

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 2016
July 1, 2015 to June 30, 2016
Prepared by The Denver Field Division
September 2016

EXECUTIVE SUMMARY

The following summary captures the highlights of the Evaluation Year 2016 (EY 2016) Annual Evaluation Report for the Utah Regulatory Program. The report covers the period of July 1, 2015 to June 30, 2016.

The Utah Program

The Utah Division of Oil, Gas and Mining (DOG M) regulates exploration for, 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 2016, Utah continued to achieve the regulatory and reclamation goals of the Surface Mining Control and Reclamation Act (SMCRA), including the protection of the public and the environment from the adverse effects of coal mining.

Overview of Public Participation and Outreach Efforts

DOG M performed outreach to citizens and communities, operators, and stakeholders by providing opportunities to discuss issues, by participating in programs that helped to educate the public about mining, and by coordinating with other State and Federal agencies involved in coal extraction.

DOG M has implemented the use of Collaborative Meetings 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.

Information and Technology Exchanges

DOG M participated in several Interstate Mining Compact Commission (IMCC) events. DOGM also 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 (WRTT) Team. DOGM staff attended several professional conferences, meetings, and workshops during the evaluation year. DOGM also had one staff member participate in two different sessions as an instructor for one of OSMRE’s NTTP courses.

Accomplishments and Innovations

DOG M continues to administer an effective Title V reclamation program under the provisions of SMCRA. During EY 2016, DOGM was able to complete a contract for additional reclamation at the White Oak Mine, a bond forfeiture site that has undergone various stages of reclamation. The additional work, including haul road removal, has enhanced reclamation and greatly improved stability at this site. Ongoing work at the site includes culvert removal, stream channel restoration, and weed control.

Plugging and Abandonment of the Columbia Well, another bond forfeiture site was accomplished by DOGM through a contract. This completed reclamation on the site and it was removed from the Inspectable Units (IU) list.

DOGM is also progressing in its efforts to institute electronic permitting. Most of the active mines are now submitting permitting actions electronically. As a result, DOGM has made significant improvements in the timeliness of permitting actions.

OSMRE developed the Reclamation Status Table (Appendix 2 of this report) to better track reclamation in the state and on a region-wide basis. DOGM compiles annual reclamation data from mine operators and reports it to OSMRE in this format. OSMRE is developing a GIS database of permit information in Utah to verify DOGM's data. OSMRE began this project during 2015, and such improvements in data are leading to a more accurate picture of coal mine disturbance and reclamation in Utah.

There are currently 3,848 acres disturbed by coal mining; 2,210 of those acres consist of long-term facilities and active mining areas that are not yet subject to contemporaneous reclamation requirements. To date, the Utah Program has overseen a total of 1,638 acres to be backfilled and regraded and 1,333 acres topsoiled and reseeded. Of these areas, Utah has approved final (Phase III) bond release on 708 acres. During EY 2016, DOGM approved 144 acres for Phase I bond release and 100 acres for Phase III bond release. Only 78 acres were disturbed this year.

Program Amendments

During the 2012 evaluation year, DOGM submitted an amendment to the Judicial Code, Title 78 of the Utah Code requiring plaintiffs who obtain temporary relief (administrative stay or preliminary injunction) in an environmental action to post a surety bond or equivalent pending state agency or judicial review. DOGM submitted the amendment in response to a February 24, 2012, letter that OSMRE sent in accordance with 30 CFR 732.17(e)(2). The final rule Federal Register notice is currently under Regional Solicitor review.

Topic Specific Oversight Reviews

The EY 2016 Topic-Specific Oversight Reviews included Inspection Reporting and Documentation Practices; and Vegetation Reference Area Selection. The Team's findings and recommendations for each evaluation can be found in Section VI of this report.

Regulatory Program Issues

An ongoing issue for the Utah Program in EY 2016 involves the monitoring and treatment of mine water discharge at the Crandall Canyon Mine. Continued monitoring of this issue is described under Section VII Regulatory Program Issues.

Another continuing issue involves a potential bond forfeiture situation at the Horizon mine. This issue is also described under Section VII below.

By letter dated December 21, 2015, the WildEarth Guardians (WEG) submitted a written citizen complaint that alleged SMCRA violations were occurring at three specific coal mine sites. Based on the site-specific allegations, WEG claimed its information demonstrated that DOGM was failing to ensure sufficient bonding existed at all coal mine sites within the State of Utah and therefore requested that OSMRE conduct a State program evaluation pursuant to the procedures outlined in 30 CFR Part 733. On January 6, 2016, OSMRE issued three TDNs in response to the citizen complaint for the violations alleged at the Dugout Canyon, Skyline, and SUFCO mines. In its January 22, 2016, TDN response DOGM concluded that no violation had occurred under either the Utah Coal Mining and Reclamation Act (UCMRA) or the Utah Administrative Code Rules (the Utah rules). Instead, DOGM asserted that WEG's allegations were unfounded as sufficient bonding exists at all three sites.

WEG subsequently filed a Notice of Intent to Sue (NOI) dated June 8, 2016, which OSMRE received on June 15, 2016. The basis for WEG's NOI was OSMRE's alleged failure to perform a non-discretionary duty and issue a decision on the 733 request within the 60-day deadline established in the Federal regulations. OSMRE responded by sending an acknowledgement letter to the NOI on June 28, 2016.

The aforementioned TDNs resulting from the citizen complaint and WEG's request to evaluate the State of Utah's coal mining and reclamation regulatory program are discussed under Section VII below.

OSMRE Assistance

For the 12 month grant period starting July 1, 2015 (FY 2015), Utah received an Administration and Enforcement Grant of \$2,057,889.00 for permitting, inspection, and other activities that it performs for coal mines. DOGM used the entire grant and did not de-obligate any funds. DOGM originally received 100% OSMRE funding for the Utah Abandoned Mine Land (AML) Program for FY 2015 in the amount of \$1,276,220.00. Utah's grant was subsequently amended to add \$2,698,845.00 for a total of \$3,975,065.00, which represented the approved allotted amount. OSMRE also provided DOGM with free-of-charge technical training courses, use of technical equipment, and library reference materials upon request.

Prevention of Off-site Impacts

An off-site impact is defined as anything resulting from a surface coal mining and reclamation activity or operation that causes a negative effect on resources (people, land, water, structures) where that impact is intended to be minimized or prevented by SMCRA or the applicable State program. Utah had a total of 33 IUs at the beginning of EY 2016 and a total of 32 permitted IUs at the end of EY 2016. During the evaluation year, the Division completed plugging of the unpermitted Columbia Well Exploration Project site and removed it from DOGM's IU list. Of the 33 sites, there were three permitted sites associated with four negative off-site impacts. Accordingly, 30 of the 33 IUs (91%) were free of negative off-site impacts.

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. Success will be determined 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 Utah, the following figures address the cumulative totals for bond release by phase:

Phase I – 1,037 acres, or 26.95% of the total disturbance of 3,848 acres;

Phase II – 760 acres, or 19.75% of the total disturbance of 3,848 acres; and

Phase III – 708 acres, or 18.40% of the total disturbance of 3,848 acres.

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*Cover Page Photograph: Reclaimed Methane Degasification Site G-4 (Dugout Canyon Mine),
Permit No. C/007/0039 (June 2016)*

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 Evaluation Year (EY) 2016, spanning July 1, 2015 through June 30, 2016.

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 Alan Boehms, DFB Manager, at aboehms@osmre.gov or (307) 261-6545 for further information.

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 2016 as the "Evaluation Year," and then click "Submit." The search can be narrowed by choosing selections under the "Keyword" or "Category" headings, although this is not necessary.
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:

| | |
|------|------------------------------------|
| A&E | Administration and Enforcement |
| AMD | Acid Mine Drainage |
| AML | Abandoned Mine Land |
| BLM | Bureau of Land Management |
| BOGM | Utah Board of Oil, Gas, and Mining |
| BTU | British Thermal Unit |
| CAD | Computer-Aided Design |
| CFR | Code of Federal Regulations |

