

**OFFICE OF SURFACE MINING  
RECLAMATION AND ENFORCEMENT**

**Annual Evaluation Summary Report  
For the  
Regulatory Program  
Administered by the State  
Of**



**UTAH**



**For  
Evaluation Year 2013  
(July 1, 2012, through June 30, 2013)**

**Prepared by**

**Denver Field Division  
(September 2013)**



## **EXECUTIVE SUMMARY**

### **Utah's Regulatory Program**

### **Evaluation Year 2013**

The following summary captures the highlights of the Evaluation Year 2013 (EY 2013) Annual Evaluation Report for the Utah Regulatory Program and the Division of Oil, Gas and Mining. The report covers the period of July 1, 2012, to June 30, 2013.

#### **The Utah Program**

The Utah Division of Oil, Gas and Mining (DOGGM) 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 2013, 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**

The Utah coal regulatory program continued to provide increased environmental improvement for coal field citizens during EY 2013 (July 1, 2012, through June 30, 2013), and strives to effectively achieve or exceed the regulatory and reclamation goals of SMCRA. 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 sent 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 performance evaluation topics as well as any questions or comments on previous oversight reports or the OSM/DOGGM oversight process.

DOGGM 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**

DOGGM participates on the steering committees for the OSM 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.

## **Accomplishments and Innovations**

During EY 2013, DOGM was able to complete the contract for additional reclamation at the White Oak mine, a bond forfeiture site that has undergone various stages of reclamation.

DOGM is also progressing in its efforts to institute electronic permitting. The Skyline mine contributed to this endeavor by participating as a “test mine” for submittal of electronic permit amendments. DOGM has implemented the electronic permitting process and other mines are now submitting permitting actions electronically. As a result, DOGM has made significant improvements in the timeliness of permitting actions.

DOGM continues to administer an effective Title V reclamation program. OSM developed the Reclamation Status Table (appended to 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 OSM in this format. DOGM and OSM now have an accurate picture of coal mine disturbance and reclamation in Utah. There are currently 2,726 acres disturbed by coal mining and 2,298 of those acres consist of long-term facilities and active mining areas that are not yet subject to contemporaneous reclamation requirements. This year, DOGM approved 11.89 acres for Phase I bond release, 95.4 acres for Phase II bond release, and 57.44 acres for Phase III bond release. An additional 47.32 acres were bonded and disturbed during the evaluation year.

## **Program Amendments**

DOGM completed a rewrite of the Valid Existing Rights section of the Utah coal rules in response to OSM’s February 1, 2008, request for rule amendments. DOGM completed the state rulemaking process and submitted a formal program amendment on August 10, 2010. The final rule Federal Register notice was published on February 12, 2013.

DOGM has also completed a rewrite of the Ownership and Control sections of the Utah coal rules in response to OSM’s October 2, 2009, request for rule amendments. DOGM completed the state rulemaking process and submitted a formal program amendment on June 25, 2012. The final rule Federal Register notice is currently under Regional Solicitor review.

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 OSM sent in accordance with 30 CFR 732.17(e)(2). The final rule Federal Register notice is currently under Regional Solicitor review.

## **Off-site Impacts**

One hundred percent of the thirty-six inspectable units were free of negative off-site impacts during the evaluation year. Accordingly, no negative off-site impacts were recorded.

## **Reclamation Success**

According to REG-8, OSM 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 – The remaining portion of the bond may be released after 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 – 810 acres or 22.32% of total disturbance.

Phase II – 649 acres or 17.88% of total disturbance.

Phase III – 434 acres or 11.95% of total disturbance.

## **Topic Specific Oversight Reviews**

The EY 2013 National Measurement Element reviews included Protection of Threatened and Endangered Species (Reclamation Success), Bond Forfeiture Sites (Prevention of Off-site Impacts), and Public Availability of Permit Records (Customer Service). The Protection of Threatened and Endangered (T&E) Species evaluation found that DOGM is ensuring reclamation success by requiring mining operators to follow Protection and Enhancement Plans to minimize disturbances and adverse impacts to T&E species when species are identified within mine permit areas. The Bond Forfeiture Sites evaluation concluded that DOGM has appropriate controls in place to prevent and manage off-site impacts on bond forfeiture sites. The Public Availability of Permit Records evaluation found that DOGM is providing effective customer service by requiring mine permit applications to be made available in an accessible location in the vicinity of the mining operation for the public to inspect and copy.

## **Regulatory Program Issues**

The most significant issue for the Utah Program in EY 2013 involved the process of increasing the bond at the Crandall Canyon Mine as a result of a TDN issued by OSM on December 7, 2012. This issue was ultimately resolved and the TDN and associated Action Plan were terminated as a result on March 21, 2013. Resolution of this issue is described in detail under Section VII Regulatory Program Issues.

## **OSM Assistance**

For the one-year grant period beginning July 1, 2012 (Fiscal Year 2012), Utah originally received an Administration and Enforcement Grant of \$2,073,878 for permitting, inspection, and other activities that it performs. DOGM subsequently de-obligated \$133,006 for a total grant amount of \$1,940,872. DOGM received 100% OSM funding for the Utah Abandoned Mine Land Program for Fiscal Year 2012 in the amount of \$4,939,010. OSM also provided DOGM with free-of-charge technical training courses, use of technical equipment, and library reference materials upon request.

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## I. Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSM) in the Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of and provide Federal funding for the state and tribal regulatory programs that have been approved by the Secretary of the Interior as meeting the minimum standards specified by SMCRA. 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 period of July 1, 2012, through June 30, 2013.

Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the OSM's Denver Field Branch, 1999 Broadway, Suite 3320, Denver, Colorado 80202. Contact Alan Boehms, Chief, DFB, at [aboehms@osmre.gov](mailto:aboehms@osmre.gov) or (303) 293-5012.

The following list of acronyms is used in this report:

ACD	Alton Coal Development, LLC
AML	Abandoned Mine Land
BLM	Bureau of Land Management
BOGM	Utah Board of Oil, Gas, and Mining
CFR	Code of Federal Regulations
DFB	Denver Field Branch
DFD	Denver Field Division
DOGM	Division of Oil, Gas and Mining
DWRi	Utah Division of Water Rights
EY	Evaluation Year
FTE	Full-Time Equivalent
IMCC	Interstate Mining Compact Commission
MRP	Mining and Reclamation Plan
MSO	Mexican Spotted Owl
NOV	Notice of Violation
NTTP	National Technical Training Program
OSM	Office of Surface Mining
REG-8	OSM Regulatory Program Development Directive REG-8
SMCRA	Surface Mining Control and Reclamation Act of 1977
SUFCO	Southern Utah Fuel Company
T&E	Threatened or Endangered Species
TDN	Ten-Day Notice
TIPS	Technical Innovation and Professional Services Program
UDWR	Utah Division of Wildlife Resources
UPDES	Utah Pollution Discharge Elimination System
USFWS	United States Fish and Wildlife Service

USFS	United States Forest Service
WIEB	Western Interstate Energy Board
WR	Western Region
WRTT	Western Region Technology Transfer

## II. Overview of the Utah Coal Mining Industry

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 2013). In 2013, 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 1970's and peaked in 1996 at 28.9 million tons. Production in calendar year 2012 was approximately 17.2 million tons (Table 1). The majority of the coal production is produced by underground mining operations. In addition, Utah removed and reprocessed 528,609 tons of no value material in 2012 (OSM 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, 2013, Utah had 20 active or temporarily inactive operations, 10 inactive operations, and six abandoned sites that have disturbed a total of 3,268 acres. Each of these 36 sites is an inspectable unit (Table 2). Of the 30 non-abandoned operations, 11 were underground mines that use the longwall mining method (of these five are currently producing coal), 10 were underground mines that use the room-and-pillar mining method (of these two are currently producing coal), one was a private surface mining operation (currently producing), two were surface mining operations that extract coal from an underground mine refuse pile (both currently producing), and six were coal preparation plants/loadout facilities. As of June 30, 2013, Utah had also reclaimed 470 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 2012 mining companies (except oil and gas), including coal mining companies, employed on average 795 and 434 persons in Carbon and Emery Counties, respectively. Kane County employed 33 people and Sevier County employed 594 persons on average in 2012. In Carbon County, coal mining companies represented two of the five largest employers with one being the third largest employer. In both Emery and Sevier Counties, the second largest employer was a coal mining company. 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 Public Participation in the Utah Program

#### A. Evaluation Process

OSM'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 DOGM is in: ensuring that coal mining and reclamation is successful; preventing off-site impacts; and providing quality service to its customers. The Team makes recommendations for improving the administration, implementation, and maintenance of the Program. The Team structure is comprised of three to four core members each from the WR 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 23, 2012, 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 2013, and soliciting any questions or comments on previous oversight reports or the OSM/DOGGM oversight process. In addition, DOGM posted a notice on its web page requesting suggestions for oversight topics from the public, industry, and environmental groups. The Team did not receive any substantive responses to its letters soliciting comments.

