittals, permits, and amendments status online; and
- A network of people, companies, permits, projects, and other activities has been created and is used for notifications, mailing lists, inspection reports, fees and other DOGM related work.

DOG M continues to improve its processes for electronic permitting and has worked to incorporate all of the Mining and Reclamation Plans for each of the mines into an electronic format. Most of the mines are now able to submit amendments to the Division in a paperless format. DOGM anticipates that all of the mines will participate in electronic permitting as the initial systems and processes continue to be refined.

V. SUCCESS IN ACHIEVING THE PURPOSES OF SMCRA

To further the concept of reporting end-results and on-the-ground success, the findings from topic-specific reviews and public participation evaluations are collected by OSMRE for a national perspective on the number and extent of observed off-site impacts, the number of acres that have been mined and reclaimed to meet bond release requirements for the various phases of reclamation, and the effectiveness of customer service provided by the state.

To validate the credibility of State programs and enhance Federal oversight improvement efforts, OSMRE announced in November of 2009 that it would immediately increase the number of oversight inspections that it performs. OSMRE also began conducting independent unannounced oversight inspections. Independent inspections are intended to provide insight into the effectiveness of State programs by evaluating the current compliance status of mines in each state. OSMRE continued these oversight efforts during EY 2017.

DFD conducted three joint complete and six joint partial inspections, including one joint partial independent inspection, of coal mining operations in Utah during EY 2017 (Table 13). These inspections are included in the DOGM complete and partial inspection totals reported below. DFD did not issue any TDNs during EY 2017.

DOGM conducted 109 complete inspections and 196 partial inspections of coal mining operations during this Evaluation Year (Table 10). In addition, DOGM conducted four bond release inspections this year. Of those four bond release inspections, one was conducted at the Skyline Mine, one at Coal Hollow, and two were conducted at Hiawatha. During EY 2017, DOGM issued 12 Notices of Violation (NOVs) and zero failure-to-abate cessation orders. None of the NOVs were vacated. Observed mine site conditions indicate that DOGM is effectively implementing and enforcing its approved State program. Based on the above numbers and DFD's monthly review of all DOGM inspection reports and enforcement actions, the Team finds that DOGM has met or exceeded the required inspection frequency on 97%, or 31 out of 32, IUs.

A. Off-site Impacts

An "off-site impact" results from a surface coal mining and reclamation activity or operation that causes a negative effect on resources (people, land, water, or structures) outside the area permitted for conducting mining and reclamation activities. The applicable State program must regulate or control the mining or reclamation activity, or the result of the activity, causing an off-site impact. In addition, the impact on the resource must be substantiated as being related to a mining and reclamation activity, and must be outside the area authorized by the permit for conducting mining and reclamation activities (OSMRE Directive REG-8).

Table 5 shows the number and type of off-site impacts that were observed and documented as having occurred during EY 2017 for both permitted sites and bond forfeiture sites. The Team identified two minor off-site impacts on two permitted sites and no off-site impacts at bond forfeiture sites during EY 2017. Because there were 32 IUs during this Evaluation Year, 94% (30 of 32) were free of negative off-site impacts.

Permitted Mine Sites Where Reclamation Performance Bonds Have Not Been Forfeited

The Team assessed whether off-site impacts had occurred on each of the 32 permitted coal mining operations that existed at some time during the evaluation period. Several sources of information are employed to identify off-site impacts. These include but are not limited to: DOGM and OSMRE inspection reports; enforcement actions; civil penalty assessments; citizen's complaints; special studies; and information from other environmental agencies. Field evaluations for off-site impacts are conducted during routine inspections (or in response to a citizen's complaint) by DOGM and OSMRE.

During EY 2017, there were 25 permitted mine sites where the performance bond had not been forfeited or was in the process of being forfeited. The Team documented one minor hydrology off-site impact to a land resource at one site and another minor hydrology off-site impact to a water resource at a separate site. Accordingly, 92% (23 of 25) of all IUs were free of negative

off-site impacts (Table 5). Off-site impacts at both sites were identified during routine inspections. Both of the off-site impacts were the result of operator negligence. DOGM issued NOV's and identified appropriate abatement measures to bring the sites into compliance. At the end of the EY, the operator of the first permitted site took action to abate the violations within the required timeframes. The operator of the second permitted site failed to comply with the abatement requirements, and the operator later forfeited the bond. For Table 5 purposes, the off-site impact is listed alongside data where the bond has not been forfeited, because, at that time, the off-site impact occurred before the bond was forfeited. (See the discussion below regarding the Horizon mine forfeiture).

Bond Forfeitures and Revoked Permit Sites

Since OSMRE approved the Utah program in 1981, DOGM has forfeited reclamation performance bonds for seven mines. The White Oak Mines #1 and #2 are counted with the bond forfeiture sites because the Division issued the determination to forfeit; however, due to the Surety company going into bankruptcy, only part of the bond forfeiture monies were received (\$999,000). Additional monies (\$1.217 million) were obtained from the Lodestar Bankruptcy Trustee, Frontier Insurance, and a "General Settlement Fund" outside of the Lodestar bankruptcy estate. Reclamation of this site was completed when the last project was finished during EY 2016. DOGM did additional work during EY 2017 to control erosion occurring from highway runoff. The work was funded through a WRI grant in the amount of \$5,000, and was completed in the Spring of 2017. With the conclusion of this project, reclamation of the White Oak mine is now complete.

During EY 2017, Horizon Mine was in the process of being forfeited and is therefore discussed as a seventh bond forfeiture site. However, the acreage (ten acres) at Horizon Mine will not be incorporated into the DST data as a forfeiture until EY 2018. While DOGM received the BOGM approval to forfeit the bond in April of 2017 and title to the collateral property was secured, monies were not collected during this Evaluation Year. Again, because the off-site impact and NOV at the Horizon mine occurred prior to the bond forfeiture, it was counted as an impact at a non-forfeiture site in Table 5.

During EY 2017, DOGM did not observe any off-site impacts on the seven bond forfeiture sites in Utah. As a result, 100% of the bond forfeiture and permit revocation sites (7 of 7) were free of off-site impacts at the end of EY 2017 (Table 5).

B. Reclamation Success

According to REG-8, OSMRE will evaluate and report on the effectiveness of State programs in ensuring successful reclamation on lands affected by surface coal mining operations. Determinations of success will be based on the number of acres that meet the bond release standards and have been released by the state. According to the Utah Administrative Code, phased bond release is defined as:

Phase I – When the operator completes the backfilling and regrading (which may include the replacement of topsoil) and drainage control of a bonded area in

accordance with the approved reclamation plan.

Phase II – When revegetation has been established on the regraded mined lands in accordance with the approved reclamation plan.

Phase III – When the operator has successfully completed all surface coal mining and reclamation operations, but not before the expiration of the period specified for operator responsibility.