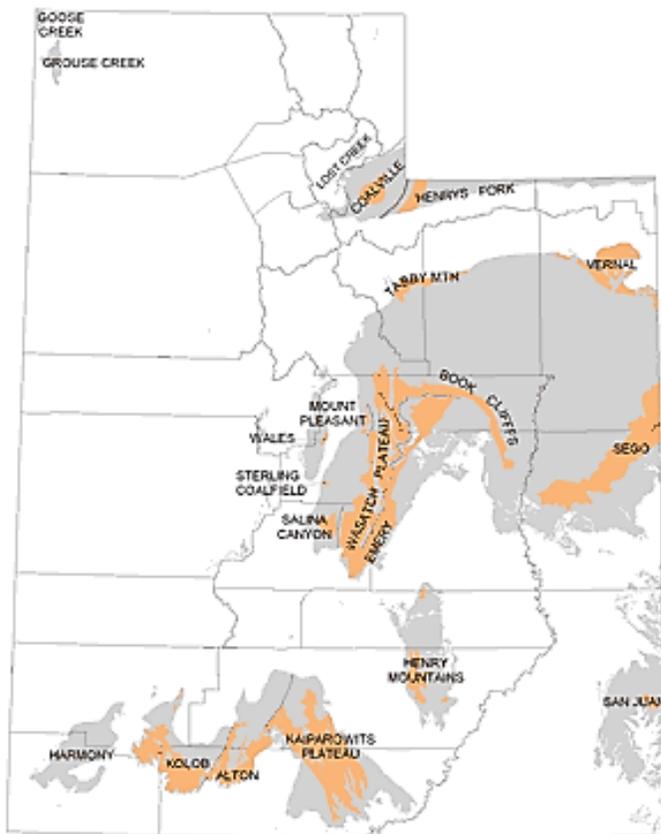
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| | |
|-------|--|
| CY | Calendar Year |
| DFB | Denver Field Branch (within the Denver Field Division) |
| DFD | Denver Field Division |
| DOGM | Utah Division of Oil, Gas and Mining |
| DO | Division Order |
| DWRi | Utah Division of Water Rights |
| EY | Evaluation Year |
| FTE | Full-Time Equivalent |
| FY | Fiscal Year |
| GIS | Geographic Information Systems |
| IMCC | Interstate Mining Compact Commission |
| 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 |
| PMLU | Post Mining Land Use |
| REG-8 | OSMRE Directive REG-8 |
| RMP | Rocky Mountain Power |
| SMCRA | Surface Mining Control and Reclamation Act of 1977 |
| SUFCA | Southern Utah Fuel Company |
| TDN | Ten-Day Notice |
| TIPS | Technical Innovation and Professional Services Program |
| UDWR | Utah Division of Wildlife Resources |
| UCMRA | Utah Coal Mining and Reclamation Act |
| UPDES | Utah Pollutant Discharge Elimination System |
| USFWS | United States Fish and Wildlife Service |
| USFS | United States Forest Service |
| VIG | Vegetation Information Guidelines |
| WEG | WildEarth Guardians |
| WIEB | Western Interstate Energy Board |
| WR | Western Region |
| WRS | Waste Rock Site |
| WRTT | Western Region Technology Transfer |

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 2016, the Wasatch Plateau, Book Cliffs, Emery, and Alton coalfields were being actively mined.



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 and peaked in 1996 at 28.9 million tons. Coal production in calendar year (CY) 2015 was approximately 14.5 million tons (Table 1) (OSM-1 quarterly coal production reporting). This production level represents a 21% decrease from 2014 levels and ranks Utah 12th among coal producing states. The majority of the coal is produced by underground mining operations. In addition, Utah removed and reprocessed 376,879 tons of no value material in 2015 (OSMRE no value determinations for coal waste tonnage

exempts permittees from the required SMCRA (abandoned mine lands) severance tax per ton of coal (waste) mined).

As of June 30, 2016, there were 32 IUs in Utah including 20 active or temporarily inactive operations, 6 inactive operations, and 6 abandoned sites (Table 2). For these operations, permitted acreage totaled 2,990 acres (Table 2) and bonded acreage approved for disturbance totaled 2,670 acres (Table 6). The total amount of bond dollars held as of June 30, 2016, was \$64,006,362.00. Of the 11 operations actively producing coal as of June 30, 2016, 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, 2016, Utah had also reclaimed 469 acres of disturbance for the six abandoned sites.

Utah's coal mining industry has a direct, significant impact on the local economies where mining occurs. Coal mining currently occurs in Carbon, Emery, Kane, and Sevier Counties. The Utah Department of Workforce Services reports that in 2015 mining companies (except oil and gas), including coal mining companies, employed on average 631 and 295 persons in Carbon and Emery Counties, respectively. Kane County employed 28 people and Sevier County employed 611 persons on average in 2015. In Carbon County, coal mining companies represented two of the five largest employers. Additionally, coal mining companies represented the second largest employer in both Emery County and Sevier County. See <http://jobs.utah.gov/jsp/wi/utalmis/default.do> for more information on coal related employment in Utah.

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.

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 releases;
- Review applications for new permits, permit revisions, and bond releases;
- 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 (DOGGM) formed an Evaluation Team (the Team) to conduct annual evaluations of Utah's Coal Regulatory Program. The Team evaluates how effective DOGGM 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 Utah's Program. The Team structure is comprised of five to six core 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 24, 2015, 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 2016, 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 2016, the Team received three responses from the Bureau of Land Management (BLM), the U.S. Forest Service (USFS), and the Utah State Historic Preservation Office. All three commenters praised DOGM for its ability to openly communicate and work well with other State and Federal agencies. Although the 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 (page 6) details how to access information using this website. Additional data used by OSMRE in its evaluation of Utah's Program are available for review in the evaluation files maintained at the WR-DFD- DFB. Contact Alan Boehms, Manager, DFB, at aboehms@osmre.gov or (307) 261-6545 for further information.

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) is a multi-interest citizen board which establishes the regulations, standards, and policies that guide DOGM. The Board was created and exists under the authority of the Utah Oil and Gas Conservation Act, Section 40-6 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 10 hearings during this evaluation year. The July meeting was cancelled due to lack of hearing matters and no meeting was scheduled for November. The meetings were all held in Salt Lake City.

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 web site 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.

DOGM 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, U. S. Fish and Wildlife Service (USFWS), DWRi, Utah Division of Wildlife Resources (UDWR), USFS and the United States Army Corps of Engineers. Utah's cooperative agreement with the Secretary for the State regulation of surface coal mining and reclamation operations on Federal lands is somewhat unique to other Federal lands states. Utah's 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

DOGM 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 (WRTT). DOGM exchanged information with other states through participation in the IMCC annual meetings and as a representative of the Reclamation Committee for the Western Interstate Energy Board (WIEB). DOGM staff attended several professional conferences, meetings, and workshops during the evaluation year. DOGM also had one staff member participate in two different sessions as an instructor for one of OSMRE's NTTP courses. 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 35th anniversary of the primacy program in the State of Utah. 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 successful in implementing its regulatory program. A list of the oversight reviews used to reach this conclusion is included in Section VII of this report. OSMRE looks forward to working cooperatively with DOGM during the next evaluation year.

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 2016, DOGM granted Phase III bond release for 94.21 acres at the Willow Creek Mine and 5.62 acres at the Bear Canyon Mine. As of June 30, 2016, 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 but may have dropped off slightly as a result of the soft coal market. The Division continues to function with a reduced staff of 14 FTEs 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 by the regulatory 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 2016 was 92%, down slightly from EY 2015 which was 95%. EY 2014 was 91%, which was down slightly from 99% in EY 2013 but still higher than 90% in EY 2012.

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 2016, 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 habitat improvement projects on the Muddy drainage in Sevier County. Their spring development provided improved water availability for vegetation, wildlife, and livestock. The durable materials used in the development will prolong the life of the systems. Spring developments allow for increased water storage and increased grazing distribution. Fence surrounding springs and sensitive riparian vegetation protects areas from impacts.

4. Training

DOGM continues to ensure that its staff is professionally and technically competent. Employees from Utah were provided the opportunity to attend instructor-led training sessions held by OSMRE's TIPS program and OSMRE's NTTP throughout the evaluation year. During EY 2016, DOGM staff participated in two training instances with the TIPS Training Program covering CAD 400: Riding the CAD and GIS Gap in the SMCRA Workflow; and Android & iOS Devices for SMCRA.

DOGM staff members participated in four training instances with the OSMRE / NTTP training program covering Enforcement Procedures (held in-house with 16 staff members); Evidence Preparation and Testimony; Cultural Resources; and NEPA Procedures. DOGM also continues to conduct Blaster Certification Training. The last annual Utah Coal Mine Surface Blaster Certification class was held on September 21, 2015, with 10 people participating.

5. State Program Amendments

By letter dated April 18, 2012, DOGM sent OSMRE an amendment to the Judicial Code, Title 78 of the Utah Code that requires plaintiffs who obtain temporary relief (administrative stay or preliminary injunction) in an environmental action to post a surety bond or equivalent pending state agency or judicial review. DOGM submitted the amendment in response to a February 24, 2012, letter sent by OSMRE in accordance with 30 CFR 732.17(e)(2). The final rule Federal Register notice for the amendment has been drafted and is currently under review by 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. With the conclusion of this project, reclamation of the White Oak mine is now complete.

During EY 2016 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 the fiscal year, approximately 197,367 tons of coal have been removed from the North slurry cell.

2. Electronic Permitting

DOGM 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.

DOGM 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.