Copies of Performance Agreements and Annual Evaluation Summary Reports are available on both the OSM internet site at [www.osmre.gov](http://www.osmre.gov) and the DOGM site at <http://www.ogm.utah.gov>. Additional data used by OSM in its evaluation of Utah's Program is available for review in the evaluation files maintained at the WR-DFD, Denver Field Branch (DFB). Contact Alan Boehms, Chief, DFB, at [aboehms@osmre.gov](mailto:aboehms@osmre.gov) or (303) 293-5012.

## **B. Utah Program**

### **1. 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. BOGM consists of seven members knowledgeable in oil, gas, mining, environmental, geology, and royalty matters. BOGM convened eleven hearings during this evaluation year. The meetings were all held in Salt Lake City, except for one that was held in Roosevelt, Duchesne County, and one that was held in Moab, Grand County.

### **2. Education and Community Outreach**

DOGM 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. DOGM representatives meet with county water user associations, coal operators, Utah Division of Water Rights (DWRi), United States Forest Service (USFS), Bureau of Land Management (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 Crandall Canyon Mine water chemistry and treatment of the mine discharge; Hydraulic Fracturing, Utah Sage Grouse Plan, Mining on the San Rafael Swell, Soil Methane Monitoring Near Natural Gas Wells, and Economic Trends and Events of the Area.

The Division also participated at the Utah Mining Association and the Utah Governor's Energy Conference with an information booth that was set up as part of the conference. 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 an FTP 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, OSM, United States 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 OSM performing this coordination effort.

- The DOGM and the Utah Department of Environmental Quality meet semiannually to review their existing Memorandum of Understanding. The discussions include UPDES and other water related compliance issues concerning coal mines.

### **3. Information and Technology Exchanges**

DOGM participates on the steering committees for the OSM 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 Interstate Mining Compact Commission (IMCC) annual meetings and as a representative of the Reclamation Committee for the Western Interstate Energy Board (WIEB). DOGM also attended the Utah Mining Association Annual Conference held in Park City, Utah.

## **IV. Major Accomplishments and Innovations in the Utah Program**

### **A. Accomplishments**

#### **1. Staffing and Workload**

The Division continues to function with a reduced staff of 16 FTE's 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 steady workload. In spite of these challenges, DOGM continues to make improvements in the timeliness of permitting actions. The timeliness of actions is measured on a monthly basis and reported quarterly on the Governor's scorecard. DOGM has improved timeliness for meeting permit review deadlines from near 90% in EY 2012 to 99% in EY 2013.

#### **2. State Program Amendments**

DOGM completed a rewrite of the Valid Existing Rights section of the coal rules in response to OSM's February 1, 2008, request for rule amendments. DOGM completed the state rulemaking process and submitted a formal program amendment on August 10, 2010. The final rule Federal Register notice was published on February 12, 2013.

DOGM has also completed a rewrite of the Ownership and Control sections of the coal rules in response to OSM's October 2, 2009, request for extensive rule amendments. DOGM completed the state rulemaking process and submitted a formal program amendment on June 25, 2012. The final rule notice approving the rule changes has been drafted. After the draft final rule notice is approved by the Regional Solicitor, Utah's proposed Rules will be approved in the Federal Register, and DOGM can continue in their State process to implement these rules.

By letter dated April 18, 2012, DOGM sent OSM 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 OSM 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.

### **3. Training**

DOGM continues to conduct Blaster Certification Training. During the week of January 7-11, 2013, DOGM conducted the annual Utah Coal Mine Surface Blaster Certification class. One new applicant was certified as State of Utah coal mine surface blaster. Four previously certified individuals renewed their certifications by successfully passing the re-certification examination on January 11, 2013.

### **4. 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. BOGM presented Earth Day Awards to Anadarko Petroleum, Canyon Fuel Company's Skyline and SUFCO mines, and Newfield Exploration Company. Anadarko earned an Earth Day Award for its stakeholder engagement initiatives to secure a Record of Decision on the Greater Natural Buttes Environmental Impact Statement. The four-and-a-half-year process involved collaboration with regulators, environmental advocates, tribal leaders and industry. Canyon Fuel Company's Skyline mine was recognized for its mitigation efforts in the Winter Quarters Canyon area of Carbon County, Utah. Winter Quarters Canyon contains significant historical features left over from coal mining that was completed in the late 1800s and early 1900s. Because construction of an exhaust fan in the canyon could possibly affect the historical resources, mitigation was needed. After consultation with various entities including the State Historic Preservation Office, Skyline contracted for publication of a 40 page booklet on the history of the canyon that was widely distributed to historical societies, university libraries, government agencies and libraries in surrounding school districts. SUFCO mine was recognized for its work on two wildlife and livestock water enhancement projects in the Fishlake and Manti-La Sal national forests. SUFCO provided partial funding and materials for construction of a gravity-fed water pipeline system that eliminates the need to haul water to troughs in the forests. Finally, Newfield Exploration Company received its award for construction of a water treatment facility in the Greater Monument Butte area. The state-of-the-art plant recycles up to 10,000 barrels of water per day which helps preserve the region's fresh water resources.

## **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.

### **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 (<http://ogm.utah.gov/fs/filesbypermitinfo.php>); access to the general public is more restricted. Some of the abilities of the database include:

- Inspections and compliance information are tracked in the database;
- Staff permitting tasks are assigned, scheduled and tracked;
- Mine operators can track submittals, permits, and amendments status online; and
- An interconnected relational database 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. Many of the mines are now able to submit amendments to the Division in a paperless format. DOGM anticipates that the other mines will participate in electronic permitting as the initial systems and processes continue to be refined.

## V. Success in Achieving the Purposes of SMCRA

The Team evaluates the number and extent of observed off-site impacts, the number and percentage of inspectable units free of off-site impacts, the number of acres that have been mined and reclaimed (which meet the bond release requirements and have been released for the various phases of reclamation), and the effectiveness of customer service provided by the State. Individual topic reports that provide additional details on how the following evaluations and measurements were conducted are available on the OSM internet site at [www.osmre.gov](http://www.osmre.gov) and in the WR-DFD Denver Field Branch at 1999 Broadway, Suite 3320, Denver Colorado, 80202. Contact Alan Boehms, Chief, DFB, at [aboehms@osmre.gov](mailto:aboehms@osmre.gov) or (303) 293-5012.

To validate the credibility of State Regulatory programs and enhance Federal oversight improvement efforts, OSM announced in November of 2009 that it would immediately increase the number of oversight inspections that it performs. OSM also began conducting independent unannounced oversight inspections. OSM schedules and conducts these inspections at independently selected mine sites. Independent inspections are intended to provide observations and insight into the effectiveness of State regulatory programs by evaluating the current compliance status of mines in each state. OSM continued these oversight efforts during EY 2013.

The DFD conducted three joint complete, six joint partial, one partial independent, and one joint bond release inspection of coal mining operations in Utah during EY 2013. These inspections are included in the DOGM complete and partial inspection totals reported below. During EY 2013, DOGM issued nine notices of violation (NOVs) while the DFD issued one Ten-Day Notice (TDN). No enforcement actions were taken by DFD as a result of the independent inspection that was conducted. Observed mine site conditions indicate that DOGM is effectively implementing and enforcing its program.

DOGM conducted 133 complete inspections and 221 partial inspections during this evaluation year (Table 10). 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" is anything resulting from a surface coal mining and reclamation activity or operation that causes a negative effect on resources (people, land, water, 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 (OSM Directive REG-8).

