

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

APR 03 2018

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

5. Lease Serial No.  
NM-012200

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE** – Other instructions on page 2.

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well  
 Oil Well     Gas Well     Other

8. Well Name and No.  
Dryden 001E

2. Name of Operator  
BP America Production Company

9. API Well No.  
~~30004526655~~ 3004525566 <sup>Ann</sup>

3a. Address  
380 Airport Road, Durango CO, 81303

3b. Phone No. (include area code)  
505-330-9179

10. Field and Pool or Exploratory Area  
Dakota

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
I-28-T28N-R08W; 1905 FSL, 580 FEL

11. Country or Parish, State  
San Juan County, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Remediation of hydrocarbon impacted soil
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

BP proposes to excavate and implement soil shredding to remediate approximately 500 cubic yards of hydrocarbon impacted soil. The impacted soil will be excavated to determine the final extents of hydrocarbon impacts. The soil shredding consists of processing impacted soil mechanically, followed by the application of hydrogen peroxide to oxidize the hydrocarbons. The soils will be sampled and laboratory analyzed for total petroleum hydrocarbons, benzene, toluene, ethylbenzene and xylenes to determine if contaminant concentrations are at or below the site ranking criteria for use as backfill. Upon meeting or exceeding the site criteria for contaminant concentrations, the treated soil will be placed in the excavation as backfill material. BP currently estimates 2-3 weeks to complete this process.

NMOC  
APR 30 2018  
DISTRICT III

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)  
Steve Moskal

Title Field Environmental Coordinator

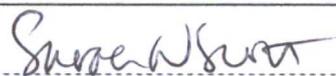
Signature



Date 04/03/2018

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by



Title

Supv NRS

Date

4/26/18

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

(RFU)

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

NMOC



## **BP Remediation Plan**

**To:** Cory Smith, Vanessa Fields(NMOCD), Whitney Thomas (BLM),  
**From:** Steve Moskal (BP)  
**CC:** Jeff Blagg (Blagg Engineering), Emmanuel Adeloeye (BLM)  
**Date:** 4/3/2018  
**Re:** Dryden 001E - Ex-situ Soil Remediation – Soil Shredding (I) S-28, T28N,  
R08W; API #30-045-26655; Serial No.:NM-012200

Dear Mr. Smith, Mrs. Fields and Mrs. Thomas,

The Dryden 001E site is an active natural gas production well location within the San Juan Basin Gas Field in San Juan County, New Mexico. The site is located on land managed by the Bureau of Land Management Farmington Field Office (BLM-FFO) and is in an area primarily used for oil and gas production and some recreation.

### **Background**

Historical impacts were identified at the location on December 26, 2017 during the closure of a below grade tank (BGT), Tank A. The impacts are likely the result of earthen pits formerly used on the location. No historical documentation is available regarding this pit. Initial site investigation determined additional delineation was required to define the extents of impacts. Vertical delineation of the site has not yet been performed. The well site is operated by BP Production.

### **Site Ranking**

Following the NMOCD site ranking criteria, the site closure standard is 100 ppm TPH, 50 ppm BTEX and 10 ppm benzene:

- Depth to groundwater <100' (10 points)
- Nearest surface water source <1,000' (10 points)
- Distance to nearest water well or water source >1,000' (0 points)

### **Proposed Remediation – Soil Shredding**

Based on recent success of soil shredding technologies performed on BP remediation sites, BP proposes to use this technology at the subject site. To date, BP has successfully contracted soil shredding of nearly 150,000 cubic yards of soil to meet site closure standards.

Soil shredding involves the excavation of the impacted soil which is then placed in processing equipment, such as a hammer mill or pug mill, to mechanically process and break-up the soil. The soil becomes more uniform and is aerated during the mechanical processing. The soil is then ejected from the processing equipment and a chemical oxidizer is applied, in this case, a 35% solution of hydrogen peroxide and water. The applied concentration of hydrogen peroxide typically ranges from 3-8%. The hydrogen peroxide quickly oxidizes the hydrocarbon impacts (reagents), resulting in soil, water and carbon dioxide (products). Once the soil is processed, it is stockpiled and allowed to sit for approximately 2-5 days of residence time. A composite soil sample is collected from each segregated stockpile and submitted for laboratory analysis to determine the effectiveness of the ex-situ remediation process. If the laboratory results are of acceptable levels, the soil will be used as backfill

to the excavation; if results are unsatisfactory, the soil is passed through the process once more and a subsequent laboratory sample will be collected for laboratory confirmation as described before. Typically, 24 hours of notice is provided to the regulatory agencies for the opportunity to observe and witness the stockpile sampling.