In addition to the nationwide information reported, offices and states may conduct specific evaluations and report on individual performance standards. Table 6 in Appendix 1 catalogues the acreage of land released from bond for Phase I, II, and III.

Permitted Mine Sites Where Reclamation Performance Bonds Have Not Been Forfeited

Each Evaluation Year the Team compiles reclamation information for all operations that DOGM has permitted under the Utah program since its approval on January 21, 1981. This reclamation information is derived from annual reclamation reports submitted to DOGM by all permitted coal mine operations and EY bond release data contained in DOGM's permitting database. Historically, the amount of bond release acreage in Utah is very low due to the following two factors:

- Most of the permitted operations are underground mines (Table 2). Regulated surface facilities associated with underground mining operations typically remain active during the entire life of the operation. Although the surface disturbances for Utah mines are relatively small (2,531 acres for EY 2017), there are 2,860 permitted acres for the 25 non-forfeited mines, or an average of 89.38 permitted acres per mine in Utah. While a 2007 legislative coal audit pointed out that the permit area may be defined as just the disturbed area, by rule the operator has the option to include what they would like, within reason, in their permit area. Several, but not all, operators reduced their permit areas by excluding shadow areas above underground mine workings. For this reason, DOGM excludes shadow area acreages and only reports areas permitted for disturbance in order to report underground mine permit areas in a consistent manner.
- Due to low precipitation, the bond liability period is a minimum of 10 years on sites requiring the establishment of vegetation.

Each mine's annual reclamation report shows mining and reclamation data based on the calendar year, and are reflected in the attached Table entitled "Reclamation Status Table for EY 2017 (Mine by Mine)" (see Appendix 2). Using the data from this table, the Team can determine acreage in the following categories: disturbed acreage; acreage backfilled and graded; acreage topsoiled and seeded; acreage seeded for 10 years or longer; and Phase I, II, and III bond release acreages. During EY 2017, DOGM granted Phase I bond release on 21 acres and Phase III bond release on 85 acres (Table 6). The Coal Hollow Mine was granted Phase I bond release for 21 acres on January 18, 2017. During the Evaluation Year, the Hiawatha Mine was granted Phase III bond release for 83 acres on July 19, 2016, and the Dugout Canyon Mine was granted Phase

III bond release for two acres on August 2, 2016.

An additional 110 acres were bonded and disturbed during EY 2017, which includes 15 acres at the Skyline Mine, 49 acres at the Coal Hollow Mine, and 46 acres at the Sufco Mine. The 110 acres does not reflect DOGM's adjustment to the Emery Deep Mine acreage after the site fell under new ownership. This, along with a calculation error of one acre is accounted for in the 164 acre administrative adjustment present in Table 6. *See also* Footnote in Reclamation Status Table.

Of the total disturbed acreage on active, temporarily inactive, inactive, final bond released, and bond forfeiture sites 1,329 of the 3,793 disturbed acres (35%) have been backfilled, regraded, re-topsoiled, and seeded. Long-term facilities (2,135 acres) and active mining areas (0 acres) are currently functioning in their intended capacities and are not yet subject to contemporaneous reclamation requirements during any given Evaluation Year. These areas, comprising a total of 2,135 acres, are thus not eligible for any phase of bond release.

Since the Utah program was approved in 1981, DOGM has granted Phase III bond release on a total of 793 acres. This successfully reclaimed acreage is 20.9% of the total disturbed acreage under the Utah permanent regulatory program (793 of 3,793 acres) which includes all permitted mining operations and full Phase III bond release mines. At the end of EY 2017, there were 2,266 acres bonded for disturbance without Phase I bond release (Table 6).

OSMRE concludes that reclamation of mined land in Utah is successful based on the Team's review of the coal permittee's annual reclamation reports, DOGM's permitting database, the EY 2017 Utah Reclamation Status Table, OSMRE oversight inspections, and routine DOGM monthly inspections that include reclamation success evaluations of those reclaimed lands.

Bond Forfeitures and Revoked Permit Sites

As shown in Table 7, DOGM has completed initial reclamation on six of seven total bond forfeiture sites. During the latter half of EY 2017, DOGM was in the process of forfeiting the bond at the Horizon Mine, the seventh forfeiture referenced in Table 7 and mentioned above. The proceeds generated from the sale of the property held as collateral bond, however, was not considered collected monies until after the close of the EY. Thus, site reclamation has not yet begun. During EY 2017, DOGM staff conducted nine complete inspections on these seven abandoned mines (Table 10). DOGM continues to evaluate bond forfeiture sites for reclamation success that could lead to the termination of jurisdiction.

C. Customer Service

Each EY, OSMRE monitors the effectiveness of customer service provided by DOGM. Areas evaluated include bond releases and DOGM's responses to citizen complaints, although other areas of customer service are also considered. OSMRE did not receive any citizen complaints pertaining to Utah during EY 2017. Utah's program also provides for public involvement of permitting actions when a new application is received, when a permit is renewed, when any significant permit revision is proposed, and when a phase of reclamation is completed to the

point of requesting bond release from a tract of reclaimed land. DOGM provided the required notices to landowners and other interested parties for significant revision applications, renewals and bond release applications. DOGM staff encourages participation in bond release inspections by the landowners and county officials. OSMRE and DOGM also evaluated DOGM's outreach and interaction with the public, adjacent landowners, current and potential operators, other State and Federal agencies, and other programs within DOGM. DOGM responded to numerous requests for information from landowners, mining companies, government agencies and others. In addition, DOGM performed outreach to citizens and communities, operators, and stakeholders by providing opportunities to discuss issues, by participating in programs that help to educate the public about mining, and by coordinating with other State and Federal agencies involved in coal extraction.

DOGM also conducted its ninth annual survey of customer satisfaction to evaluate performance at the Division and Program level and to foster improved customer service in the future. The results of this survey are discussed under Section VI (B).

VI. NATIONAL PRIORITY AND GENERAL OVERSIGHT TOPIC REVIEWS

National Priority Reviews and general oversight topic reviews can be located and reviewed at OSMRE's website as listed at the introduction section of this report. Individual reports prepared by OSMRE are part of the oversight process of each State and contain findings and details regarding the evaluation of specific elements of the State program.

A. National Priority Reviews

National Priority Reviews are oversight topic reviews selected by OSMRE to review nationwide. In EY 2017, there were no National Priority Reviews.

B. Topic-Specific Oversight Reviews

General Oversight Topic Reviews are conducted as specified in the Utah Performance Agreement/Evaluation Plan. For EY 2017, the Team conducted two topic specific evaluations. These reviews evaluated DOGM's regulation of exploration activities and administration of its enforcement procedures. These topic review reports are available online at <http://odocs.osmre.gov/> or by contacting Howard E. Strand, DFB Manager, at hstrand@osmre.gov or (303) 293-5026.