Table 5 shows the number and type of off-site impacts that were observed and documented as having occurred during EY 2013, both for permitted sites and bond forfeiture sites. The State of Utah had a total of 36 inspectable units during the evaluation year. The Team did not identify

any off-site impacts during EY 2013. Accordingly, 100 percent of the 36 inspectable units in Utah were free of negative off-site impacts.

*Permitted Mine Sites Where Reclamation Performance Bonds Have Not Been Forfeited*

Several sources of information have been selected for identifying off-site impacts. These include but are not limited to: DOGM and OSM inspection reports, enforcement actions, civil penalty assessments, citizens' 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 OSM. The Team assessed whether off-site impacts had occurred on each of the 30 non-forfeited mine sites that existed at some time during the evaluation period. The Team did so through the following 359 on-the-ground observations: one independent unannounced partial OSM inspection; 133 DOGM complete inspections, including three OSM and DOGM joint complete inspections; 221 DOGM partial inspections, including six OSM and DOGM joint partial inspections (Tables 10 and 13); and four special focus evaluation observations discussed in section VI below.

For EY 2013, the Team did not find any off-site impacts from any active or inactive coal mining operations. Accordingly, 100 percent (30 of 30) of the permitted inspectable units were free of negative off-site impacts (Table 5). In comparison, the Team found 93, 93, 87, and 94 percent of the mines free of off-site impacts in EY's 2009, 2010, 2011, and 2012, respectively.

*Bond Forfeitures and Revoked Permit Sites*

Since OSM 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 Loadstar Bankruptcy Trustee, Frontier Insurance, and a "General Settlement Fund" outside of the Lodestar bankruptcy estate.

During EY 2013, DOGM conducted 12 complete and eight partial inspections on the six forfeited sites (see Table 10). It did not observe any off-site impacts. As a result, 100 percent of the bond forfeiture and permit revocation sites (6 of 6) were free of off-site impacts at the end of EY 2013 (Table 5). The Team previously found that 86, 100, 100, and 100 percent of these mines were free of off-site impacts in EY's 2009, 2010, 2011, and 2012, respectively.

## **B. Reclamation Success**

According to REG-8, OSM 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 – The remaining portion of the bond may be released after 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 2 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 in January of 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. For operations where reclamation performance bonds have not been forfeited, the Team used disturbed acreage that had received bond release as a measure of reclamation success. 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 (2,726 acres for EY 2013), there are 3,270 permitted acres for the 30 non-forfeited mines, or an average of 90.83 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, we exclude shadow area acreages and only report areas permitted for disturbance 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.

Table 6 shows the permit acreage where DOGM partially released (Phases I and II) or totally released (Phase III) bonds during the evaluation year. For the 2,808 acres of total permitted disturbance that had not yet received final (Phase III) bond release at the beginning of the evaluation year, DOGM released 11.89 acres of Phase I at the Crandall Canyon Mine, 95.40 acres of Phase II at the Willow Creek Mine, and 57.44 acres of Phase III bond release at the Castle Gate Mine. During the evaluation year an additional 40 acres were bonded and disturbed at the Coal Hollow Mine, as were seven acres at the Crandall Canyon Mine, thus reducing the overall total number of disturbed acres to 2,726 as of June 30, 2013.

A review of data in the EY 2013 Utah Reclamation Status Table (see Appendix 2) indicates that 2,298 acres consist of long-term facilities and active mining areas that are not yet subject to contemporaneous reclamation requirements during any given evaluation year, and thus not eligible for any phase of bond release. Since the Utah Permanent Regulatory Program was approved in January of 1981, 1,222 of 3,629 acres on active, temporarily inactive, inactive, final bond released, and bond forfeiture sites has been backfilled, regraded, re-topsoiled and seeded. In addition, DOGM has granted Phase III bond release on a total of 433.28 acres. Taking into account those acreages temporarily excluded from contemporaneous reclamation requirements, 32.55% (433.28 of 1,331) of mining related disturbance has been successfully reclaimed.

OSM 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 2013 Utah Reclamation Status Table, OSM oversight inspections, and DOGM's routine 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 2013, DOGM continued to evaluate bond forfeiture sites for reclamation success that could lead to the termination of jurisdiction. DOGM staff conducted 12 complete and eight partial inspections on six abandoned mines (Table 10). While reclamation may be adequate at these sites to terminate jurisdiction, DOGM has yet to do so.

### **C. Customer Service**

To evaluate the effectiveness of customer service provided by DOGM, the Team selects a program area to monitor the State's responses to complaints, requests for assistance, and services. During EY 2013, the Team evaluated whether DOGM is effectively implementing its program by ensuring that permit records are available to the public for inspection and copying during the appropriate timeframes. For a discussion of this evaluation refer to section VI, "Customer Service –Public Availability of Permit Records." In addition, DOGM conducted its fifth 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 also discussed under section VI below.

## **VI. OSM General Oversight Topic Reviews**

Each year OSM and DOGM evaluate topics to determine whether DOGM is effective in ensuring reclamation success, preventing off-site impacts, and ensuring effective customer service. For EY 2013, the Team conducted three general evaluation topic reviews. Complete results of these reviews are available at the WR-DFD Office.

## **A. Reclamation Success – Protection of Threatened and Endangered Species**

As a measure of reclamation success, the Team evaluated DOGM’s protection of listed or proposed threatened and endangered (T&E) species on a sample of three mine sites. Because the sage grouse is a candidate for listing as a “threatened and endangered” species and due to the Governor’s pending approval of the Greater Sage-grouse Plan in Utah, OSM extended this evaluation that began during EY 2012 into EY 2013.

The review focused on whether DOGM was ensuring that operators follow a Protection and Enhancement Plan to minimize disturbances and adverse impacts to T&E species when species are identified within the permit area, and whether mine operators are complying with applicable regulatory and permit requirements pertaining to the minimization of adverse impacts to T&E species and their habitat during coal mining and reclamation operations.

### **Findings**

#### **Deer Creek Mine**

In 2005, the mine constructed a new portal facility. Prior to the project, the operator conducted research to determine if any T&E species were present in the area. The research included an in-depth vegetation analysis of the area related to the proposed portal facilities to determine the presence of plant species listed as “sensitive” in the Manti-LaSal National Forest. Neither these plants nor their ideal habitats were observed within the study areas during the course of the field sampling and surveys.

A Habitat Suitability Determination Report was written in 2005. This report focused on the Mexican Spotted Owl (MSO) because a USFWS habitat suitability model had identified the mine area as containing habitat or potential habitat for the MSO. It was determined that the area, although having many of the characteristics necessary for MSO habitat, was not inhabited by the MSO.

As part of the Upper Colorado River Endangered Fish Recovery Program, calculations must be performed to determine if consumption of water from coal mining is contributing or will contribute to water depletions, thereby affecting fish habitat. Existing coal mine operations have been required to revisit the water depletion calculations if a proposed change to the MRP has the potential to significantly increase the amount of depletion from the Colorado River Watershed. The Deer Creek Mine has submitted calculations which show that water consumption from mining operations does not significantly impact any endangered Colorado River fish or their habitat.

#### **Emery Deep Mine**

This mine has conducted numerous T&E surveys due to several significant revisions for permit expansion and construction projects. Additionally, a sensitive species Burrowing Owl survey was conducted in 2008 which resulted in a Wildlife Protection and Enhancement Plan for an area which was incorporated into the MRP in October of 2009.

As a result of these many surveys, the mine has made efforts for the protection and enhancement of these “high value habitats” by using recommended seed mixtures to create ideal habitats and permanently retaining ponds as post-mining wildlife enhancement structures.

The mine committed to monitor the area during and after subsidence to determine if adverse effects from mining had occurred to a burrowing owl nest site. Additionally, the mine constructed seven artificial burrows for burrowing owls to use within the permit area. Two of these burrows were intentionally placed in the subsidence zone so that the company could test the effects of subsidence on the burrows.

Similar to the Deer Creek Mine, the Emery Deep Mine participates in the Upper Colorado River Endangered Fish Recovery Program. The mine has submitted calculations which show that water consumption from mining operations does not significantly impact the Colorado River fish or their habitat.