DOGM 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 SM CRA

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. Individual topic-specific reports that provide additional details on how the following evaluations and measurements were conducted are available online at <http://odocs.osmre.gov/> or at the WR-DFD-DFB at 1999 Broadway, Suite 3320, Denver Colorado, 80202. Contact Alan Boehms, Manager, DFB, at aboehms@osmre.gov or (307) 261-6545 for further information.

To validate the credibility of State Regulatory 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 regulatory programs by evaluating the current compliance status of mines in each state. OSMRE continued these oversight efforts during EY 2016.

DFD conducted three joint complete, three joint partial, four partial independent, and four joint bond release inspections of coal mining operations in Utah during EY 2016 (Table 13). These inspections are included in the DOGM complete and partial inspection totals reported below. During EY 2015, DOGM issued 30 notices of violation (NOVs) and one cessation order. Thirteen NOVs were subsequently vacated and DFD issued no Ten-Day Notices (TDN) during EY 2015. During EY 2016, DOGM issued 27 NOVs and four failure-to-abate cessation orders. None of the NOVs were vacated. DFD issued three TDNs this evaluation year as a result of the independent inspections that were conducted. In each case, OSMRE determined that DOGM's response constituted good cause for not taking enforcement or other action within ten days to cause the identified potential violations to be corrected because the alleged violations did not exist under Utah's approved regulatory program. DFD also issued three TDNs in response to a written citizen complaint received from WEG on December 28, 2015. Observed mine site conditions indicate that DOGM is effectively implementing and enforcing its program.

DOGM conducted 119 complete inspections and 187 partial inspections of coal mining operations during this evaluation year (Table 10). In addition, DOGM conducted four bond release inspections this year. 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 all inspectable units.

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 authorized by the permit 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 2016 for both permitted sites and bond forfeiture sites. The Team identified four off-site impacts on three permitted sites and no off-site impacts at bond forfeiture sites during EY 2016. Because there were 33 IUs during this evaluation year, 91% (30 of 33) 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 2016, there were 26 permitted mine sites where the performance bond had not been forfeited, and one unpermitted exploration project site that DOGM counted as an IU before it was plugged and removed from the IU list. The Team documented one minor hydrology off-site impact to a land resource and another minor hydrology off-site impact to a water resource at one permitted site; one “other” moderate off-site impact to a water resource at a second permitted site; and another minor hydrology offsite impact to a water resource at a third permitted site. Accordingly, 89% (24 of 27) of all IUs were free of negative off-site impacts (Table 5). Off-site impacts at the first site were identified during routine DOGM inspections, and the off-site impact at the second site was identified during a joint DOGM–OSMRE oversight inspection. The off-site impact at the third site was identified through a citizen complaint. All 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 was in the process of addressing all of the required abatement actions. The operator of the third site also took actions to abate the violation within the required timeframe.

Bond Forfeitures and Revoked Permit Sites

Since OSMRE approved the Utah permanent regulatory program in 1981, DOGM has forfeited

reclamation performance bonds for six mines. The White Oak Mines #1 and #2 are counted with the bond forfeiture sites because the Division issued the determination to forfeit; however, bond forfeiture monies were never received. Monies 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 will be evaluating the site during the next few months to determine the effectiveness of the reclamation procedures.

During EY 2016, DOGM did not observe any off-site impacts on the six bond forfeiture sites in Utah. As a result, 100% of the bond forfeiture and permit revocation sites (6 of 6) were free of off-site impacts at the end of EY 2016 (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 Regulatory 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 Evaluation Year 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 (2,670 acres for EY 2016), there are 2,990 permitted acres for the 26 non-forfeited mines, or an average of 93.44 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 2016 (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 2016, DOGM granted Phase I bond release on 144 acres and Phase III bond release on 100 acres (Table 6). The Coal Hollow Mine was granted Phase I bond release for 13 acres on November 7, 2015, 100 acres on November 7, 2015, and 31 acres on May 4, 2016. The Bear Canyon Mine was granted Phase III bond release for 5.52 acres on December 16, 2015, and the Willow Creek Mine was granted Phase III bond release for 94.21 acres on October 15, 2015. An additional 78 acres were bonded and disturbed during EY 2016 including three acres at the Skyline Mine, 23 acres at Wildcat Loadout, and 52 acres at the Coal Hollow Mine. The permit for PacifiCorp's Trail Mountain Mine was transferred to Fossil Rock Resources, LLC, on October 8, 2015, and is now called the Fossil Rock Mine.

Of the total disturbed acreage on active, temporarily inactive, inactive, final bond released, and bond forfeiture sites 1,333 of the 3,848 disturbed acres (34.64%) have been backfilled, regraded, re-topsoiled, and seeded. Long-term facilities (2,210 acres) and active mining areas 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 2,210 acres, are thus not eligible for any phase of bond release. Subtracting those temporarily excluded acreages (2,210 acres) from the total disturbed acreage (3,848 acres), the remaining 1,638 acres are subject to contemporaneous reclamation requirements. When taking these temporary exclusions into account, 1,333 of 1,638 acres (81.38%) of mining related disturbances which are subject to contemporaneous reclamation requirements have been backfilled, regraded, re-topsoiled, and seeded. Several operations have not submitted bond release applications for lands that have been reclaimed 10 years or longer.

Since the Utah Permanent Regulatory Program was approved in January, 1981, DOGM has granted Phase III bond release on a total of 708 acres. This successfully reclaimed acreage is 18.4% of the total disturbed acreage under the Utah permanent regulatory program (708 of 3,848 acres) which includes all permitted mining operations and full Phase III bond release mines.

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 2016 Utah Reclamation Status Table, OSMRE oversight inspections, and routine DOGM monthly inspections that include reclamation success evaluations of the reclaimed lands.

Bond Forfeitures and Revoked Permit Sites

As shown in Table 7, DOGM has completed initial reclamation on all six bond forfeiture sites. During EY 2016, DOGM staff conducted nine complete inspections on these six 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 evaluation year, 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 received one citizen complaint during EY 2016. 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 eighth 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) (3).

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 (page 6) 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 2016, 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 2016, the Team conducted two topic-specific evaluations. These reviews evaluated the implementation of DOGM's inspection reporting and documentation practices, as well as vegetation reference area selection.

1. Inspection Reporting and Documentation Practices

The Team conducted an evaluation to determine whether DOGM is consistently documenting field conditions at mine sites in a meaningful way so as to demonstrate compliance or noncompliance during each inspection. The Team also evaluated whether technological tools such as GPS, laser rangefinders, inclinometers, cameras, etc. were used to enhance documentation collected during inspections. The Team evaluated a 25% sample (3 months) of DOGM's EY 2015 inspection reports prior to conducting EY 2016 oversight inspections for this review.

R645-400-135.300 requires that the inspections performed under R645-400-131 through R645-400-134 will include the prompt filing of inspection reports adequate to enforce the requirements of the approved State Program. In order to ascertain whether monthly inspection reports successfully documented ground conditions, the team verified that:

1. A layperson could understand which specific features, as identified on a permitted map (e.g. "Pond 2" or "Diversion Channel PM-20"), were inspected and the status of those features were adequately described at the time of inspection.
2. Reports describe what was observed rather than simply stating that something was in compliance.
3. Reports provide a snapshot in time so that changes in ground conditions could easily be identified as having occurred since the last inspection.
4. Ground conditions are documented to an extent that could reasonably be expected to withstand legal challenge of the report's content or an associated enforcement action.
5. DOGM employs tools at its disposal such as cameras, GPS, laser rangefinders, inclinometers, etc. as necessary or appropriate to document inspection activities.