DOGM also conducted its ninth annual survey of customer satisfaction during EY 2017 to evaluate performance at the Division and program level and to foster improved customer service in the future. The survey concluded on October 20, 2016. The results of the survey for the Coal program, on a 1 to 5 scale with 5 being the highest satisfaction, were as follows:

Timeliness of Services: 4.33
Accuracy of Information: 4.38

Helpfulness of Employees: 4.45
Expertise of Employees: 4.45
Availability of Information: 4.06
Composite Rating: 4.33

VII. PROGRAM PROBLEMS AND ISSUES

OSMRE has initiated a corrective action process that applies when problems are identified with a State's approved regulatory program, or the State's actions under that program, that could, if left unaddressed, result in a failure by the State to effectively implement, administer, enforce, or maintain its approved regulatory program. Site-specific issues identified by the DFD during inspections are addressed by DOGM when they are identified. During EY 2017, OSMRE responded to a request for State program evaluation under 30 C.F.R. Part 733. OSMRE also issued its TDN decision which was also the result of allegations submitted as part of the citizen complaint request, which was also included in the same letter as the request for a State program evaluation. Although OSMRE determined that the request did not warrant further evaluation under 30 C.F.R. Part 733, and that the Division had shown good cause in its TDN response, OSMRE requested technical assistance during its review of the allegations. OSMRE's technical review findings indicated potential, separate problems associated with DOGM's internal bond cost calculation practices. This resulted in the development of a corrective action plan. An additional ongoing issue remains present at the Crandall Canyon Mine (discussed below) which both DOGM and OSMRE continue to monitor.

A. WildEarth Guardians Citizen Complaint

On January 6, 2016, OSMRE issued three TDNs in response to the written citizen complaint submitted by WEG in its letter dated December 21, 2015. The complaint alleged that DOGM failed to adjust the bond amount to account for the inflation of the reclamation costs at the Dugout Canyon, Skyline, and SUFCO mines. All three mines are owned by Canyon Fuel Company, LLC, a subsidiary of Bowie Resources. WEG further alleged that DOGM inaccurately calculated the cost of reclamation by using an inflation factor based on an outdated Cost Index. In its TDN response submitted on January 22, 2016, DOGM responded that each of the three sites were sufficiently bonded and concluded that no violation had occurred under either the UCMRA or the Utah Administrative Code Rules. On January 27, 2016, DFB requested internal technical assistance from the OSMRE Western Region's Program Support Division to answer questions related to DOGM's TDN response, bonding practices, and to assess the cost estimates on all three sites. OSMRE provided WEG with an opportunity to respond. On October 11, 2016, OSMRE issued its decision on the three TDNs, finding that DOGM had shown good cause under 30 C.F.R. § 842.11(b)(1)(ii)(B)(4)(i) because the violations alleged at all three mines did not exist under the Utah program.

B. WildEarth Guardians Request for OSMRE Review of the Utah Coal Regulatory Program Pursuant to 30 C.F.R. § 733.12(a)(2)

In addition to the accompanying citizen complaint discussed above, WEG requested, in its letter dated December 21, 2015, that OSMRE conduct a State program evaluation, pursuant to the procedures outlined in 30 C.F.R. § 733.12, to ensure the Utah program is being appropriately implemented, administered, maintained, and enforced. In its 733 request, WEG contended that DOGM's failures allegedly occurring at the three sites indicated a systemic program failure. Similar to the status in the citizen complaint, OSMRE was awaiting receipt of internal technical findings before completing the verification process, as required by 30 C.F.R. § 733.12(a)(2). In response to WEG's notice of intent to sue received on June 15, 2016, OSMRE sent an acknowledgement letter on June 28, 2016. On August 16, 2016, OSMRE issued its determination, finding that further evaluation was not warranted under 30 C.F.R. Part 733. No subsequent litigation was filed related to this matter.

C. Action Plan #UT-2017-001

Upon issuing the TDN determination and the decision on the 733 request, OSMRE began developing an Action Plan to address the potential, separate issues identified during the aforementioned technical review. After much collaboration between OSMRE and DOGM, Action Plan #UT-2017-001 was signed in May of 2017. The Action Plan was developed to address four identified issues that related to DOGM's bond calculation methods and practices. A majority of the issues pertained to one of DOGM's technical directives, which, both as written and as applied, conflicted with the requirements under the approved Utah program. The fourth issue regarded the development of clearer internal guidelines for staff use to ensure consistent, defensible cost estimating procedures for calculating and adjusting bond amounts. Four criteria for resolution and action sequences were outlined to directly resolve each issue. At the close of this Evaluation Year, DOGM and OSMRE were in the process of completing the action sequence for all four issues within the Action Plan. For additional information related to this Action Plan, please visit the OSMRE Oversight Documents website at <http://odocs.osmre.gov/>.

D. Horizon Mine – Intent to Forfeit Surety

On December 20, 2012, the Division received notice that the Horizon Mine was in idle status and had been for several months. On February 25, 2013, the Division received notice that AmericaWest Resources (AWR) had filed a voluntary petition pursuant to Chapter 11 of Title 11 of the United States Bankruptcy code, and pursuant to the powers and procedures approved by the court sought to sell the Horizon Mine by auction sale. In July of 2013, the court dismissed the bankruptcy petition. Hidden Splendor Resources (HSR) and its subsidiary AWR were not able to sell the mine operations, and instead sold all of the equipment used and necessary to continue mining operations.

Since January of 2014, HSR has been issued 11 NOVs and one FTACO. Of these, six of the NOVs were issued for HSR failing to conduct water monitoring or macro invertebrate surveys in accordance with their Mining and Reclamation Plan (MRP); four of the NOVs were issued for

HSR's failure to perform routine maintenance of the mine site resulting in inadequate drainage controls, increased erosion, and sediment transport outside the permit area; and one violation (NOV #10141) was issued for failure to maintain the sediment pond on site. On August 5, 2014, a FTACO was issued to HSR for failing to complete the abatement measures identified in NOV #10141. On September 10, 2014, the Division filed a Notice of Agency Action with the Board intending to seek permission to forfeit the reclamation bond. The Notice was subsequently dismissed which would allow the Division to complete administrative requirements. During this process, the permittee attempted to change the post-mining land use from undeveloped land to recreational use by submitting three different permit change applications, none of which were approved.

On April 25, 2017, the Division filed a motion before the BOGM to default and enter judgment against HSR and AWR to (1) forfeit the reclamation surety, (2) order the Division to proceed with a Trustees Sale, Foreclosure, or other Sale of the real property held has surety for the reclamation obligations and use the sale proceeds for reclamation, (3) authorize the Utah Attorney General to proceed as necessary to recover civil penalties from officers, directors, or agents of HSR for failure to abate violations, and (4) direct the Division and the Utah Attorney General to take all necessary actions to require Alexander H. Walker III, and any other agents, owners and controllers of Horizon Mine to complete reclamation of the mine site.