### **Coal Hollow Mine**

Although not officially registered as a T&E species, much attention has been given to the sage grouse as it is currently a “candidate species for listing.” The mine area contains “Crucial Value brood habitat” for the birds. BLM and the UDWR located a sage grouse lek in the proposed mine area. In 2005, BLM biologists captured, collared, and began monitoring four sage grouse in an effort to study the lifecycle and migrating patterns of these birds. In April of 2006, Alton Coal Development, LLC (ACD) began its own sage grouse studies. Monthly monitoring of sage grouse is also conducted by ACD from August to April each year, primarily by using a spotlight to count the birds at night. Monthly vegetation surveys are also conducted beginning in early fall. The lek count data for 2013 indicates that the number of displaying males (12) was within several birds of the total observed prior to mining.

In addition to studying the sage grouse, the Coal Hollow Mine is implementing techniques determined collectively with DOGM, UDWR, and the Natural Resources Conservation Service to improve the habitat for the birds. Landscape with many sagebrush plants is essential for sage grouse habitat. Single juniper trees that are scattered throughout sagebrush communities are ideal locations for predatory species to perch and hunt the sage grouse. To encourage sage grouse survival, over 10,000 juniper trees had been removed by plucking equipment prior to mining. This equipment pulls the entire tree (including roots) out of the ground. This technique causes minor impacts to the existing, essential sagebrush community. Additionally, the Mine has employed a “lop and scatter” method, where the limbs of the trees are cut off and scattered on the ground below. The BLM also continues to perform a technique known as “bull hogging,” where entire trees (mainly pinion and juniper) are mulched to increase the production of grasses and forbs.

Past efforts have been made to establish a corridor between lekking areas on the permit and the large leks to the north of the current permit area. This connectivity is thought to greatly increase the chances of survival for the birds. To open up this corridor, many pinion juniper stands have been removed.

The mine-proposed reclamation seed mixtures include plant species which sage grouse depend on for food and cover. Areas that are currently dominated by grass species will be seeded with big sagebrush and black sagebrush, which provide excellent nesting habitat for the grouse.

Various State agencies have combined their efforts to create a plan for the protection and enhancement of sage grouse habitat. Due to the status of Greater sage grouse as a candidate species for listing under the Endangered Species Act, State wildlife agencies have encouraged greater protection, enhancement and mitigation of sage-grouse habitat. On February 14, 2013, the Governor approved the Greater sage-grouse Plan, which includes protective measures to prevent the sage-grouse from being listed, including a one-mile lekking buffer and an additional two mile nesting, brood rearing and wintering buffer from any activity associated with mining and reclamation. DOGM has encouraged ACD to work with numerous agencies to further develop sage grouse habitat. ACD's future Federal lease application and its associated Reclamation Plan will be affected by the Governor's Plan.

ACD submitted an addendum to Appendix 3-6, *The 2012 Progress Report*, currently under review by DOGM, UDWR and the USFWS. This document includes the results of predator control efforts, vegetation treatment, and grouse and vegetation monitoring efforts. DOGM will consult with DWR and FWS and make recommendations to ACD regarding habitat improvement for the sage grouse.

On April 19, 2013, DOGM approved a Change in Mining Sequence amendment to ACD's MRP. During the field evaluation, the Team observed that revised Diversion Ditch #1 had been constructed through the active historic lek during the active lekking period (February 15<sup>th</sup> through May 15<sup>th</sup>), and Pond 4 construction had taken place in critical nesting and brood rearing habitat during the onset of the sage grouse brood rearing period.

The Alton Coal Mine was permitted with the understanding that the sage grouse lek within the permit area would be mined through and destroyed. For this reason, proper mitigation was required in the Mining and Reclamation Plan (vegetation treatment off-site). Even though the mine built Diversion Ditch #1 and Pond 4 close to the lek this spring during brooding and rearing season, the mine operator was following the approved MRP and the mine was not required to place any time restrictions on mining activities. Consequently, because avoidance of the lek was not possible, the choice to deal with the sensitive species was to mitigate off-site.

DOGM met with the head of the Governor's Public Lands Policy Coordinating Office (charged with enforcing the Governor's Sage Grouse Management Plan in Utah), who agreed that the mine had done what was expected and the actions taken were congruent with the plan. As a result, DOGM concluded that ACD did what was required according to their MRP and that the Division followed the law in devising and implementing the *Sage Grouse Management Plan* that is in the MRP.

### **Conclusions & Recommendations**

The Team concluded that DOGM is ensuring reclamation success by requiring mining operators to follow Protection and Enhancement Plans to minimize disturbances and adverse impacts to T&E species when species are identified within mine permit areas. This evaluation supports that

mine operators are complying with applicable regulatory and permit requirements pertaining to the minimization of adverse impacts to T&E species and their habitat during coal mining and reclamation operations.

OSM encourages DOGM to continue working with operator, landowners, and other agencies to ensure that T&E species and their habitat remain protected.

## **B. Prevention of Off-site Impacts – Bond Forfeiture Sites**

As a measure of preventing off-site impacts, the Team evaluated DOGM's success in preventing and managing off-site impacts on bond forfeiture sites. The evaluation focused on whether DOGM has appropriate controls in place on bond forfeiture sites to successfully prevent and manage off-site impacts with respect to erosion / sedimentation. Reclamation at the White Oak and Blazon mines were of particular interest to the Team because the original reclamation plans were modified by DOGM and utilize some innovative techniques to prevent offsite impacts (e.g. channel redesign, hand planting riparian vegetation, and using biosolids as a soil amendment).

Utah's Coal Mining Rules at R645-301-526.222, -731, -731.121 and -742 require that the best technology currently available be utilized to prevent, to the extent possible, additional contributions of sediment to stream flow or to runoff outside the permit area from active mine sites. However, because Utah's performance standards do not apply to bond forfeiture sites, these rules were only used as general guidelines and not specific measures of success.

### **Findings:**

#### **Boyer Mine**

This reclaimed site shows very stable vegetation; rabbitbrush and shadscale as high as four feet tall, many species of perennial grasses as high as 2.5 feet tall, and small perennial forbs, including a significant amount of whitetop (*Cardaria draba*). The pre-mining vegetation was most likely Pinyon / Juniper with oak scrub; this is the vegetation seen surrounding the reclamation site. Currently this surrounding vegetation contains a significant amount of bare ground mixed with large patches of cheatgrass.

No running or pooled water was observed at the time of the evaluation, however there was some disturbance documented related to a washed out downdrain. The source of the impact appeared to originate up gradient from the reclaimed area, which contains steep slopes and cliffs. Runoff from this area resulting from an intense precipitation event disturbed the reclaimed downdrain by affecting vegetation and causing some minor headcutting in certain areas. The resulting erosion of the reclaimed channel deposited sediment off-site and onto the shoulder of State Road 133.

The downdrain erosion did not interfere with land use, jeopardize public safety, or cause damage to uncontrolled structures or restricted areas. Further, sediment deposition associated with the downdrain did not appear to affect the integrity of the road ditch, but it did have an effect on vegetation by partially or completely burying it underneath a layer of sediment. However, it was apparent that the affected area was beginning to become re-vegetated.

According to OSM's rules at 30 CFR 816.43(c) and Utah's counterpart rules at R645-301-742.333, permanent diversions of miscellaneous flows must be designed for a 10 year 6 hour storm event. Although these rules are not specifically applicable to bond forfeiture sites, they are cited as a general guideline. Because precipitation data indicates the storm design event for the downdrain may have been met or exceeded and because the occurrence did not result from any mining or reclamation activity, the sediment deposition was not documented as an off-site impact.

### **Summit Mine**

The pre-mine vegetation was most likely oak scrub / sage habitat, which currently surrounds the site on three sides, with riparian habitat completing the site's surroundings. Stable populations of sage, snowberry, perennial grasses, and forbs (e.g. sweet clover, lupine) now dominate the reclamation. There was no stockpiled topsoil available on sight; therefore this site was reclaimed using a topsoil substitute that contained a significant amount of gravel and other larger diameter stone. Furrows were ripped into the slopes of the reclaimed area perpendicular to the direction of dip to help control erosion; these features appeared to be functioning as designed at the time of the evaluation as no rills or gullies were observed. A post-mining impoundment near the river was not reclaimed and is currently revegetated with mostly native species (perennial grasses, aspen, etc.) and thistle. This vegetation type is typical both on and off-site in this area. No running or pooled water was observed at this site during the evaluation and no offsite impacts were documented at Summit Mine.