Summary of Findings

The Team reviewed a 3-month sample of DOGM's EY 2015 inspection reports to determine whether those reports consistently contain clear, accurate, and thorough information pertaining to the mines' current status sufficient to demonstrate compliance or noncompliance at the time of inspection in accordance with R645-400-135.300. The Team also determined whether DOGM's inspection reports discussed documentation of field activities including the use of technological

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tools (GPS, laser rangefinders, inclinometers, cameras, etc.). The Team’s findings are as follows:

July 2014 – 25 mines inspected (3 complete inspections and 22 partial inspections). A review of DOGM’s inspection reports rendered the following topic-specific evaluation measure results:

| Measurement was Achieved | Layperson could understand features inspected & their status | Inspection Reports describe what was observed | Inspection Reports capture changes in ground conditions | Ground conditions are documented well enough to withstand legal challenges | Available tools were used as needed to document field inspection activities |
|--------------------------|--|---|---|--|---|
| YES | 15 | 16 | 7 | 7 | 2 |
| NO | 10 | 9 | 18 | 18 | 23 |

October 2014 – 20 mines inspected (all partial inspections). A review of DOGM’s inspection reports rendered the following topic-specific evaluation measure results:

| Measurement was Achieved | Layperson could understand features inspected & their status | Inspection Reports describe what was observed | Inspection Reports capture changes in ground conditions | Ground conditions are documented well enough to withstand legal challenges | Available tools were used as needed to document field inspection activities |
|--------------------------|--|---|---|--|---|
| YES | 11 | 11 | 6 | 5 | 3 |
| NO | 9 | 9 | 14 | 15 | 17 |

May 2015 – 25 mines inspected (20 complete inspections and five partial inspections). A review of DOGM’s inspection reports rendered the following topic-specific evaluation measure results:

| Measurement was Achieved | Layperson could understand features inspected & their status | Inspection Reports describe what was observed | Inspection Reports capture changes in ground conditions | Ground conditions are documented well enough to withstand legal challenges | Available tools were used as needed to document field inspection activities |
|--------------------------|--|---|---|--|---|
| YES | 24 | 23 | 16 | 14 | 13 |
| NO | 1 | 2 | 9 | 11 | 12 |

The EY 2015 inspection report review indicated that while measurements #1 and #2 for July and October of 2014 fell within an acceptable range, measurements #3 through #5 did not. However, DOGM’s numbers improved markedly in all categories during the month of May 2015.

OSMRE inspectors also used regularly scheduled EY 2016 oversight inspections to discuss documentation of field activities including the use of technological tools (GPS, laser rangefinders, inclinometers, cameras, etc.). Ten inspections were conducted during the EY, including three joint complete, three joint partial, and four partial independent inspections. The Team’s findings are as follows:

| Measurement was Achieved | Layperson could understand features inspected & their status | Inspection Reports describe what was observed | Inspection Reports capture changes in ground conditions | Ground conditions are documented well enough to withstand legal challenges | Available tools were used as needed to document field inspection activities |
|---------------------------------|---|--|--|---|--|
| YES | 8 | 8 | 7 | 7 | 5 |
| NO | 2 | 2 | 3 | 3 | 5 |

On May 17, 18 and 19, 2016, OSMRE and DOGM were to jointly conduct EY 2016 vegetation reference area topic-specific evaluations at the Skyline, Deer Creek, and West Ridge Mines. Unfortunately, the DOGM sub-Team members / inspectors chose not to participate in the Deer Creek, and West Ridge evaluations due to an apparent internal policy that partial oversight inspections will not be conducted unless more than one topic / area is evaluated. As a result, OSMRE conducted three independent partial inspections / EY 2016 oversight topic-specific evaluations. Although DOGM generated an inspection report for the Skyline Mine evaluation, such reports were not created for the Deer Creek and West Ridge Mine evaluations. Consequently, none of the five evaluation measures were quantified for these sites. A separate vegetation reference area topic-specific evaluation was jointly conducted at the Coal Hollow Mine on June 13 and 14, 2016. The DOGM sub-Team members / inspectors participated in this evaluation, and an inspection report was generated and included in this review.

Conclusions & Recommendations

Based on OSMRE’s 3-month sample review of DOGM’s EY 2015 inspection reports, as well as eight of the 10 regularly scheduled EY 2016 oversight inspection reports, the Team concludes that DOGM has made strides to ensure that it is collecting and reporting sufficient data (including qualitative observations) to document current field conditions during its regular inspections. Although the overall content of DOGM’s inspection reports has improved since July 2014, the results in accomplishing the five evaluation measures are mixed. For example, the bulk of the inspection reports are written in layman’s terms and routinely describe what was observed in the office (records) and the field. However, the reports become less reliable with respect to capturing changes in ground conditions and documenting them well enough to withstand potential legal challenges. Additionally, as noted below, DOGM’s use of available technological tools to document inspection field activities appears to be lacking.

The Team acknowledges that the subject matter of each inspection report will vary depending on the nature of the inspection, weather conditions, and whether enforcement action is taken. Similarly, the Team recognizes that while the use of technological tools such as GPS cameras, water testing kits, laser rangefinders, and inclinometers are largely at the discretion of the individual inspector and may not always be necessary, they are integral to conducting a thorough

field inspection and documenting on-the-ground activities. For this reason, the Team recommends that DOGM's inspectors improve upon and increase their use of these technological tools. If availability is an issue, the Team recommends that DOGM invest in and supply its inspectors with the necessary tools. Grant funds may be available through OSMRE for this purpose.

Lastly, while the level of detail that is included in each inspection report, as well as the readability, syntax, and structure of the narrative is very clearly linked to the personal writing style of each individual inspector, all of DOGM's inspection reports should strive to include information necessary to achieve the evaluation measures outlined above.

2. Vegetation Reference Area Selection

The Team evaluated this topic to determine whether DOGM is ensuring reclamation success on lands affected by surface coal mining operations by requiring vegetation reference areas to adhere to all applicable regulatory criteria. Specifically, this review examined instances where DOGM has approved the use of vegetation reference areas in order to determine vegetation success on reclaimed lands. This review focused on ensuring that the selected reference area(s) are 1) representative of the plant community that was disturbed (vegetation species / cover / herbaceous productivity), 2) representative of the ecological site conditions, 3) sufficient in size to allow for valid comparison with reclaimed area, and 4) managed in a manner consistent with the approved post mine land use (PMLU) such as fencing, sampling occurring concurrently with sampling on reclamation, etc.

Summary of Findings

The Team evaluated four sample mines with permitted vegetation reference areas in order to verify that selected reference area(s) are representative of each plant community present within the area to be disturbed, unless otherwise approved by the Division.

Coal Hollow Mine

According to the MRP, a total of seven different vegetation communities will be disturbed by mining and reclamation activities within the Coal Hollow permit area. At the time of this evaluation, only four of the vegetation communities had been disturbed including 1) sagebrush/grass, 2) pinyon-juniper, 3) pastureland, and 4) riparian vegetation community types. The Team was able to locate each of the reference areas using GPS coordinates provided by the operator. Each reference area is situated on BLM surface outside the approved permit boundary. Although this practice is fairly common in the mountain west where lands are predominantly federally owned, it is also common to observe conflicting land management objectives. While the BLM may allow dispersed camping or livestock grazing or conduct prescribed burns, these activities do not necessarily support the land management objective (or PMLU) the permittee is trying to achieve and may conflict with vegetation sampling activities during any given year.

The DOGM biologist in attendance visually observed the sagebrush/grass reclaimed area and compared the grass, forb, and shrub species (composition-diversity) against that of the approved

seed mix provided in the MRP. The vegetation was very well established, revegetation supports the PMLU, the majority of the approved species were present, and the vegetation appeared to provide good cover with minimal weeds due to weed control. Overall, the Team was impressed with the reclamation at this stage of the liability period and agreed that the vegetation establishment observed also supports the approved PMLU of grazing. However, the Team was concerned that the approved sagebrush/grass reference area is, by and large, a very thick old-growth sagebrush community that has outcompeted understory species that add diversity to the overall species composition. OSMRE notes that the currently approved reference area is significantly different from reclamation goals in terms of species diversity and composition. DOGM's approved definition of "reference area" at R645-100-200 requires reference areas to be representative of the vegetation within the permit area. This is to ensure that appropriate success standards are established (based upon vegetation within the reference area) which are indicative that the permittee has successfully established the target community. DOGM requires parameters such as vegetation ground cover, productivity, and species diversity to apply under a specific PMLU. Although the reference area may have approximated pre-mine conditions within the permit area, the Team is concerned that the sagebrush/grass reference area is not representative of reclamation plan objectives within the permit area and may set inappropriately low revegetation success criteria in this instance.

The Team visually observed reclamation at the pinyon-juniper reference area and identified the majority of species from the approved seed mixture. Vegetation on the reclaimed area was very well established, the majority of the species present were included in the approved seed mix, and the vegetation appeared to provide good cover with minimal weeds due to the recent active weed control. Overall, the Team was impressed with the reclamation at this stage of the liability period and agreed that the vegetation observed would support the approved PMLU of grazing.

The Team expressed the same concerns at the pinyon-juniper site that were noted at the sagebrush/grass reference area. Specifically, the vegetation reference area does not appear to represent the target reclamation community in terms of species cover, productivity, or diversity as required under R645-100-200. The pinyon-juniper reference site is representative of a particular plant community with little to no understory growth, abundant areas of bare ground, very minimal diversity, and dominant old growth juniper trees. Site conditions such as slope were also not representative of that observed at the reclamation area.

OSMRE was unable to compare the reclamation at the pastureland site (just above pit 26) to an approved reference area because there is not currently an approved pastureland reference area in the permit. Instead, the MRP states that a success standard will be developed for pasturelands. Although technical standards for determining reclamation success are outside the scope of this evaluation, the Team notes that such standards should be in place prior to allowing an operator to disturb (or reclaim) those lands. Permit applications are required to be complete and accurate prior to approval and issuance under R645-300-133.100, and are required to contain the measures proposed to be used to determine success of revegetation under R645-301-341.250.