Shortly after the filing, HSR contacted the Division regarding a proposed settlement agreement. After an agreement was reached, it was presented before the BOGM on April 26, 2017. The Board (1) approved the Stipulation to settle all claims, and dismiss notice of agency action against Alexander Walker III and Amanda Walker Cardinali (referred to herein as the "Stipulation"); and (2) granted DOGM's motion to default and enter judgment against HSR and AWR. In issuing its Order approving the Stipulation, the Board authorized the surrender and transfer of title of the condominium held has surety for the reclamation of Horizon Mine. Following the BOGM Order, OSMRE subsequently provided a letter concurring in the bond forfeiture and DOGM received the title to the condominium on May, 17, 2017. At the end of EY 2017, the Division was in the process of selling the property. The proceeds from the sale are to be used to complete the reclamation at the mine site and the forfeiture will be counted in EY 2018 DST data.

E. Crandall Canyon Six Month Mine-Water Discharge Reports

On August 6, 2007, a mine collapse occurred at the Crandall Canyon Mine, which took the lives of six miners. Because the mine was shut down in such an unexpected manner, the provisions for mine water discharge had not been adequately addressed. Water began discharging from the mine portals shortly after they were sealed. A Division Order (C/015/032-DO 08A) was issued on April 22, 2008, requiring Genwal Resources, Inc. (Genwal), permittee for the Crandall Canyon Mine, to make requisite permit changes and update the Mining and Reclamation Plan (MRP) to include a plan for the discharge of post-reclamation mine water in accordance with R645-301-551, R645-301-731.521, and R645-301-751. The level of iron in the water started to exceed the UPDES discharge parameters and soon began to stain the receiving stream, Crandall Creek. On August 11, 2009, the Division issued a violation to the mine for failure to minimize the disturbance to the hydrologic balance. The mine was required to stop discharging water that

exceeded the UPDES permit; a treatment facility was built that would treat the water before it was discharged into Crandall Creek.

On August 16, 2010, DOGM issued Division Order 10A (DO-10A) which superseded all versions of previous Division Orders. DO-10A was accompanied by DOGM's June 7, 2010, hydrologic report finding probable perpetual pollutorial discharge. DO-10A required Genwal to conduct increased water quantity and quality monitoring, revise the Mining and Reclamation Plan to reflect the increased monitoring, provide a bond or trust fund by October 16, 2010, that would yield a yearly payment sufficient to cover the operating costs for the water treatment system in perpetuity (then estimated at \$325,000/year), revise the Probable Hydrologic Consequences determination to reflect current conditions, and make other associated changes to the permit. Genwal Resources complied with the requirements to conduct increased water monitoring and to amend the permit to reflect the increased monitoring. Genwal appealed the Division Order to BOGM on September 15, 2010, indicating its belief that there was no authority for requiring a perpetual bond and no rules were in place to govern a trust fund bonding mechanism.

BOGM filed its findings of fact and conclusions of law in the matter of Genwal's request for Board review of DO-10A on March 6, 2012. BOGM amended and vacated portions of DO-10A, finding that DOGM had appropriately sought a bond adjustment but that an interest bearing bonding mechanism would require rulemaking prior to implementation. Additionally, BOGM dismissed DOGM's hydrologic report and findings of probable perpetual pollutorial discharge and accepted Genwal's hydrologic report claiming the noncompliant discharge would not likely persist more than three years. BOGM ruled that the additional bond amount Genwal was required to post must be based on Genwal's costs assuming a best-case scenario. BOGM determined this to be three years of current operating costs (\$240,000), or \$720,000.00. Genwal posted the additional \$720,000.00 bond on July 6, 2012.

On January 28, 2013, BOGM issued a written Memorandum Decision and Order, which modified the March 6, 2012, Order by requiring Genwal to submit water quality data on a six month recurring schedule for the purpose of reassessing bond adequacy. On January 30, 2013, DOGM responded to TDN #X12-140-933-001 by stating that it had "good cause" for not taking action in response to the TDN because under its State program a violation did not exist and it was precluded from taking action due to the Board's March 6, 2012, and January 28, 2013, Orders. The response also indicated DOGM had taken appropriate action to address the bonding issue based on the plan to monitor and reassess the need for bond adjustments on a six-month recurring schedule.

On March 21, 2013, OSMRE issued its determination that DOGM had taken appropriate action to cause the violation to be abated by instituting a bond review schedule in accordance with R645-301-830.410. OSMRE reasoned that the State was acting within its authority to determine a cost basis for any necessary bond adjustment. The water quality data available at the time was insufficient to draw statistically valid conclusions regarding the duration of pollutorial discharge. DOGM's plan to reassess the bond adequacy on a six-month recurring schedule is within the State's discretion under its approved State program and constitutes appropriate action under 30

C.F.R. § 842.11(b)(1)(ii)(B)(4). OSMRE's March 21, 2013, determination also terminated Action Plan #UT-2012-001 because DOGM had taken appropriate action to correct the violation.

Since June of 2010, numerous reports have been prepared by the DOGM and Genwal that examine the mine discharge water at Crandall Canyon. In compliance with the January 28, 2013, BOGM Order, DOGM and Genwal prepared reports that present an update on the data collected in accordance with the six-month recurring schedule, the last being in July of 2017. The reports focus on data collected since approximately January of 2010 (after total iron concentrations in the discharge peaked). The updated reports describe: the data currently being collected; plots which have been prepared to examine the data; a recent data evaluation; recent compliant samples; a rate kinetics analysis; and predictive compliance analysis.

Genwal has continued to perform monthly sampling and analysis of the mine discharge water in accordance with the Crandall Canyon MRP. In addition, Genwal has occasionally collected laboratory analysis samples more frequently than required by the MRP and has also been sampling the discharge using a total iron field analysis. The Division has also taken numerous samples to verify and bolster the sampling results. The sampling is conducted to evaluate the need for continued treatment of the mine discharge water in order to meet the 1.24 mg/L maximum daily effluent limitation for total iron in accordance with their UPDES permit. The total iron concentrations, collected from June 2016 to June 2017, have fluctuated from as low as 0.97 mg/L to as high as 1.38 mg/L. With the exception of February (1.38 mg/l), all samples taken during the last year have been under the 1.24 mg/l threshold. Comparing this information to the previous six months, the average total iron concentration has decreased. Compared to data from prior years, the decrease in total iron concentration evidences an improvement. The Division continues to compile and review total iron concentration evaluations every six months based on newly available data.