### **Blazon Mine**

The surrounding area contains two different vegetation types; mixed forest and riparian. The seed mixes (e.g. sage, great basin wild rye, snowberry, serviceberry, yarrow) and hand plantings (willow) on the reclaimed area are well established. In addition, native forest and riparian species from the surrounding areas are slowly moving into the reclaimed area.

Snider Creek is a perennial stream which runs through the reclaimed area. In 2000, DOGM reclaimed a section of the stream using a meandering stream design, rip rap lining, drop structures, and burlap along the stream banks. DOGM also planted willow cuttings to both stabilize and approximate the pre-mining characteristics of the stream. At least one of the drop structures is still intact and functioning properly, and some of the burlap lining is still intact. The burlap lining along the channel banks appears to have been generally successful in stabilizing the stream as it flows through the Blazon Mine site. Vegetation along the stream banks has also been helpful in achieving stability.

An extensive forest fire in 2012 significantly disturbed the upstream watershed of Snider Creek and came within about a mile of the Blazon site. Subsequent heavy rains upstream from this site created minor damage by transporting sand and burned woody debris from the upstream fire area, covering existing vegetation within the reclaimed riparian corridor; this damage does not currently affect the structure or species composition of the reclaimed site. At the time of the evaluation, non-native species (e.g. thistles, dandelion) had a minor presence.

It was not apparent that the runoff event had affected the portion of the Snider Creek that was reclaimed by DOGM any differently than it had to the upstream and downstream reaches of the creek. The stream meanders installed in 2000 at the Blazon Mine appeared to be intact and functioning as designed during the evaluation, although sediment has been deposited in some of them and minor erosion has occurred in other areas. No offsite impacts were documented at the Blazon Mine.

### **White Oak Mine**

The White Oak mine was initially a pre-SMCRA underground mine until DOGM approved a contour mining plan in 2001. Mining ceased at this location in 2003 and the site was subsequently abandoned. The White Oak mine was first reclaimed by Utah's AML Program using bond forfeiture monies in 2005. Following issues with subsidence, erosion, and a lack of vegetative growth on one south-facing slope of the reclamation and a portion of the drainage, DOGM re-designed and reconstructed this portion of the site in 2010 and 2011 using various reclamation approaches.

An area up gradient and outside of the permitted area contributes a significant amount of surface water onto the permitted area and has in the past created rills and gullies across a wide section of the reclaimed area. To address this, DOGM constructed three terraces designed to safely pass the runoff from a 100-year, 6-hour event into the reclaimed side channel. The terraces and side channel appeared to be in good condition at the time of the evaluation.

Stabilization and extensive revegetation efforts utilizing several types of soil amendments, seed mixtures, shrubs, and perennial seedlings appear to have succeeded in establishing self-perpetuating vegetation at the White Oak Mine even more so than the original reclamation. However, a significant portion of this new vegetation is non-native musk thistle, houndstongue, and common mullen.

In 2010, DOGM redesigned the reclamation of Whiskey Creek following significant erosion and headcutting to this area. Specifically, DOGM incorporated large boulder-sized rip rap, removed geotextile underlayment where it had failed, widened the stream channel in its steep third reach, added log weirs, and constructed successive drop structures and associated pools to control erosion on the four reaches of the reworked stream.

The original reclamation from 2004 that was not re-worked by DOGM showed no evidence of significant instability, although the Team observed some minor rills and gullies which had formed. These did not appear to be contributing excess sediment to Whiskey Creek, and perennial shrubs and grasses are present in this area. No offsite impacts were documented at White Oak Mine during the evaluation.

### **Conclusions**

DOGM expenditures of forfeited bond monies have resulted in successful implementation of reclamation plans. In the event bond monies do not cover all costs associated with ensuring long-term reclamation success, DOGM pursues additional funding from other sources to conduct

supplemental reclamation work. There was no evidence of offsite impacts and the mine sites' slopes and diversions are stable and not contributing excessive amounts of sediment to the hydrologic balance. OSM finds that DOGM has appropriate controls in place to successfully prevent and manage off-site impacts with respect to erosion/sedimentation at the Summit, Boyer, Blazon, and White Oak bond forfeiture sites.

### **C. Customer Service – Public Availability of Permit Records**

This evaluation was based on OSM Directive REG-8 for determining DOGM's effectiveness in serving its customers by ensuring that permit records are available to the public for inspection and copying during the appropriate timeframes.

Utah's Rules at R645-300-121.200, Public Participation in Permit Processing, Filing and Public Notice, requires permit applicants to file a full copy (excluding confidential information under R645-300-124) of the permit application with the recorder at the courthouse of the county where the coal mining and reclamation is proposed to occur or an accessible public office approved by the Division. The applicant must file the entire permit and the relevant application by the date of the first newspaper publication and must file any changes to the application with the public office at the same time the change is submitted to the Division. Additionally, R645-300-124.100 requires all applications for permits, permit changes, permit renewals, and transfers, assignments or sales of permit rights on file with the Division to be made available for public inspection and copying. This evaluation determined whether the Division is successfully providing customer service by ensuring all sample mine permit applications were available in an accessible location in the vicinity of the mining operation for the public to inspect and copy as required under R645-300-121.200 and R645-300-124.

#### **Findings**

The Team evaluated the availability of two mine permit renewal applications as a representative sample of all permit applications in the state. The Team verified that these two permit renewal application packages were available for public inspection and copying at the local courthouse or other approved accessible location in accordance with the identified regulatory requirements. The sample permit applications were chosen based upon public comment periods coinciding with OSM and DOGM Team members' field activities in the state of Utah.

The Dugout Canyon Mine filed a Permit Renewal application with the Division on September 11, 2012. The Division determined that the renewal application was complete on October 29, 2012. Public notification of the renewal application was published in the Sun Advocate on November 1, 8, 15, 22, and 29, 2012. Rule R645-300-121.200 requires that the application be made publicly available on the date of the first newspaper advertisement. Team members were not in Price, Utah on November 1 to verify that the application was filed by that date. On December 12, 2012, the Team verified that the entire Dugout Canyon Mine permit (with the exception of confidential and/or proprietary information in accordance with R645-300-124) and the renewal application were available at the Carbon County Justice Courthouse located at 120 East Main Street in Price.

The Division received a Permit Renewal application from the Crandall Canyon Mine on January 30, 2013. This submittal for Permit Renewal was approved by the Division on February 1, 2013. An Affidavit of Publication from the Emery County Progress states that the application was available at the Emery County Court House located at 75 East Main Street in Castledale, Utah. The Public Notice was published for four consecutive weeks from February 19 through March 12, 2013. Team members were not in Castledale, Utah on February 19 to verify that the application was filed by that date. On February 25, 2013, the Team verified that the entire Crandall Canyon “Mining Reclamation Permit” (with the exception of confidential and/or proprietary information in accordance with R645-300-124) and the renewal application were available at the Emery County Courthouse.

### **Conclusions & Recommendations**

The Team concluded that DOGM is successfully implementing the requirements set forth under R645-300-121.200 and R645-300-124 by requiring mine permit applications to be made available in an accessible location in the vicinity of the mining operation for the public to inspect and copy. Due to timing constraints, the Team was unable to conclude whether permit applications were available on the original date of newspaper publication during this review. Based on the findings above, the DFD recommends that DOGM utilize future inspections to verify that applications for permits, permit changes, permit renewals, and transfers, assignments or sales of permit rights are available to the public for public review and copying on the first date of publication. This will ensure permit records are being made available to the public in a timely manner.

### **D. Fifth Annual Division-wide Stakeholder Satisfaction Survey (Utah self-evaluation)**

DOGM also conducted its fifth annual survey of customer satisfaction during EY 2013 to evaluate performance at the Division and Program level and to foster improved customer service in the future. The survey included the period of July 10 through August 31, 2012. 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: 4.38  
Accuracy of Information: 4.31  
Helpfulness of Employees: 4.46  
Expertise of Employees: 4.23  
Availability of Information: 3.75  
Composite Rating: 4.23

## **VII. Regulatory Program Problems and Issues**

The following is a description of significant regulatory issues DOGM has addressed on mining operations during EY 2013.