The Team also inspected the riparian reclamation area along Lower Robinson Creek. The Team compared the reclaimed areas to the adjacent undisturbed riparian area. The vegetative communities appeared similar at the time of inspection. Both of these reclaimed areas had been

seeded one to two years prior and the vegetation exhibited good cover and diversity. However, there has not been a reference area established or approved for the reclamation of Lower Robinson Creek.

Deer Creek Mine

The Team evaluated all eight (five at Rilda Canyon and three at Deer Creek Canyon) of the vegetation reference areas at the Deer Creek Mine complex. The PMLU includes wildlife habitat and livestock grazing. All vegetation reference areas were delineated on MRP Map 2-15 and CE-10885-EM as required under R645-301-323.100, and marked in the field at the corners with high-visibility red Carsonite identification posts. DOGM biologists were able to navigate to each reference area with a georeferenced digital map loaded onto a Global Positioning System (GPS) enabled electronic tablet. DOGM biologists also recorded each plant species included in Dr. Patrick Collins' (Mt. Nebo Scientific) most recent vegetation reference area survey as they were observed on the ground. Though it was still a bit early for some of the warm season grasses, DOGM biologists found that the vegetation observed at each reference area agreed with what was surveyed and reported by Dr. Collins. Fencing was not utilized at any of the reference areas observed, and readings were not taken for slope, aspect, or elevation where no reclamation had taken place for comparison. The Team notes that vegetation reference areas are re-assessed every five years to determine range site condition, in accordance with the Division's Vegetation Information Guidelines and the approved permit. Evidence of limited grazing and human activity was noted at some of the vegetation reference areas. For example, the pinyon-juniper/mountain brush reference area is situated on USFS land and apparently experiences winter-time harvesting activities as part of the USFS Christmas Tree Program. The pinyon-juniper/mountain brush reference area also includes overhead high voltage lines owned by Rocky Mountain Power (RMP). The utility's right-of-way is 40 feet in either direction from the line, which raises questions of the operator's level of control over the reference area, as well as the reference area's future ecological representiveness, should RMP require access and disturb the site. A campfire ring just outside the sage/grass reference area also raised concerns about the levels of human activity occurring near and potentially on the reference area. Finally, the white fir/aspen reference area, also located on USFS surface, actually features a marked hiking trail running through it. These anthropogenic disturbances raised questions regarding what constitutes "appropriate management" under R645-100-200. The Team ultimately determined that while DOGM's approved program does not define "appropriate management," provisions in the Deer Creek Mine permit indicate that vegetation reference areas do receive regular, professional condition monitoring and verification.

Skyline Mine

At the Skyline Mine, the Team evaluated the Waste Rock Site (WRS) which is associated with sagebrush/grass and aspen reference areas, and the South Fork Breakout Portal Area final reclamation which is associated with aspen and spruce reference areas. These vegetation reference areas were delineated on MRP Plates 2.7.1 and 2.7.1-2 as required under R645-301-323.100. The PMLU includes wildlife habitat and livestock grazing.

The Team's first stop was at the WRS. The Team hiked past the WRS to the sagebrush/grass reference area. The approximate grade of the southwest facing slope was measured at 33%. The permitted disturbance boundary was marked with t-posts and barbed wire but the reference area itself was not marked or fenced. The reference area was located outside of the permitted disturbance area and livestock grazing was evident.

The Team's second stop was at the aspen reference area, which is located further upslope from the sagebrush/grass reference area. The approximate grade of the southwest facing slope was measured at 23%. Mature aspen were present, with an understory of grasses and shrubs. Evidence of livestock grazing was also noted. This reference area was likewise situated outside of the permitted disturbance area and no corner markers or fencing were present.

The Team then proceeded to the reclaimed South Fork Breakout Portal Area. Approximate grade was measured at 56%. Approximate grade of the South Fork Breakout Portal Area was measured at 56%. The disturbed area perimeter was marked with blue painted t-posts. Vegetation present was sufficient to control erosion. However, musk thistle was abundant and the operator representatives mentioned mechanically treating for this noxious weed in the summer months. The operator reported a downward trend in musk thistle density due to continuous weed control efforts.

West Ridge Mine

The West Ridge Mine has three vegetation reference areas that were delineated on MRP Map 3-1 as required under R645-301-323.100. These reference areas represent Douglas fir/maple, pinyon-juniper, and Douglas fir/Rocky Mountain juniper communities. The Division had incorporated this map into a GPS enabled device (iPad) to easily navigate to each reference area. Baseline vegetation survey reports and photographs were available and used to validate the location of each site. Reference areas were observed to be in the same vegetative condition as those approved in the MRP. However, the Maple/Aspen site had been impacted from adjacent boulder fallout which had altered ground cover, production, and woody species density at that precise location. As such, the Division requested the Permittee to relocate the Maple/Aspen reference site to another appropriate location that meets the Division's regulatory requirements.

Conclusions & Recommendations

Based on the discussion above, the Team concludes that DOGM's implementation of its approved program as it relates to vegetation reference area selection can be enhanced. Similarly, DOGM's effectiveness in ensuring that reference areas are under appropriate management for the purpose of measuring cover, productivity, and diversity and that they be representative of geology, soil, slope, and vegetation in the permit area accordance with Utah's definition of "Reference Area" at R645-100-200 can be improved upon. Specifically, the Team recommends that:

1. DOGM provide clarification regarding what constitutes appropriate management and monitoring of reference areas in accordance with R645-100-200. By definition, "Reference Area" means a land unit maintained under appropriate management for the

purpose of measuring vegetation ground cover, productivity, and plant species diversity that are produced naturally or by crop production methods approved by the Division. The Team observed instances where human impact and degradation were occurring within designated reference area locations, thus facilitating a potential departure from desired conditions.

2. Each permit with approved vegetation reference areas includes requirements for monitoring those reference areas. Although not required under Utah's approved program, monitoring approved reference areas would allow the permittee and the regulatory authority to ensure the lands are maintained in appropriate condition to be used to set revegetation success criteria for final bond release.
3. Each reference site be electronically marked using the Best Technology Currently Available such as Longitude and Latitude. R645-301-323.100 requires maps or aerial photographs of the permit area and adjacent areas which delineate the location and boundary of any proposed reference area for determining the success of revegetation. Boundary demarcation (e.g., fences, t-posts) is a useful tool for delineating the area to be used as a reference area. However, tangible tools such as fences and t-posts may also act as attractants to grazing animals which would lead to increased grazing and browsing pressure at the reference site thus altering production and ground cover at locations near the markers.
4. Reference areas should be representative of the desired vegetation community projected at years five or 10 (depending on the precipitation) of the liability period for bond release purposes. Reclamation success criteria established within each reference area, such as cover, diversity, and productivity, will be used to determine whether the permittee has achieved successful revegetation. Comparing vegetation characteristics between drastically different communities will not provide a meaningful metric for determining reclamation success.

In Utah, native plant communities such as pinyon-juniper are in a late seral stage and it is generally not desirable or feasible to restore a disturbed site back to these pre-disturbance conditions within 10 years. For this reason, the reference site may not be representative of late seral stage plant communities. When available, state and transition models for ecological sites could be used to determine desired plant communities and reclamation success standards. Desired plant communities are chosen by the land owner/management agency and are based on the PMLU (e.g. palatable herbaceous species for a PMLU of grazing). Target reclamation communities may be different from pre-mining vegetation conditions. Per Utah Rule R645-301-356.100, success of revegetation will be judged on the effectiveness of the vegetation for the approved PMLU, the extent of cover, and other general requirements. Therefore, reference areas may not be appropriate indicators of revegetation success if they are in a late seral stage or do not represent the PMLU. During the 35 year implementation of Utah's coal program there has only been one reference area (sagebrush) that reached a late decadent seral stage prior to year 10 of the liability period. The PMLU was deer winter range and an alternative reference area was selected in consultation with the land owner and UDWR that more closely represented

the target PMLU vegetation community.

5. DOGM ensure that each permit clearly articulates which revegetation success criteria (specific reference areas or technical standards) will apply to all disturbed lands within the permit area in accordance with R645-301-341.250. Success criteria are commonly associated with PMLU, approved seed mixes, and/or soil types.

3. Eighth Annual Division-wide Stakeholder Satisfaction Survey (Utah self-evaluation)

DOGM also conducted its eighth annual survey of customer satisfaction during EY 2016 to evaluate performance at the Division and Program level and to foster improved customer service in the future. The survey concluded on October 20, 2015. 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: 4.1
Accuracy of Information: 4.0
Helpfulness of Employees: 4.1
Expertise of Employees: 4.1
Availability of Information: 3.8
Composite Rating: 4.0

VII. PROGRAM PROBLEMS AND ISSUES

OSMRE initiates 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. One issue is ongoing and both DOGM and OSMRE continue to monitor it. OSMRE also received a citizen complaint during EY 2016 that resulted in the issuance of three TDNs which are discussed in detail below. There were no corrective action plans in place during EY 2016.