VIII. OSMRE ASSISTANCE

OSMRE provides technical assistance and technology support to state Regulatory and AML Programs at the individual state level on project specific efforts, and at the national level in the form of national meetings, forums, and national initiatives. OSMRE provides direct technical assistance in project and problem investigation, design and analysis, permitting assistance, developing technical guidelines, training, and support. OSMRE initiated a regional Technology Transfer Team in 2004 to support and enhance the technical skills needed to operate regulatory and reclamation programs on which each state, including Utah, has a representative.

A. Grants

Utah's 2016 grant period was from July 1, 2016, through June 30, 2017, which corresponds with the State's Fiscal Year (FY) and OSMRE's EY 2017. DOGM requested \$2,535,108.00 in Federal funds. However, DOGM's request was limited to the amount allocated for Utah in OSMRE's FY 2016 Final Regulatory Grant Distribution. Therefore, OSMRE funded an Administration and Enforcement Grant to the Utah program in the amount of \$2,305,343.00 for the grant period starting July 1, 2016, and ending June 30, 2017 (Table 9). Through a Federal

lands cooperative agreement, OSMRE reimburses DOGM for permitting, inspection, and other activities that it performs for mines on Federal lands. Because most of the acreage mined for coal in Utah is on Federal lands (Table 2), OSMRE funds 86% of DOGM's total program costs. DOGM did not de-obligate any funding for FY 2016.

Utah requested \$1,467,109.00 in AML funding for FY 2016. OSMRE subsequently funded a grant to the Utah AML Program in the amount of \$1,467,109.00 for a three-year period which will end June 30, 2019 (Table 9). This amount represented 100% funding that would normally be available for Utah's AML Program under SMCRA.

B. Education/Outreach/Tools

DOGM staff participated in two training sessions through the NTTP training program.

TIPS deployed a FLIR camera system to the Utah DOGM Title V staff. The system was used to identify sage grouse at the Coal Hollow mine. It was also used by the DOGM Title IV program to identify hotspots at an abandoned mine that had underground fires. In addition, a seismograph was loaned for use at the Coal Hollow mine to measure earth movement during surface blasting operations.

EY 2017 Utah Evaluation Team Members

Steve Christensen, Steve Demczak, Daron Haddock, James Owen, and Steve Schneider, DOGM

Alexis Long, Christine Belka, Dan MacKinnon, and Tom Medlin, DFD

Dana Dean, DOGM, and Howard Strand, DFD (Team coaches)

IX. TABLE FOOTNOTES

The table data is provided as an attachment to the Annual Evaluation Report. There are some data sets that require additional description. The following are explanations for the data sets with anomalies that deviate for what is standard, normal, or expected:

DST Table 6: Surface Coal Mining and Reclamation Activity. An administrative adjustment was made to account for 164 acres. Of those 164 acres, one acre was previously incorporated into the calculations by error. The remaining 163 acres account for the new ownership of a mine and bringing the acreage into actual acres disturbed.

DST Table 7: Bond Forfeiture Activity. Utah has bond forfeiture sites which have been completely reclaimed, but jurisdiction has not been terminated. Table 7 does not account for this situation. Because Table 7 automatically populates data into other tables, all bond forfeiture sites must be reported here. The data in Table 7 has been footnoted to indicate that Utah has bond forfeiture sites that have been completely reclaimed, but jurisdiction has not been terminated. Additionally, as referenced in above discussions, Horizon Mine was in the process of being forfeited, but monies from the forfeiture were not collected until after the close of EY 2017. Therefore, the Horizon Mine acreage (10 acres) will be counted as forfeited in next year's DST and RST data.

Appendix 1: Summary of Core Data to Characterize the Utah Program

Utah Annual Evaluation Report Evaluation Year 2017

APPENDIX 1, Part A

Summary of Core Data to Characterize the Utah Program

The following tables present summary data pertinent to mining operations and regulatory activities under the Utah regulatory program. Unless otherwise specified, the reporting period for the data contained in the tables is the Evaluation Year. Other data and information used by OSMRE in its evaluation of Utah's performance are available for review in the evaluation file maintained by the Denver Field Division.

Because of the enormous variations from state to state in the number, size, and type of coal mining operations and the differences between state programs, the summary data should not be used to compare one state to another.

List of Tables

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

Utah

EY 2017, ending June 30, 2017

TABLE 1

COAL PRODUCED FOR SALE , TRANSFER, OR USE ^A (Millions of short tons)			
Calendar Year	Surface Mines	Underground Mines	Total
2013	0.7	16.8	17.6
2014	0.6	17.8	18.4
2015	0.3	14.2	14.5
2016	0.7	14.2	14.9

^A Coal production is the gross tonnage (short tons) and includes coal produced during the calendar year (CY) for sale, transfer or use. The coal produced in each CY quarter is reported by each mining company to OSM during the following quarter on line 8(a) of form OSM-1, "Coal Reclamation Fee Report." Gross tonnage does not provide for a moisture reduction. OSM verifies tonnage reported through routine auditing of mining companies. This production may vary from that reported by other sources due to varying methods of determining and reporting coal production.

TABLE 2

PERMANENT PROGRAM PERMITS, INITIAL PROGRAM SITES, INSPECTABLE UNITS, AND EXPLORATION

Mines and Other Facilities	Numbers of Permanent Program Permits and Initial Program Sites								Insp. Units ^{1, 2}	Area in Acres ³				Total Area
	Permanent Program Permits				Initial Program Sites					Permanent Program Permits (Permit Area)		Initial Program Sites		
	Active	Inactive	Abandoned	Total	Active	Inactive	Abandoned	Total		Federal Lands	State/Tribal and Private Lands	Federal Lands	State/Tribal and Private Lands	
Surface Mines	3	0	1	4	0	0	0	0	4	150	650	0	0	800
Underground Mines	10	7	6	23	0	0	0	0	23	330	1,040	0	0	1,370
Other Facilities	3	2	0	5	0	0	0	0	5	120	570	0	0	690
Total	16	9	7	32	0	0	0	0	32	600	2,260	0	0	2,860
Permanent Program Permits and Initial Program Sites (Number on Federal Lands: 0)				Total Number:		32						Average Acres per Site:		89.38
Average Number of Permanent Program Permits and Initial Program Sites per Inspectable Unit (IU):				Total Number:		1.00						Average Acres per IU:		89.38
Permanent Program Permits in Temporary Cessation:				Total Number:		7						Number More than 3 Years:		0
EXPLORATION SITES				Total Number of Sites				Sites on Federal Lands ⁴				Exploration Inspectable Units		
Exploration Sites with Permits:				0				0				0		
Exploration Sites with Notices:				2				2				0		

¹An Inspectable Unit may include multiple small and neighboring Permanent Program Permits or Initial Program Sites that have been grouped together as one Inspectable Unit, or conversely, an Inspectable Unit may be one of multiple Inspectable Units within a Permanent Program Permit.