### A. Crandall Canyon Ten-Day Notice

On August 6, 2007, a mine collapse occurred at the Crandall Canyon Mine, which took the lives of six miners. Three rescue workers were killed during a rescue attempt. On August 7, 2007, in an emergency attempt to rescue the men, borehole drilling began from the surface of East Mountain down to the underground workings. Due to the nature of this rescue operation all drill pads and access roads were constructed under emergency provisions. On August 30<sup>th</sup>, the Mine Safety and Health Administration officially called off the rescue effort. Permitting and reclamation of the seven drill pads and access roads began shortly thereafter. DOGM, along with other state and federal agencies, continues to work with the mine to coordinate reclamation activities. The emergency drill holes, pads, and access roads have now all been reclaimed.

Because the Crandall Canyon 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 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, OSM issued two Ten-Day Notices (TDN's) 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 the Office of Surface Mining 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.

Division Order C/015/0032-DO09A required the bond to be increased within 60 days of receipt. Utah American Energy Inc. asked to meet with the Division and contested the requirement to post bond for perpetual treatment of the water citing its believed lack of a regulatory basis for

doing so. Annual operation and maintenance costs for the water treatment facility were very high and the bond held was potentially inadequate to cover such costs over an extended period of time. Determining the costs of operating the water treatment facility for that Division Order was a major effort between the Division and Genwal and required much discussion and interchange.

On December 3, 2009, OSM 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, OSM 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, OSM 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, the 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, OSM 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. OSM attached Action Plan #UT-2012-001 to the October 17<sup>th</sup> 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 polluttional 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.

OSM 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, OSM 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, OSM 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, OSM 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. OSM 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). OSM's March 21, 2013, determination also terminated Action Plan #UT-2012-001 because DOGM has taken appropriate action to correct the violation.

### B. Coal Hollow Mine (Alton Coal Development, LLC)

A new permit application for fee surface / fee coal (636 acres) was submitted to the Division on June 14, 2007. This surface mine is located in the Alton Coal Field. On October 15, 2009, the Division approved the application. Shortly after the decision was rendered, on November 18, 2009, an appeal was filed to BOGM by a consortium of environmental groups (Sierra Club, Southern Utah Wilderness Alliance, National Parks Conservation Association and Natural Resources Defense Council). Several hearings were held before the board where the petitioners were allowed to provide their arguments as to why the permit should not be issued and the Division provided a defense of its position. On August 3, 2010, the Board ruled in favor of the Division and Alton Coal Development on all counts. The company posted the required bond and on November 8, 2010, the permit was issued. Alton Coal Development has since applied for coal leases on adjacent federal lands. The BLM's updated Draft Environmental Impact Statement for adjacent federal leases will be released for public comment soon. One issue at this mine that has recently been brought to the forefront is the displacement of sage grouse. Because there is planned mining through an historic sage grouse lek, there is a lot of interest in the effects on the birds and on the mitigation being done by the mine. There is further discussion of this issue under the Protection of Threatened and Endangered Species oversight topic in section VI above. The mine continues to operate and is producing coal.

### C. Kinney #2 Mine

A new permit application for the Kinney #2 Mine, Carbon Resources, LLC, was received February 29, 2008, for an underground coal mine on 38 acres of fee surface and 453 acres of fee coal. The application was determined administratively complete on June 25, 2008. As requested, an informal conference was held September 30, 2008. The Center for Water Advocacy filed two petitions to have the Kinney #2 Mine area designated as lands unsuitable for coal mining, but the petitions were incomplete and were never resubmitted.

On September 24, 2008, the Division sent a notice of deficiencies to Carbon Resources informing them that they must address the deficiencies for the Division to further process the application. Due to the lack of response from the applicant, processing of the application was suspended for a period of time. On January 7, 2010, the Division returned the proposed mine application to Carbon Resources. After some time, Carbon Resources chose to pursue the application again and republished the notice of complete application again on June 10, 17, 24, and July 1, 2010. They also resubmitted a revised and reformatted (prompted by DOGM) application on October 4, 2010. On June 28, 2011, the last clean copy submittal was made which incorporated all of the updates made throughout the review process and the application was considered to be complete and accurate. Carbon Resources, LLC was notified that their application was approved on June 30, 2011. Due to the amount of time that has elapsed since the application was approved and the fact that the bond was not posted, the applicant was notified on December 3, 2012, that they would have to reapply for a permit with updated information. The Division is currently waiting for them to submit the application.

## VIII. OSM Assistance

### A. Grants

OSM funded an Administration and Enforcement Grant to the Utah program in the amount of \$2,073,878 for the one-year grant period starting July 1, 2012, and ending June 30, 2013. Utah was originally awarded the full amount or 100% of their request for administration and enforcement (Table 9). However, DOGM subsequently de-obligated \$133,006 resulting in Utah receiving \$1,940,872. Through a Federal lands cooperative agreement, OSM 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), OSM funds 89% of DOGM's total program costs. As described above, the Federal appropriation allowed for full funding.

OSM also funded a grant to the Utah AML Program in the amount of \$4,939,010 (Table 9). This grant applies to both administrative and construction expenses. This amount represents 100 percent funding for Utah's AML Program.

### B. Education/Outreach/Tools

Through NTTP and TIPS, OSM offers free-of-charge technical training courses to State and Tribal employees. During EY 2013, five DOGM employees (students) participated in four NTTP training opportunities covering Instructor Training, AML drilling and Grouting, Underground Mining Technology, and Geology and Geochemistry of Acid-forming Materials. DOGM, in kind, provided two NTTP instructors. No DOGM employees participated in any TIPS instructor-led training opportunities during EY 2013.

OSM's Technical Librarian provided 21 article reprints to Utah Staff. OSM's Technical Library web site can be accessed at <http://www.techtransfer.osmre.gov/NTTMainSite/osmlibrary.shtm>.

TIPS deployed a RICOH GPS camera to the Utah DOGM Title V staff at their Salt Lake City Offices. TIPS also deployed the FLIR P 660 Infrared Camera to the Utah DOGM Title V staff. The camera was used to conduct sage grouse counts on nesting areas near active surface coal mining in Kane County, Utah.

### **EY 2013 UTAH EVALUATION TEAM MEMBERS**

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

Christine Belka, Elizabeth Shaeffer, Flynn Dickinson, Dan MacKinnon, Spencer Shumate, and Howard Strand, DFD

Dana Dean, DOGM, and Alan Boehms, DFD (Team coaches)

Cover Page: Photo of Reclaimed Loadout at the Star Point Mine courtesy of Priscilla Burton, DOGM.

**Utah Annual Evaluation Report  
Evaluation Year 2013**

## **Appendix 1: 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 OSM in its evaluation of Utah's performance is available for review in the evaluation files maintained by the Denver Field Division.

Because of the enormous variations from state to state and tribe to tribe in the number, size, and type of coal mining operations and the differences between state and tribal programs, the summary data should not be used to compare one state or tribe to another. Many of the tables were revised for Evaluation Year 2013. Please note that Table 7 continues to report data in a way that does not accurately represent the Utah program.

### List of Tables

Table 1	Coal Produced for Sale, Transfer, or Use
Table 2	Permanent Program Permits, Initial Program Sites, Inspectable Units, and Exploration
Table 3	Permits Allowing Special Categories of Mining
Table 4	Permitting Activity
Table 5	Off-site Impacts
Table 6	Surface Coal Mining and Reclamation Activity
Table 7	Bond Forfeiture Activity

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 all bond forfeiture sites in Utah have been reclaimed.