A. 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 November 9, 2009, after having conducted an inspection at the site, OSMRE issued TDNs for: (1) failure to conduct operations only in accordance with the approved permit, which pertained to the water treatment facility; and (2) failure to maintain adequate bond coverage at all times, which pertained to not having bond for long term treatment of the mine water discharge.

By letter to OSMRE dated November 23, 2009, DOGM explained the emergency informal approval of the permit amendment allowing construction of a water treatment facility at the Crandall Canyon mine. Also on November 23, 2009, DOGM issued Division Order C/015/0032-DO09A requiring Genwal Resources to increase the bond held for the site.

The water treatment facility was informally allowed to be constructed before Genwal had submitted a complete permit revision application package. Water was not to enter the facility until DOGM received the requisite engineering details and approved the plan. DOGM was concerned that any further corrective action, or notice of violation, would only delay efforts to treat the water and abate the underlying problem.

On December 3, 2009, OSMRE found that DOGM had shown good cause for not issuing a violation pertaining to the water treatment facility being constructed under emergency procedures and that DO-9A constituted appropriate action to cause the inadequate bond to be corrected. For those reasons, OSMRE terminated both TDNs. DOGM subsequently revised DO-09A on December 22, 2009, to add requirements that Genwal provide annual operating cost estimates for the ongoing and continual treatment of water, to post money by January 23, 2010, for a water treatment trust fund in the amount required to generate an annuity equal to the estimate provided, to supply detailed engineering plans for final portal closure and final site configuration, to supply new reclamation bond estimates which reflect new plan changes, and to post any additional bond required by March 18, 2010.

On August 16, 2010, DOGM issued Division Order 10A (DO-10A) which superseded all versions of DO-08A and DO-09A. DO-10A was accompanied by DOGM's June 7, 2010, hydrologic report finding probable perpetual pollutional 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 in place to govern a trust fund bonding mechanism. By letter dated December 23, 2010, OSMRE revoked its December 3, 2009 termination of TDN #X09-140-182-002 because adequate bond had not yet been posted. BOGM first heard legal arguments on this matter on January 26, 2011. In May 2011, BOGM

requested that the Division and Genwal work out an agreeable financial mechanism for this financial assurance in the form of a contract between DOGM and Genwal. As part of a good faith effort during negotiations, DOGM revised DO-10A on June 20, 2011, to require a bond or trust fund that will yield a yearly payment sufficient to cover the costs of water treatment in perpetuity with interim steps and timeframes. Subsequent to unsuccessful negotiations between the Division and Genwal, BOGM issued a Minute Entry on September 30, 2011, which required rule making and an evidentiary hearing regarding bonding costs and the expected duration of the pollutional discharge. DOGM has not pursued an amendment to its bonding regulations and the subsequent Board decision on this matter appears to have negated that need. On October 17, 2011, OSMRE issued a letter to DOGM stating that revised DO-10A constituted appropriate action to cause the inadequate bond to be corrected and terminated the TDN. OSMRE attached Action Plan #UT-2012-001 to the October 17th letter. The Action Plan was developed to monitor the State's progress toward successful resolution of this case.

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 pollutional 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 must post 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.

OSMRE developed and implemented Action Plan #UT-2012-001 to monitor DOGM's progress in resolving the inadequate bond. The Action Plan outlined the steps called for in DO-10A and alternatives in the event DO-10A was not upheld by the BOGM or was unsuccessful in attaining an adequate bond. On September 14, 2012, OSMRE revised Action Plan #UT-2012-001 as a result of the BOGM's decision. The original Action Plan did not anticipate a situation in which BOGM would acknowledge the bond was inadequate but require the increase in bond to be based on the operator's costs assuming a best-case scenario. Rule R645-301-830.200 requires bond amounts to be sufficient to assure the completion of the reclamation plan if the work has to be performed by the Division in the event of forfeiture. Upon further consideration of this matter, OSMRE issued a new TDN (#X12-140-933-001) on December 7, 2012, citing a potential violation of R645-301-830.200. This TDN identified the potential failure to secure bond sufficient to assure completion of the reclamation plan if the Division must perform the work in the event of forfeiture.

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 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 not sufficient to draw statistically valid conclusions regarding the duration of polluttional discharge. DOGM's plan to reassess the bond adequacy on a six-month recurring schedule is within the State's discretion under its approved program and constitutes appropriate action under 30 CFR 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 2016. 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 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 January to May of 2016, have fluctuated as low as 0.96 mg/L and as high as 1.6 mg/L, with a six month average concentration of 1.51 mg/L and a standard deviation of 0.22 mg/L. Comparing this information to the previous six months, the average total iron concentration has decreased. This is a good improvement in total iron concentrations compared to the previous year of data. The Division will continue to compile total iron concentration evaluations every six months based on newly available data.

B. 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 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 AmericaWest Resources 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 eleven NOV's and one FTACO. Of these, six of the NOV's 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 NOV's 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. In the meantime, the permittee has 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.

The Division continues to pursue bond forfeiture and on June 22, 2015, filed with the permittee a Notice of Intent to Forfeit Surety and Opportunity to Cure. Since that time, the Division has been pursuing bond forfeiture, but it has been complicated by a number of factors including dissolution of HSR, there is the only remaining officer left to deal with, and the bond is in the form of real property collateral (condominium) that would need to be foreclosed on. As a result the Assistant Attorney General representing DOGM has been working to reach an agreement with the remaining officer which would allow the collateral to be sold, with the proceeds being held in escrow, so that the Division could then use the funds to assure that reclamation is completed in a timely manner. Details of this agreement are still being worked out with the assistance of OSMRE and their solicitors.

C. WildEarth Guardians Citizen Complaint TDNs

On January 6, 2016, OSMRE issued three TDNs in response to a written citizen complaint submitted by WEG on 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 from 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. Instead, DOGM asserted that WEG's allegations were unfounded as sufficient bonding exists at all three sites. 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 several interim responses. At the time of this report, OSMRE was in the process of reviewing DOGM's response to the TDNs.

D. WildEarth Guardians Request for OSMRE Review of the Utah Coal Regulatory Program Pursuant to 30 CFR 733.12(a) (2)

In addition to the citizen complaint, WEG also requested that OSMRE conduct a State program evaluation, pursuant to the procedures outlined in 30 CFR 733.12, to ensure it is being appropriately implemented, administered, maintained, and enforced. In its 733 request, WEG presumed that DOGM's alleged failures asserted for the three sites are likely indicative of total programmatic 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 CFR 733.12(a)(2). In a letter dated February 24, 2016, OSMRE explained that we would not be meeting the 60-day deadline under 30 CFR Part 733, but were working to verify the allegations to determine whether WEG's information warranted further evaluation under Part 733. In response to WEG's NOI received on June 15, 2016, OSMRE sent an acknowledgement letter on June 28, 2016. At the time of this report, OSMRE was in the process of reaching and drafting a 733 determination.

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 2015 grant period was from July 1, 2015, through June 30, 2016, which corresponds with the State's Fiscal Year (FY) and OSMRE's EY 2015. DOGM requested \$2,423,328.00 in Federal funds. However, DOGM's request was limited to the amount allocated for Utah in OSMRE's FY 2015 Final Regulatory Grant Distribution. Therefore, OSMRE funded an A&E Grant to the Utah program in the amount of \$2,057,889.00 for the grant period starting July 1, 2015, and ending June 30, 2016 (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 79.9% of DOGM's total program costs. DOGM did not de-obligate any funding for EY 2015.

Utah requested \$1,276,220.00 in AML funding for FY 2015. OSMRE initially funded a grant to the Utah AML Program in the amount of \$1,276,220.00 for a three year period which will end June 30, 2018. This amount represented 100% funding that would normally be available for Utah's AML Program under SMCRA. Utah's grant was subsequently amended to add \$2,698,845.00 which resulted in a total funding amount of \$3,975,065.00 and represented the entire approved allotted amount for FY 2015 (Table 9). This grant applies to both administrative

and construction expenses.

B. Education/Outreach/Tools

DOGM staff participated in two training instances with the TIPS Training Program and three training instances with the NTTP training program. Utah Regulatory Program staff also requested the two equipment loans from TIPS this year.

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. The second piece of equipment that was loaned was a seismograph used at the Coal Hollow mine to measure earth movement during their surface blasting.

OSMRE's Technical Librarian filled two reference requests for Utah Staff. OSMRE's Technical Library web site can be accessed at <http://www.osmre.gov/resources/Library.shtm>.