²Total Inspectable Units calculation includes Exploration Sites Inspectable Units

³When a Permanent Program Permit or Initial Program Site contains both Federal and State and Private lands, the acreage for each type of land is in the applicable column.

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

Utah

EY 2017, ending June 30, 2017

TABLE 3

PERMITS ALLOWING SPECIAL CATEGORIES OF MINING

Special Category of Mining	30 CFR Citation Defining Permits Allowing Special Mining Practices	Numbers of Permits	
		Issued During EY	Total Active and Inactive Permits
Experimental Practice	785.13(d)	0	1
Mountaintop Removal Mining	785.14(c)(5)	0	0
Steep Slope Mining	785.15(c)	0	0
AOC Variances for Steep Slope Mining	785.16(b)(2)	0	0
Prime Farmlands Historically Used for Cropland	785.17(e)	0	0
Contemporaneous Reclamation Variances	785.18(c)(9)	0	0
Mining on or Adjacent to Alluvial Valley Floors	785.19(e)(2)	0	0
Auger Mining	785.20(c)	0	0
Coal Preparation Plants Not Located at a Mine Site	785.21(c)	0	0
In-Situ Processing	785.22(c)	0	0
Remining	773.15(m) and 785.25	0	2
Activities in or Within 100 Feet of a Perennial or Intermittent Stream	780.28(d) and/or (e) 784.28(d) and/or (e)	0	18

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

U.S. Department of the Interior

Utah

EY 2017, ending June 30, 2017

TABLE 4

PERMITTING ACTIVITY												
Type of Application	Surface Mines			Underground Mines			Other Facilities			Totals		
	App. Rec.	Issued/ Appvd	Acres	App. Rec.	Issued/ Appvd	Acres ¹	App. Rec.	Issued/ Appvd	Acres	App. Rec.	Issued/ Appvd	Acres
New Permits	0	0	0	0	0	0	0	0	0	0	0	0
Renewals	0	0		6	6		0	0		6	6	
Transfers, sales, and assignments of permit rights	0	0		0	0		0	0		0	0	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits										0	0	
Exploration notices ²											0	
Revisions that do not add acreage to the permit area	14	14		39	39		4	4		57	57	
Revisions that add acreage to the permit area but are not incidental boundary revisions	1	1	49	2	2	61	0	0	0	3	3	110
Incidental boundary revisions	0	0	0	1	1	0	0	0	0	1	1	0
Totals	15	15	49	48	48	61	4	4	0	67	67	110
Permits terminated for failure to initiate operations:							Number:	0	Acres:		0.0	
Acres of Phase III bond releases (Areas no longer considered to be disturbed):									Acres:		85.0	
Permits in temporary cessation							Notices received:	2	Terminations:		1	
Midterm permit reviews completed							Number:	7				
¹ Includes only the number of acres of proposed surface disturbance ² State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.												

TABLE 5
OFF-SITE IMPACTS
EXCLUDING BOND FORFEITURE SITES

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

Total Number of Inspectable Units¹: 26
 Inspectable Units with one or more off-site impacts: 2
 Exploration Inspectable Units with one or more off-site impacts²: 0
 Inspectable Units free of off-site impacts: 24

% of Inspectable Units free of off-site impacts⁴: 92

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

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

OFF-SITE IMPACTS AT BOND FORFEITURE SITES

RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrology	0	0	0	0	0	0	0	0	0	0	0	0	0
Encroachment	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Number of Inspectable Units³: 6
 Inspectable Units with one or more off-site impacts: 0
 Inspectable Units free of off-site impacts: 6

% of Inspectable Units free of off-site impacts⁴: 100

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

TABLE 5
(Continued)

TOTAL OFF-SITE IMPACTS INCLUDING BOND FORFEITURE SITES													
RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrology	2	0	0	0	1	0	0	1	0	0	0	0	0
Encroachment	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	0	1	0	0	1	0	0	0	0	0
Total Number of Inspectable Units ⁵ :				32									
Inspectable Units with one or more off-site impacts:				2									
Exploration Inspectable Units with one or more off-site impacts:				0									
Inspectable Units free of off-site impacts:				30						% of Inspectable Units free of off-site impacts ⁴ :			94
⁴ % of Inspectable Units free of off-site impacts is based on the number of Inspectable Units during the Evaluation Year. The number of Inspectable Units may vary during the Evaluation Year.													
⁵ Total number of Inspectable Units is (1) the number of active and inactive Inspectable Units at the end of the Evaluation Year and (2) the number of Inspectable Units that were final bond released or removed during the Evaluation Year and (3) the number bond forfeiture sites that were reclaimed during the Evaluation Year and (4) the number of bond forfeiture sites that were unreclaimed at the end of the Evaluation Year.													

TABLE 6

SURFACE COAL MINING AND RECLAMATION ACTIVITY							
Areas of Phase I, II, and III Bond Releases During the Evaluation Year (EY)							
Phase I Releases	Phase II Releases		Phase III Releases			Total Acres Released During the EY	
Total Acres Released in Approved Phase I Releases	Total Acres Released in Approved Phase II Releases	Acres not previously released under Phase I	Total Acres Released in Approved Phase III Releases	Acres not previously released under Phase II	Acres not previously released under Phase I or II		
21		0			0	Phase I	21
	0			0		Phase II	0
			85			Phase III	85
Number of Permanent Program Permits with Jurisdiction Terminated Under Phase III Bond Release During the Evaluation Year					0	Other Releases - Acres	
Initial Program Sites with Jurisdiction Terminated During the Evaluation Year					0	Administrative Adjustments	164
Number of Inspectable Units Removed					0	Bond Forfeiture	0
Areas of Permits Bonded for Disturbance by Surface Coal Mining and Reclamation Operations							

	Total Acres at Start of EY	Total Acres at End of EY	Change in Acres During EY
New Area Bonded for Disturbance			110
Total Area Bonded for Disturbance	2,670	2,531	(139)
Area Bonded for Disturbance without Phase I Bond Release	2,047	2,266	219
Area Bonded for Disturbance for which Phase I Bond Release Has Been Approved	277	265	(12)
Area Bonded for Disturbance for which Phase II Bond Release Has Been Approved	347	60	(287)
Area Bonded for Disturbance with Bonds Forfeited During Evaluation Year			0
Area Bonded for Remining	350	350	0
Areas of Permits Disturbed by Surface Coal Mining and Reclamation Operations			
Disturbed Area	2,670	2,531	N/A