Table 8	Regulatory and AML Programs Staffing
Table 9	Funds Granted to Utah by OSM
Table 10	Utah Inspection Activity

Table 11	Utah Enforcement Activity
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Table 13	OSM Oversight Activity
Table 14	Status of Action Plans
Table 15	Post Mining Land Use Acreage of Sites Fully Reclaimed

**TABLE 1**

<b>COAL PRODUCED FOR SALE , TRANSFER, OR USE <sup>A</sup></b> (Millions of short tons)			
<b>Calendar Year</b>	<b>Surface Mines</b>	<b>Underground Mines</b>	<b>Total</b>
2010	0.0	19.0	19.1
2011	0.4	19.9	20.3
2012	0.6	16.6	17.2

<sup>A</sup> 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

<b>PERMANENT PROGRAM PERMITS, INITIAL PROGRAM SITES, INSPECTABLE UNITS, AND EXPLORATION</b>														
<b>Mines and Other Facilities</b>	<b>Numbers of Permanent Program Permits and Initial Program Sites</b>								<b>Insp. Units<sup>1 2</sup></b>	<b>Area in Acres<sup>3</sup></b>				<b>Total Area</b>
	<b>Permanent Program Permits</b>				<b>Initial Program Sites</b>					<b>Permanent Program Permits (Permit Area)</b>		<b>Initial Program Sites</b>		
	<b>Active</b>	<b>Inactive</b>	<b>Abandoned</b>	<b>Total</b>	<b>Active</b>	<b>Inactive</b>	<b>Abandoned</b>	<b>Total</b>		<b>Federal Lands</b>	<b>State/Tribal and Private Lands</b>	<b>Federal Lands</b>	<b>State/Tribal and Private Lands</b>	
<b>Surface Mines</b>	3	0	1	4	0	0	0	0	4	150	680	0	0	830
<b>Underground Mines</b>	13	8	5	26	0	0	0	0	26	300	1,480	0	0	1,780
<b>Other Facilities</b>	4	2	0	6	0	0	0	0	6	90	570	0	0	660
<b>Total</b>	20	10	6	36	0	0	0	0	36	540	2,730	0	0	3,270
<b>Permanent Program Permits and Initial Program Sites (Number on Federal Lands: 36)</b>				<b>Total Number:</b>		36		<b>Average Acres per Site:</b>				90.83		
<b>Average Number of Permanent Program Permits and Initial Program Sites per Inspectable Unit (IU):</b>				<b>Total Number:</b>		1.00		<b>Average Acres per IU:</b>				90.83		
<b>Permanent Program Permits in Temporary Cessation:</b>				<b>Total Number:</b>		10		<b>Number More than 3 Years:</b>				9		
<b>EXPLORATION SITES</b>				<b>Total Number of Sites</b>				<b>Sites on Federal Lands<sup>4</sup></b>				<b>Exploration Inspectable Units</b>		
<b>Exploration Sites with Permits:</b>				0				0				0		
<b>Exploration Sites with Notices:</b>				3				3				0		
<sup>1</sup> An 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.														
<sup>2</sup> Total Inspectable Units calculation includes Exploration Sites Inspectable Units														
<sup>3</sup> When 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.														
<sup>4</sup> The 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

<b>PERMITS ALLOWING SPECIAL CATEGORIES OF MINING</b>			
<b>Special Category of Mining</b>	<b>30 CFR Citation Defining Permits Allowing Special Mining Practices</b>	<b>Numbers of Permits</b>	
		<b>Issued During EY</b>	<b>Total Active and Inactive Permits</b>
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	2
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 <sup>1</sup>	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		2	2		0	0		3	3	
Transfers, sales, and assignments of permit rights	0	0		0	0		0	0		0	0	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits										0	3	
Exploration notices <sup>2</sup>											0	
Revisions that do not add acreage to the permit area	13	6		62	30		11	6		86	42	
Revisions that add acreage to the permit area but are not incidental boundary revisions	0	0	0	1	1	7	0	0	0	1	1	7
Incidental boundary revisions	0	0	0	1	1	480	0	0	0	1	1	480
<b>Totals</b>	14	7	0	66	34	487	11	6	0	91	50	487
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:	57.0
Permits in temporary cessation									Notices received:	0	Terminations:	0
Midterm permit reviews completed									Number:	3		
<sup>1</sup> Includes only the number of acres of proposed surface disturbance												
<sup>2</sup> State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.												

TABLE 5

**OFF-SITE IMPACTS  
EXCLUDING BOND FORFEITURE SITES**

RESOURCES AFFECTED		People			Land			Water			Structures		
DEGREE OF IMPACT		Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major	Minor	Moderate	Major
TYPE OF IMPACT EVENT	NUMBER OF EVENTS												
Blasting	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Stability	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrology	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
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Total Number of Inspectable Units<sup>1</sup>: 30

Inspectable Units with one or more off-site impacts: 0

Exploration Inspectable Units with one or more off-site impacts<sup>2</sup>: 0

Inspectable Units free of off-site impacts: 30 % of Inspectable Units free of off-site impacts<sup>4</sup>: 100

<sup>1</sup> 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

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

**OFF-SITE IMPACTS AT BOND FORFEITURE SITES**

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

Total Number of Inspectable Units<sup>3</sup>: 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<sup>4</sup>: 100

<sup>3</sup> 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)**

<b>TOTAL OFF-SITE IMPACTS INCLUDING BOND FORFEITURE SITES</b>														
<b>RESOURCES AFFECTED</b>		<b>People</b>			<b>Land</b>			<b>Water</b>			<b>Structures</b>			
<b>DEGREE OF IMPACT</b>		<b>Minor</b>	<b>Moderate</b>	<b>Major</b>	<b>Minor</b>	<b>Moderate</b>	<b>Major</b>	<b>Minor</b>	<b>Moderate</b>	<b>Major</b>	<b>Minor</b>	<b>Moderate</b>	<b>Major</b>	
<b>TYPE OF IMPACT EVENT</b>	<b>NUMBER OF EVENTS</b>													
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	
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
Total Number of Inspectable Units <sup>5</sup> :				36										
Inspectable Units with one or more off-site impacts:				0										
Exploration Inspectable Units with one or more off-site impacts:				0										
Inspectable Units free of off-site impacts:				36						% of Inspectable Units free of off-site impacts <sup>4</sup> :			100	
<sup>4</sup> % 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.														
<sup>5</sup> 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  Total Acres Released in Approved Phase I Releases	Phase II Releases		Phase III Releases			Total Acres Released During the EY	
	Total Acres Released in Approved Phase II Releases	Acres not previously released under Phase I	Total Acres Released in Approved Phase III Releases	Acres not previously released under Phase II	Acres not previously released under Phase I or II		
12		0			0	Phase I	12
	95			0		Phase II	95
			57			Phase III	57
Number of Permanent Program Permits with Jurisdiction Terminated Under Phase III Bond Release During the Evaluation Year					0	Other Releases - Acres	
Initial Program Sites with Jurisdiction Terminated During the Evaluation Year					0	Administrative Adjustments	72
Number of Inspectable Units Removed					0	Bond Forfeiture	0
Areas of Permits Bonded for Disturbance by Surface Coal Mining and Reclamation Operations							

	Total Acres at Start of EY	Total Acres at End of EY	Change in Acres During EY
New Area Bonded for Disturbance			47
Total Area Bonded for Disturbance	2,808	2,726	(82)
Area Bonded for Disturbance without Phase I Bond Release	2,090	1,988	(102)
Area Bonded for Disturbance for which Phase I Bond Release Has Been Approved	717	161	(556)
Area Bonded for Disturbance for which Phase II Bond Release Has Been Approved	476	577	101
Area Bonded for Disturbance with Bonds Forfeited During Evaluation Year			0
Area Bonded for Remining	350	350	0
Areas of Permits Disturbed by Surface Coal Mining and Reclamation Operations			
Disturbed Area	2,808	2,726	N/A

**TABLE 7**

<b>BOND FORFEITURE ACTIVITY (Permanent Program Permits)</b>			
<b>Bond Forfeiture and Reclamation Activity</b>	<b>Number of Sites</b>	<b>Dollars</b>	<b>Acres</b>
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) <sup>1</sup>	6		470
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 <sup>1</sup>	6		470
Sites with bonds forfeited but un-collected at the end of the current Evaluation Year	0		0
<b>Forfeiture Sites with Long-Term Water Pollution</b>			
Bonds forfeited, lands reclaimed, but water pollution is still occurring	0		
Bonds forfeited, lands reclaimed, and water treatment is ongoing	0		
<b>Surety/Other Reclamation Activity In Lieu of Forfeiture</b>			
Sites being reclaimed by surety/other party at the start of the current Evaluation Year (i.e., the end of previous Evaluation Year) <sup>2</sup>	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 <sup>3</sup>	0		0
Sites being reclaimed by surety/other party at the end of the current Evaluation Year <sup>2</sup>	0		0
<sup>1</sup> Includes data only for those forfeiture sites not fully reclaimed. <sup>2</sup> Includes all sites where surety or other party has agreed to complete reclamation and the site is not fully reclaimed. <sup>3</sup> 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.			