EY 2016 Utah Evaluation Team Members

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

Alexis Long, Christine Belka, Dan MacKinnon, Duane Matt, Tom Medlin, Spencer Shumate, and Howard Strand, DFD

Dana Dean, DOGM, and Alan Boehms, 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 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 which have been completely reclaimed, but jurisdiction has not been terminated.

Appendix 1:

Summary of Core Data to Characterize the Utah Program

Utah Annual Evaluation Report Evaluation Year 2016

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.

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TABLE 1

| COAL PRODUCED FOR SALE, TRANSFER, OR USE^A (Millions of short tons) | | | |
|---|----------------------|--------------------------|--------------|
| Calendar Year | Surface Mines | Underground Mines | Total |
| 2012 | 0.6 | 16.6 | 17.2 |
| 2013 | 0.7 | 16.8 | 17.6 |
| 2014 | 0.6 | 17.8 | 18.4 |
| 2015 | 0.3 | 14.2 | 14.5 |

^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 | | | | | | | | | | Area in Acres⁵ | | | | | | |
| | Permanent Program Permits | | | | | Initial Program Sites | | | | | Permanent Program Permits (Permit Area) | | Initial Program Sites | | | | |
| | Active | Inactive | Abandoned | Total | Active | Inactive | Abandoned | Total | Insp. Units^{1,2} | Federal Lands | State/Tribal and Private Lands | Federal Lands | State/Tribal and Private Lands | Total Area | | | |
| Surface Mines | 3 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 4 | 150 | 600 | 0 | 0 | 750 | | | |
| Underground Mines | 13 | 5 | 5 | 23 | 0 | 0 | 0 | 0 | 23 | 260 | 1,290 | 0 | 0 | 1,550 | | | |
| Other Facilities | 4 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 5 | 120 | 570 | 0 | 0 | 690 | | | |
| Total | 20 | 6 | 6 | 32 | 0 | 0 | 0 | 0 | 32 | 530 | 2,460 | 0 | 0 | 2,990 | | | |
| Permanent Program Permits and Initial Program Sites (Number on Federal Lands: 0) | | | | | | | | | | Total Number: | | 32 | | Average Acres per Site: | | 93.44 | |
| Average Number of Permanent Program Permits and Initial Program Sites per Inspectable Unit (IU): | | | | | | | | | | Total Number: | | 1.00 | | Average Acres per IU: | | 93.44 | |
| Permanent Program Permits in Temporary Cessation: | | | | | | | | | | Total Number: | | 5 | | Number More than 3 Years: | | 0 | |
| EXPLORATION SITES | | | | | | | | | | Total Number of Sites | | Sites on Federal Lands⁴ | | Exploration Inspectable Units | | | |
| Exploration Sites with Permits: | | | | | | | | | | 0 | | 0 | | 0 | | | |
| Exploration Sites with Notices: | | | | | | | | | | 3 | | 3 | | 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

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 |

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 | 1 | 1 | | 5 | 5 | | 0 | 0 | | 6 | 6 | |
| Transfers, sales, and assignments of permit rights | 0 | 0 | | 3 | 3 | | 0 | 0 | | 3 | 3 | |
| Small operator assistance | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Exploration permits | | | | | | | | | | 0 | 0 | |
| Exploration notices ² | | | | | | | | | | | | |
| Revisions that do not add acreage to the permit area | 11 | 11 | | 35 | 35 | | 2 | 2 | | 48 | 48 | |
| Revisions that add acreage to the permit area but are not incidental boundary revisions | 0 | 0 | 0 | 1 | 1 | 4 | 1 | 1 | 12 | 2 | 2 | 16 |
| Incidental boundary revisions | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 12 | 12 | 0 | 44 | 44 | 4 | 3 | 3 | 12 | 59 | 59 | 16 |

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: 100.0

Permits in temporary cessation: Notices received: 1 Terminations: 2

Midterm permit reviews completed: Number: 5

¹Includes only the number of acres of proposed surface disturbance

²State 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 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Encroachment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Total | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 |
| Total Number of Inspectable Units ¹ : | | 27 | | | | | | | | | | | |
| Inspectable Units with one or more off-site impacts: | | 3 | | | | | | | | | | | |
| Exploration Inspectable Units with one or more off-site impacts ² : | | 0 | | | | | | | | | | | |
| Inspectable Units free of off-site impacts: | | 24 | | | | | | | | | | | |
| | | % of Inspectable Units free of off-site impacts ⁴ : 89 | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | |
| 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 Units ³ : | | 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 impacts ⁴ : 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 | | |
| | Minor | Moderate | Major | Minor | Moderate | Major | Minor | Moderate | Major | Minor | Moderate | Major |
| DEGREE OF IMPACT | | | | | | | | | | | | |
| TYPE OF IMPACT EVENT | NUMBER OF EVENTS | | | | | | | | | | | |
| Blasting | 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 |
| Hydrology | 3 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Encroachment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Total | 4 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 |
| Total Number of Inspectable Units ⁵ : | 33 | | | | | | | | | | | |
| Inspectable Units with one or more off-site impacts: | 3 | | | | | | | | | | | |
| Exploration Inspectable Units with one or more off-site impacts: | 0 | | | | | | | | | | | |
| Inspectable Units free of off-site impacts: | 30 | | | | | | | | | | | |
| 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 Phase I Releases | Total Acres Released in Phase II Releases | Acres not previously released under Phase I | Total Acres Released in Phase III Releases | Acres not previously released under Phase II | Acres not previously released under Phase I or II | Phase I | Phase II | Phase III | Other Releases - Acres | |
| 144 | | 0 | | | 0 | | | 144 | | |
| | 0 | | | 0 | | | | 0 | | |
| | | | 100 | | | | | 100 | | |
| Number of Permanent Program Permits with Jurisdiction Terminated Under Phase III Bond Release | | | | | | | | | | |
| 0 | | | | | | | | | | |
| Initial Program Sites with Jurisdiction Terminated During the Evaluation Year | | | | | | | | | | |
| 0 | | | | | | | | | | |
| Number of Inspectable Units Removed | | | | | | | | | | |
| 1 | | | | | | | | | | |
| Administrative Adjustments | | | | | | | | | | |
| 1 | | | | | | | | | | |
| 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 | | | | | | | 78 | | | |
| Total Area Bonded for Disturbance | | | | | 2,693 | 2,670 | (23) | | | |
| Area Bonded for Disturbance without Phase I Bond Release | | | | | 2,213 | 2,047 | (166) | | | |
| Area Bonded for Disturbance for which Phase I Bond Release Has Been Approved | | | | | 133 | 277 | 144 | | | |
| Area Bonded for Disturbance for which Phase II Bond Release Has Been Approved | | | | | 347 | 347 | 0 | | | |
| Area Bonded for Disturbance with Bonds Forfeited During Evaluation Year | | | | | | | 0 | | | |
| Area Bonded for Remaining | | | | | 350 | 350 | 0 | | | |
| Areas of Permits Disturbed by Surface Coal Mining and Reclamation Operations | | | | | | | | | | |
| Disturbed Area | | | | | 2,693 | 2,670 | N/A | | | |

Bond Forfeiture Activity

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 | 0 | | 0 |
| 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 for those forfeiture sites where reclamation has been completed but the State has not yet terminated jurisdiction. Reflects final reclamation of the White Oak Mine completed during EY 2016. 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. | | | |

Regulatory and AML Programs Staffing

TABLE 8

| REGULATORY AND AML PROGRAMS STAFFING | |
|--|-----------------------|
| Function | Number of FTEs |
| Regulatory Program | |
| Permit Review and Maintenance | 8.00 |
| Inspection | 3.00 |
| Other (supervisory, clerical, administrative, fiscal, personnel, etc.) | 3.00 |
| Regulatory Program Total | 14.00 |
| AML Program Total | 10.00 |
| TOTAL | 24.00 |

Funds Granted to State by OSMRE

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 | 2,057,889 | | |
| Other Regulatory Funding, if applicable | 0 | | |
| Subtotal (Regulatory Funding) | 2,057,889 | 2,575,132 | 80 |
| Small Operator Assistance Program Grant Funding | 0 | 0 | |
| Abandoned Mine Land Reclamation Funding | 3,975,065 | 3,975,065 | 100 |
| Watershed Cooperative Agreement Program | 0 | 0 | |
| TOTAL | 6,032,954 | | |