Utah
EY 2017, ending June 30, 2017

TABLE 7

BOND FORFEITURE ACTIVITY (Permanent Program Permits)			
Bond Forfeiture and Reclamation Activity	Number of Sites	Dollars	Acres
Sites with bonds forfeited and collected that were un-reclaimed at the start of the current Evaluation Year (i.e., end of previous Evaluation Year) ¹	6		469
Sites with bonds forfeited and collected during the current Evaluation Year	0	0	0
Sites with bonds forfeited and collected that were re-permitted during the current Evaluation Year	0		0
Sites with bonds forfeited and collected that were reclaimed during the current Evaluation Year	0		0
Sites with bonds forfeited and collected that were un-reclaimed at the end of the current Evaluation Year ¹	6		469
Sites with bonds forfeited but un-collected at the end of the current Evaluation Year	1		10
Forfeiture Sites with Long-Term Water Pollution			
Bonds forfeited, lands reclaimed, but water pollution is still occurring	0		
Bonds forfeited, lands reclaimed, and water treatment is ongoing	0		
Surety/Other Reclamation Activity In Lieu of Forfeiture			
Sites being reclaimed by surety/other party at the start of the current Evaluation Year (i.e., the end of previous Evaluation Year) ²	0		0
Sites where surety/other party agreed during the current Evaluation Year to do reclamation	0		0
Sites being reclaimed by surety/other party that were re-permitted during the current Evaluation Year	0		0
Sites with reclamation completed by surety/other party during the current Evaluation Year ³	0		0
Sites being reclaimed by surety/other party at the end of the current Evaluation Year ²	0		0
¹ Includes data only for those forfeiture sites not fully reclaimed. ² Includes all sites where surety or other party has agreed to complete reclamation and the site is not fully reclaimed. ³ These sites are also reported in Table 6, Surface Coal Mining and Reclamation Activity, because Phase III bond release would be granted on these sites.			

Utah

EY 2017, ending June 30, 2017

TABLE 8

REGULATORY AND AML PROGRAMS STAFFING	
Function	Number of FTEs
Regulatory Program	
Permit Review and Maintenance	8.00
Inspection	2.00
Other (supervisory, clerical, administrative, fiscal, personnel, etc.)	4.00
Regulatory Program Total	14.00
AML Program Total	11.00
TOTAL	25.00

Utah

EY 2017, ending June 30, 2017

TABLE 9

FUNDS GRANTED TO STATE OR TRIBE BY OSM (Actual Dollars Rounded to the Nearest Dollar)			
Type of Funding	Federal Funds Awarded	Total Program Cost	Federal Funds Awarded as a Percentage of Total Program Costs
Regulatory Funding			
Administration and Enforcement Grant	2,305,343		
Other Regulatory Funding, if applicable	0		
Subtotal (Regulatory Funding)	2,305,343	2,674,306	86
Small Operator Assistance Program Grant Funding	0	0	
Abandoned Mine Land Reclamation Funding	1,467,109	1,467,109	100
Watershed Cooperative Agreement Program	0	0	
TOTAL	3,772,452		

TABLE 10

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

Inspectable Units (IUs)	Total number of inspectable units ²	Number of inspections required annually		Number of inspections conducted		IUs Met Complete Inspection Frequency Requirement		IUs Met Partial Inspection Frequency Requirement		IUs Met Complete and Partial Inspection Frequency Requirements		
		Complete inspections	Partial inspections	Complete inspections	Partial inspections	Number	Percent	Number	Percent	Total number of IUs	Number that met inspection frequency	Percent
COAL MINES AND FACILITIES												
Active	16	64	128	65	136	16	100	16	100	16	16	100
Inactive	9	36	0	35	52	8	89	9	100	9	8	89
Abandoned	7	7	0	9	8	7	100	7	100	7	7	100
TOTALS ³	32	107	128	109	196	31	97	32	100	32	31	97
Coal Exploration Activities ⁴		Complete Inspections					Partial Inspections					
Exploration sites with permits		0					0					
Exploration sites with notices		0					0					

¹ Calculated on a site-specific basis.
² Total number includes both permanent program permits and initial program sites.
³ OSM is assuming that all states have gone through the process described in 30 CFR 840.11(h) and 842.11(f) to reduce inspection frequency on abandoned/forfeited sites
⁴ Includes all valid notices and permits. No inspection frequency data are provided since SMCRA does not establish a minimum numerical inspection frequency for coal exploration activities.
⁵ NA - Not Available

Utah

EY 2017, ending June 30, 2017

TABLE 11

STATE OR TRIBAL ENFORCEMENT ACTIVITY		
Type of Enforcement Action	Number of Actions ¹	Number of Violations ¹
Notice of Violation	12	12
Failure-to-Abate Cessation Order	0	0
Imminent Harm Cessation Order	0	0
¹ Does not include actions and violations that were vacated.		

Utah

EY 2017, ending June 30, 2017

TABLE 12

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

Utah

EY 2017, ending June 30, 2017

TABLE 13

OSM OVERSIGHT ACTIVITY					
Oversight Inspections and Site Visits					
	Complete		Partial		
	Joint	Non-Joint	Joint	Non-Joint	Total
Oversight Inspections	3	0	6	0	9
	Technical Assistance		Other		Total
Site Visits	0		0		0
Violations Observed by OSM and Citizen Requests for Inspection¹					
Type of Action				Total number of each action	
How many violations were observed by OSM on oversight inspections?				0	
Of the violations observed, how many did OSM defer to State action during inspections?				0	
Of the violations observed, how many did OSM refer to the State through Ten-Day Notices? ²				0	
How many Ten-Day Notices did OSM Issue for observed violations? ³				0	
How many Ten-Day Notices did OSM issue to refer citizen requests for inspection?				0	
How many Notices of Violation did OSM issue?				0	
How many Failure-to-Abate Cessation Orders did OSM issue?				0	
How many Imminent Harm Cessation Orders did OSM issue?				0	
OSM Action for Delinquent Reporting or Non-Payment of Federal AML Reclamation Fees					
How many Ten-Day Notices for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?				0	
How many Notices of Violation for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?				0	
How many Federal Failure-to-Abate Cessation Orders for delinquent reporting or non-payment of Federal AML reclamation fees did OSM issue?				0	
¹ This section does not include actions for delinquent reporting or non-payment of Federal AML fees that are reported in the last section of the table. ² Number of violations contained in Ten-Day Notices not including those issued to refer citizen requests for inspection. ³ Number of Ten-Day Notices issued not including those to refer citizen requests for inspection.					