TABLE 8

<b>REGULATORY AND AML PROGRAMS STAFFING</b>	
<b>Function</b>	<b>Number of FTEs</b>
<b>Regulatory Program</b>	
Permit Review and Maintenance	10.00
Inspection	3.00
Other (supervisory, clerical, administrative, fiscal, personnel, etc.)	3.00
<b>Regulatory Program Total</b>	16.00
<b>AML Program Total</b>	10.00
<b>TOTAL</b>	26.00

TABLE 9

<b>FUNDS GRANTED TO STATE OR TRIBE BY OSM (Actual Dollars Rounded to the Nearest Dollar)</b>			
<b>Type of Funding</b>	<b>Federal Funds Awarded</b>	<b>Total Program Cost</b>	<b>Federal Funds Awarded as a Percentage of Total Program Costs</b>
<b>Regulatory Funding</b>			
Administration and Enforcement Grant	1,940,872		
Other Regulatory Funding, if applicable	0		
<b>Subtotal (Regulatory Funding)</b>	1,940,872	2,168,688	89
<b>Small Operator Assistance Program Grant Funding</b>	0	0	
<b>Abandoned Mine Land Reclamation Funding</b>	4,939,010	0	
<b>Watershed Cooperative Agreement Program</b>	0	0	
<b>TOTAL</b>	6,879,882		

TABLE 10

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

Inspectable Units (IUs)	Total number of inspectable units <sup>2</sup>	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
<b>COAL MINES AND FACILITIES</b>												
Active	20	80	160	81	161	20	100	19	95	20	19	95
Inactive	10	40	0	40	52	10	100	10	100	10	10	100
Abandoned	6	6	0	12	8	6	100	6	100	6	6	100
<b>TOTALS <sup>3</sup></b>	36	126	160	133	221	36	100	35	97	36	35	97
<b>Coal Exploration Activities <sup>4</sup></b>												
		<b>Complete Inspections</b>						<b>Partial Inspections</b>				
Exploration sites with permits		0						0				
Exploration sites with notices		0						0				

<sup>1</sup> Calculated on a site-specific basis.

<sup>2</sup> Total number includes both permanent program permits and initial program sites.

<sup>3</sup> 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

<sup>4</sup> 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.

<sup>5</sup> NA - Not Available

TABLE 11

<b>STATE OR TRIBAL ENFORCEMENT ACTIVITY</b>		
<b>Type of Enforcement Action</b>	<b>Number of Actions <sup>1</sup></b>	<b>Number of Violations <sup>1</sup></b>
Notice of Violation	9	9
Failure-to-Abate Cessation Order	0	0
Imminent Harm Cessation Order	0	0

<sup>1</sup> Does not include actions and violations that were vacated.

TABLE 12

<b>LANDS UNSUITABLE ACTIVITY</b>		
<b>Activity</b>	<b>Number</b>	<b>Acres</b>
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

<b>OSM OVERSIGHT ACTIVITY</b>					
<b>Oversight Inspections and Site Visits</b>					
	<b>Complete</b>		<b>Partial</b>		
	Joint	Non-Joint	Joint	Non-Joint	Total
Oversight Inspections	3	0	7	0	10
	Technical Assistance		Other		Total
Site Visits	0		1		1
<b>Violations Observed by OSM and Citizen Requests for Inspection<sup>1</sup></b>					
<b>Type of Action</b>					<b>Total number of each action</b>
How many violations were observed by OSM on oversight inspections?					0
Of the violations observed, how many did OSM defer to State action during inspections?					0
Of the violations observed, how many did OSM refer to the State through Ten-Day Notices? <sup>2</sup>					1
How many Ten-Day Notices did OSM Issue for observed violations? <sup>3</sup>					1
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
<b>OSM Action for Delinquent Reporting or Non-Payment of Federal AML Reclamation Fees</b>					
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
<sup>1</sup> 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. <sup>2</sup> Number of violations contained in Ten-Day Notices not including those issued to refer citizen requests for inspection. <sup>3</sup> 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 <sup>1</sup>	Problem Title	Problem Description	Date Action Plan Initiated	Scheduled Completion Date	Actual Completion Date
None						
<sup>1</sup> 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)**

<b>POST-MINING LAND USE ACREAGE OF SITES FULLY RECLAIMED</b> (Phase III bond release or termination of jurisdiction under the Initial Program)	
<b>Land Use<sup>1</sup></b>	<b>Acres Released</b>
Cropland	0.00
Pasture/Hayland	0.00
Grazingland	0.00
Forestry	0.00
Residential	0.00
Industrial/Commercial	0.00
Recreation	0.00
Fish & Wildlife Habitat	57.44
Developed Water Resources	0.00
Undeveloped land or no current use or land management	0.00
Other - Public Utilities	0.00
Other -	0.00
<b>Sub-Total Other</b>	0.00
<b>Total</b>	57.44

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

## **Appendix 2: EY 2013 Utah Reclamation Status Table**

# Utah Reclamation Status Table for EY-2013 (Mine by Mine)

## RECLAMATION STATUS OF ALL AREAS DISTURBED UNDER THE PERMANENT REGULATORY PROGRAM

1      2      3      4      5      6      7      8      9      10      11      12      13      14      15      16  
Acres Disturbed As of EY-2013

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)
Castle Gate Mine		X	0	63	0	0	0	63	0	63	0	58	0	58	57	57	57	57
Skyline Mine		X	0	122	122	0	0	0	0	0	0	0	0	0	0	0	0	0
Star Point Mine		X	0	101	0	0	0	101	0	101	0	101	0	101	0	14	0	14
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		0	78	78	0	0	0	0	0	0	0	0	0	0	0	0	0
Banning Loadout	X		0	22	22	0	0	0	0	0	0	0	0	0	0	0	0	0
SCA	X		0	202	197	0	0	5	0	5	0	5	0	5	0	5	0	5
Willow Creek Mine		X	0	188	0	0	0	188	0	188	0	188	95	188	0	93	0	93
Dugout Mine		X	0	109	109	0	0	0	0	0	0	0	0	0	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 Cleaning 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
Trail Mountain Mine		X	0	10	10	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
Des-Bee-Dove Mine		X	0	137	0	0	0	137	0	137	0	96	0	96	0	96	0	96
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	67	46	0	0	21	0	21	0	21	0	21	0	21	0	21
Bear Canyon Mine		X	0	41	41	0	0	0	0	0	0	0	0	0	0	0	0	0
Crandall Canyon		X	7	35	23	0	12	12	12	12	0	0	0	0	0	0	0	0
Coal Hollow Mine	X		40	254	106	97	0	51	0	0	0	0	0	0	0	0	0	0
SUFCO Mine		X	0	48	48	0	0	0	0	0	0	0	0	0	0	0	0	0
Columbia Exploration Project		X	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0
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
Sunnyside Coal Company		X	0	287	0	0	0	287	0	0	0	287	0	0	0	0	0	0
Blazon Mine		X	0	7	0	0	0	7	0	0	0	7	0	0	0	0	0	0
Summit #1		X	0	14	0	0	0	14	0	0	0	14	0	0	0	0	0	0
Boyer Mine		X	0	7	0	0	0	7	0	0	0	7	0	0	0	0	0	0
Black Jack #1 Mine		X	0	3	0	0	0	3	0	0	0	3	0	0	0	0	0	0
White Oak #1 & #2 Mines and Loadout	X		0	151	0	0	0	151	0	0	0	151	0	0	0	0	0	0
TOTAL			47	3629	2201	97	12	1331	12	810	0	1222	95	649	57	433	57	434

Legend	
	Final Bond
	Release Sites
	Bond Forfeiture Sites