TABLE 10

| STATE INSPECTION ACTIVITY | | | | | | | | | | | | | |
|---|--|---|---------------------|---------------------------------|---------------------|---|------------|--|------------|--|--------------------------------------|------------|--|
| INSPECTABLE UNITS FOR WHICH STATE MET REQUIRED INSPECTION FREQUENCY ON AN INSPECTABLE UNIT-BY-INSPECTABLE UNIT BASIS ¹ | | | | | | | | | | | | | |
| Inspectible Units (IUs) | Total number of inspectible 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 | 21 | 84 | 168 | 86 | 163 | 21 | 100 | 21 | 100 | 21 | 21 | 100 | |
| Inactive | 6 | 24 | 0 | 24 | 24 | 6 | 100 | 6 | 100 | 6 | 6 | 100 | |
| Abandoned | 6 | 6 | 0 | 9 | 0 | 6 | 100 | 6 | 100 | 6 | 6 | 100 | |
| TOTALS ³ | 33 | 114 | 168 | 119 | 187 | 33 | 100 | 33 | 100 | 33 | 33 | 100 | |
| Coal Exploration Activities ⁴ | | | | | | | | | | | | | |
| Complete Inspections | | | | | | Partial Inspections | | | | | | | |
| Exploration sites with permits | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Exploration sites with notices | | 0 | | 0 | | 0 | | 0 | | 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

TABLE 11

| STATE OR TRIBAL ENFORCEMENT ACTIVITY | | |
|---|---------------------------------------|--|
| Type of Enforcement Action | Number of Actions ¹ | Number of Violations ¹ |
| Notice of Violation | 27 | 27 |
| Failure-to-Abate Cessation Order | 4 | 4 |
| Imminent Harm Cessation Order | 0 | 0 |
| ¹ Does not include actions and violations that were vacated. | | |

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 |

TABLE 13

| OSM OVERSIGHT ACTIVITY | | | | | |
|--|-----------------------------|-----------|----------------|-----------|------------------------------------|
| Oversight Inspections and Site Visits | | | | | |
| | Complete | | Partial | | |
| | Joint | Non-Joint | Joint | Non-Joint | Total |
| Oversight Inspections | 3 | 0 | 7 | 0 | 10 |
| | 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? | | | | | 10 |
| Of the violations observed, how many did OSM defer to State action during inspections? | | | | | 1 |
| Of the violations observed, how many did OSM refer to the State through Ten-Day Notices? ² | | | | | 9 |
| How many Ten-Day Notices did OSM Issue for observed violations? ³ | | | | | 3 |
| 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. | | | | | |

TABLE 14

STATUS OF ACTION PLANS

| Action Plan ID | Problem Type ¹ | Problem Title | Problem Description | Date Action Plan Initiated | Scheduled Completion Date | Actual Completion Date |
|----------------|---------------------------|---------------|---------------------|----------------------------|---------------------------|------------------------|
| None | | | | | | |

¹ Problem Type: "PA" indicates a required Program change under subchapter T or 732
 "RP" indicates a Regulatory Program implementation or administrative problem

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 Use ¹ | Acres Released |
| Cropland | 0.00 |
| Pasture/Hayland | 0.00 |
| Grazingland | 100.00 |
| 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 | 100.00 |

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 2016

APPENDIX 1, Part B

Comments of State of Utah on the Report

Utah had no comments on the Annual Evaluation report.

APPENDIX 2: EY 2016 Utah Reclamation Status Table

| Utah Reclamation Status Table for EY-2016 (Mine by Mine) | | | | | | | | | | | | | | | | | | |
|--|-----------|-------------|----------------|-------------------|--|--------------------|-----------------------------|-------------------|-----------------------------|-------------------|-----------------------------------|-------------------|------------------------------|-------------------|---|-------------------|-------------------------------|-------------------|
| RECLAMATION STATUS OF ALL AREAS DISTURBED UNDER THE PERMANENT REGULATORY PROGRAM | | | | | | | | | | | | | | | | | | |
| Acres Disturbed As of EY-2016 | | | | | | | | | | | | | | | | | | |
| 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 | 3 | 125 | 125 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hiawatha Mine | | X | 0 | 290 | 194 | 0 | 0 | 96 | 0 | 96 | 0 | 96 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wellington Preparation Plant | X | | 0 | 392 | 392 | 0 | 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 | 0 | 74 |
| Gordon Creek #2, #7, and #8 | | X | 0 | 35 | 2 | 0 | 0 | 33 | 0 | 33 | 0 | 33 | 0 | 33 | 0 | 0 | 0 | 1 |
| Soldier Canyon Mine | | X | 0 | 24 | 24 | 0 | 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 | 0 |
| Horizon Mine | | X | 0 | 10 | 10 | 0 | 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 | 0 |
| Wildcat Loadout | X | | 23 | 112 | 112 | 0 | 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 | 0 |
| Sunnyside Refuse & Slurry | X | | 0 | 202 | 197 | 0 | 0 | 5 | 0 | 5 | 0 | 5 | 0 | 5 | 0 | 5 | 0 | 5 |
| Plateau-Willow Creek Mine | | X | 0 | 188 | 0 | 0 | 0 | 188 | 0 | 188 | 0 | 188 | 0 | 188 | 94 | 187 | 94 | 187 |
| Dugout Canyon Mine | | X | 0 | 109 | 72 | 0 | 0 | 37 | 0 | 37 | 0 | 19 | 0 | 19 | 0 | 0 | 0 | 0 |
| West Ridge Mine | | X | 0 | 31 | 31 | 0 | 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 | 0 |
| Wellington Dry-Coal Facility | X | | 0 | 30 | 30 | 0 | 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 | 0 | 0 | 0 | 0 | 0 |
| Fossil Rock Mine | | X | 0 | 28 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Emery Deep Mine | | X | 0 | 249 | 249 | 0 | 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 | 1 |
| Cottonwood/Wilberg Mine | | X | 0 | 49 | 28 | 0 | 0 | 21 | 0 | 21 | 0 | 21 | 0 | 21 | 0 | 21 | 0 | 21 |
| Bear Canyon Mine | | X | 0 | 41 | 35 | 0 | 0 | 6 | 0 | 6 | 0 | 6 | 0 | 6 | 6 | 6 | 6 | 6 |
| Crandall Canyon | | X | 0 | 35 | 23 | 0 | 0 | 12 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Coal Hollow Mine | X | | 52 | 394 | 119 | 0 | 144 | 275 | 144 | 144 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sufco Mine | | X | 0 | 50 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Columbia Well Exploration Project | | X | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Castle Gate Mine | | X | 0 | 63 | 0 | 0 | 0 | 63 | 0 | 63 | 0 | 63 | 0 | 63 | 0 | 63 | 0 | 63 |
| Des-Bee-Dove Mine | | X | 0 | 137 | 0 | 0 | 0 | 137 | 0 | 137 | 0 | 137 | 0 | 137 | 0 | 137 | 0 | 137 |
| Star Point Mine | | X | 0 | 101 | 0 | 0 | 0 | 101 | 0 | 101 | 0 | 101 | 0 | 101 | 0 | 101 | 0 | 101 |
| Blackhawk-Willow Creek Mine | | X | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 |
| Trail Canyon Mine | | X | 0 | 10 | 0 | 0 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 |
| Gordon Creek #3 and #6 | | X | 0 | 17 | 0 | 0 | 0 | 17 | 0 | 17 | 0 | 17 | 0 | 17 | 0 | 17 | 0 | 17 |
| Huntington #4 Mine | | X | 0 | 13 | 0 | 0 | 0 | 13 | 0 | 13 | 0 | 13 | 0 | 13 | 0 | 13 | 0 | 13 |
| J.B. King Mine | | X | 0 | 28 | 0 | 0 | 0 | 28 | 0 | 28 | 0 | 28 | 0 | 28 | 0 | 28 | 0 | 28 |
| Knight Mine | | X | 0 | 40 | 0 | 0 | 0 | 40 | 0 | 40 | 0 | 40 | 0 | 40 | 0 | 40 | 0 | 40 |
| Sunnyside Coal Company | | X | 0 | 287 | 0 | 0 | 0 | 287 | 0 | 0 | 0 | 287 | 0 | 0 | 0 | 287 | 0 | 0 |
| Blazon #1 Mine | | X | 0 | 7 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 7 | 0 | 0 |
| Summit #1 Mine | | X | 0 | 14 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 14 | 0 | 0 |
| Boyer Mine | | X | 0 | 7 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 7 | 0 | 0 |
| New Tech Black Jack #1 Mine | | X | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 0 |
| White Oak #1 & #2 Mines and Loadout | X | | 0 | 151 | 0 | 0 | 0 | 151 | 0 | 0 | 0 | 151 | 0 | 0 | 0 | 151 | 0 | 0 |
| TOTAL | 9 | 33 | 78 | 3848 | 2210 | 0 | 144 | 1638 | 144 | 1037 | 0 | 1333 | 0 | 760 | 100 | 1176 | 100 | 708 |

| Legend | |
|--------|----------------------------|
| | Reclaimed Exploration Site |
| | Final Bond Release Sites |
| | Bond Forfeiture Sites |