Utah

EY 2017, ending June 30, 2017

TABLE 14

STATUS OF ACTION PLANS

Action Plan ID	Problem Type ⁴	Problem Title	Problem Description	Date Action Plan Initiated	Scheduled Completion Date	Actual Completion Date
457	RP	Bond Cost Calculations and Methods	Resolving issues related to bond calculation	05/03/2017	7/18/2017	07/18/2017

⁴ Problem Type: "PA" indicates a required Program change under subchapter T or 732
 "RP" indicates a Regulatory Program implementation or administrative problem

Utah

EY 2017, ending June 30, 2017

TABLE 15
(Optional)

POST-MINING LAND USE ACREAGE OF SITES FULLY RECLAIMED (Phase III bond release or termination of jurisdiction under the Initial Program)	
Land Use¹	Acres Released
Cropland	0.00
Pasture/Hayland	0.00
Grazingland	85.00
Forestry	0.00
Residential	0.00
Industrial/Commercial	0.00
Recreation	0.00
Fish & Wildlife Habitat	0.00
Developed Water Resources	0.00
Undeveloped land or no current use or land management	0.00
Other - Public Utilities	0.00
Other -	0.00
Sub-Total Other	0.00
Total	85.00

¹ Land uses as defined in 30 CFR 701.5 or "Other" as defined under the state or tribal program

Comments of State of Utah on the Report

Utah Annual Evaluation Report

Evaluation Year 2017

APPENDIX 1, Part B

Comments of State of Utah on the Report

Utah had no comments on the Annual Evaluation report.

APPENDIX 2: EY 2017 Utah Reclamation Status Table

Utah Reclamation Status Table for EY-2017 (Mine by Mine)																		
RECLAMATION STATUS OF ALL AREAS DISTURBED UNDER THE PERMANENT REGULATORY PROGRAM																		
Acres Disturbed As of EY-2017																		
Mine Name	Mine type		Disturbed area		Long-term mining or reclamation facilities	Active mining area	Areas backfilled and graded		Areas released phase I bond		Areas soiled and seeded / planted		Areas released phase II bond		Areas final seeded / planted for 10 years		Areas released phase III bond	
	Surface	Underground	EY	Total (all years)			EY	Total (all years)	EY	Total (all years)	EY	Total (all years)	EY	Total (all years)	EY	Total (all years)	EY	Total (all years)
Skyline Mine		X	15	140	140	0	0	0	0	0	0	0	0	0	0	0	0	
Hiawatha Mine		X	0	290	194	0	0	96	0	96	0	93	0	93	83	83	83	
Wellington Preparation Plant	X		0	392	392	0	0	0	0	0	0	0	0	0	0	0	0	
Horse Canyon Mine		X	0	117	43	0	0	74	0	74	0	74	0	74	0	74	74	
Gordon Creek #2, #7, and #8		X	0	35	2	0	0	33	0	33	0	33	0	33	0	0	1	
Soldier Canyon Mine		X	0	24	24	0	0	0	0	0	0	0	0	0	0	0	0	
Centennial Mine		X	0	47	47	0	0	0	0	0	0	0	0	0	0	0	0	
Savage Coal Terminal	X		0	133	133	0	0	0	0	0	0	0	0	0	0	0	0	
Wildcat Loadout	X		0	112	112	0	0	0	0	0	0	0	0	0	0	0	0	
Banning Siding Loadout	X		0	22	22	0	0	0	0	0	0	0	0	0	0	0	0	
Sunnyside Refuse & Slurry	X		0	202	197	0	0	5	0	5	0	5	0	5	0	5	5	
Plateau-Willow Creek Mine		X	0	188	0	0	0	188	0	188	0	188	0	188	0	187	0	
Dugout Canyon Mine		X	0	109	72	0	0	37	0	37	0	19	0	19	2	2	2	
West Ridge Mine		X	0	31	31	0	0	0	0	0	0	0	0	0	0	0	0	
Star Point Refuse Mine	X		0	153	153	0	0	0	0	0	0	0	0	0	0	0	0	
Wellington Dry-Coal Facility	X		0	30	30	0	0	0	0	0	0	0	0	0	0	0	0	
Hidden Valley Mine		X	0	7	0	0	0	7	0	7	0	7	0	7	0	0	0	
Fossil Rock Mine		X	0	28	28	0	0	0	0	0	0	0	0	0	0	0	0	
Emery Deep Mine		X	0	86	86	0	0	0	0	0	0	0	0	0	0	0	0	
Deer Creek Mine		X	0	92	91	0	0	1	0	1	0	1	0	1	0	1	0	
Cottonwood/Wilberg Mine		X	0	49	28	0	0	21	0	21	0	21	0	21	0	21	21	
Bear Canyon Mine		X	0	41	35	0	0	6	0	6	0	6	0	6	0	6	6	
Crandall Canyon		X	0	34	22	0	0	12	0	12	0	0	0	0	0	0	0	
Coal Hollow Mine		X	49	443	147	0	21	296	21	165	0	0	0	0	0	0	0	
Horizon Mine		X	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	
Sufco Mine		X	46	96	96	0	0	0	0	0	0	0	0	0	0	0	0	
Castle Gate Mine		X	0	63	0	0	0	63	0	63	0	63	0	63	0	63	63	
Dez-Bee-Dove Mine		X	0	137	0	0	0	137	0	137	0	137	0	137	0	137	137	
Star Point Mine		X	0	101	0	0	0	101	0	101	0	101	0	101	0	101	101	
Blackhawk-Willow Creek Mine		X	0	4	0	0	0	4	0	4	0	4	0	4	0	4	4	
Trail Canyon Mine		X	0	10	0	0	0	10	0	10	0	10	0	10	0	10	10	
Gordon Creek #3 and #6		X	0	17	0	0	0	17	0	17	0	17	0	17	0	17	17	
Huntington #4 Mine		X	0	13	0	0	0	13	0	13	0	13	0	13	0	13	13	
J.B. King Mine		X	0	28	0	0	0	28	0	28	0	28	0	28	0	28	28	
Knight Mine		X	0	40	0	0	0	40	0	40	0	40	0	40	0	40	40	
Sunnyside Coal Company		X	0	287	0	0	0	287	0	0	0	287	0	0	0	287	0	
Blazon #1 Mine		X	0	7	0	0	0	7	0	0	0	7	0	0	0	7	0	
Summit #1 Mine		X	0	14	0	0	0	14	0	0	0	14	0	0	0	14	0	
Boyer Mine		X	0	7	0	0	0	7	0	0	0	7	0	0	0	7	0	
New Tech Black Jack #1 Mine		X	0	3	0	0	0	3	0	0	0	3	0	0	0	3	0	
White Oak #1 & #2 Mines and Loadout		X	0	151	0	0	0	151	0	0	0	151	0	0	0	151	0	
TOTAL	9	32	110	3793	2135	0	21	1658	21	1058	0	1329	0	853	85	1261	85	

Legend	
	Final Bond Release Sites
	Bond Forfeiture Sites

Table Footnote: An adjustment was made to the RST to Emery Deep’s disturbed area for 163 acres, which is included in the administrative adjustment to Table 6. As part of the permitting process, the permittee surveyed the disturbed area and brought the acreage into actual acres. As no new disturbance occurred during EY 2017, a “0” was entered under the “Disturbed During the EY” column, the “Total Disturbed Area (All Years)” column was corrected, and an administrative adjustment was made to Table 6 to reflect this information.