BP proposes to perform the remediation of hydrocarbon impacts by the means of soil shredding. A conservative estimate of approximately 500 cubic yards of soil will be treated through the soil shredding process. BP proposes to treat the impacted soil and segregate windrow stockpiles broken into 100 cubic yard increments. A single, five-point composite, soil sample will be collected to represent each 100 cubic yard stockpile. If necessary, once a baseline of approximately 1,000 cubic yards of soil is consistently and successfully treated, BP will propose to decrease the sampling frequency to 500 cubic yard stockpile segments. The 500 cubic yard sampling modification will be discussed with the NMOCD and BLM for approval and input prior to implementation. BP would expect to have a sampling modification approval from the agencies within 48 working hours from the time of request. The remediation will then continue until complete and sampling will be based on the regulatory agencies approved sampling plan.

Excavation sampling will be in accordance with a typical dig and haul. The sidewalls and base of the excavation will be sampled in a frequency based on the size and progress of the excavation. Agency notification of excavation sampling will also be issued in advanced, 24-48 hours if possible.

BP is currently anticipates mobilizing to the location within the next 2-3 weeks. BP plans to shut the well in and remove all necessary surface equipment.

It is understood, that if soil remediation is not successful via the soil shredding, an alternative method such as a dig and haul or soil vapor extraction will be necessary. BP will be in close communications with the agencies in the event an alternative remediation method is required.

#### **Site Closure and Reporting**

Once the soil shredding process is complete, the excavated area will be fully backfilled and compacted, and surface equipment will be re-set. Any necessary interim reclamation will be performed. Final reclamation of the well pad will occur at a later date, once the natural gas production well is plugged and abandoned.

A final remediation report will be delivered to NMOCD and BLM for approval of final site closure regarding the excavation and soil shredding activities within 60 days of the end of remediation.

**United States Department of the Interior**  
**BUREAU OF LAND MANAGEMENT**

Farmington Field Office

**REQUEST FOR THREATENED AND ENDANGERED (T&E) / SPECIAL STATUS SPECIES  
SPECIES PROPOSAL EVALUATION**

**Accomplishment Number  
2018-19**

Instructions: Double Form: 1) the upper portion - a request for and 2) the lower portion - evaluation of need for Formal Consultation

TO: Resource Area Special Status Species, T & E Species, Migratory Birds.

Please evaluate this proposed action relative to possible affects on any Federally listed T&E, proposed Federal T&E, State listed T&E, or Special Status Species which may occur in the proposed location.

Description of the proposed Action and Case Reference Number:3004525566/Dryden 001E: BP will like to utilize soil shredding to remediate hydrocarbon contaminated soil at above reference loaction. The activities will remain entirely on the previously disturbed well pad.

**LOCATION**

Sec 28, T28N R08W

**PROPOSEE**

Abiodun Adeloye (Emmanuel) NRS  
Signature of Initiating Official & Title

04/06/2018  
Date

This proposal and relative data have been analyzed concerning the following species:SSS and habitat

The analysis indicates that there would be a No- May- affect situation as a result of approving this described proposed action and Formal Consultation  is is not necessary.

This proposal is a  minor construction major construction.

Method of Analysis:  Field Examination  Data bank/GIS  Other (explain)

**COMMENTS**No SSS issues

<u>Level 1 Biologist</u>	Evaluated by	<u>Level 2 Biologist</u>
/s/ John Kendall	4/23/18	
(Signature)	(Date)	(Signature)
		(Date)

Reviewed by

IN-HOUSE ARCHEOLOGICAL SURVEY DETERMINATION  
FARMINGTON FIELD OFFICE

NM-210-2018-019

Case No./Name: Dryden 001E/3004525566 Date Submitted: 04/06/2018  
Company: BP America Production Company  
Type of Case: Soil Shredding

**IS A CULTURAL RESOURCE INVENTORY REQUIRED?**

- Proposal involves non-Federal lands.
- Proposal is within an existing right-of-way.
- Proposal is along an existing road.
- Proposal is within an existing disturbed area.
- The well pad is to be expanded \_\_\_\_\_ feet to the \_\_\_\_\_.
- Other: BP will like to utilize soil shredding to remediate hydrocarbon contaminated soil at above reference location. The activities will remain entirely on the previously disturbed well pad.  
NOTE: Attach map (e.g., USGS map, survey plat, GIS) and other supporting information as needed. If you are proposing to use a previously culturally surveyed area, identify by BLM cultural case number if known.

Submitted by:

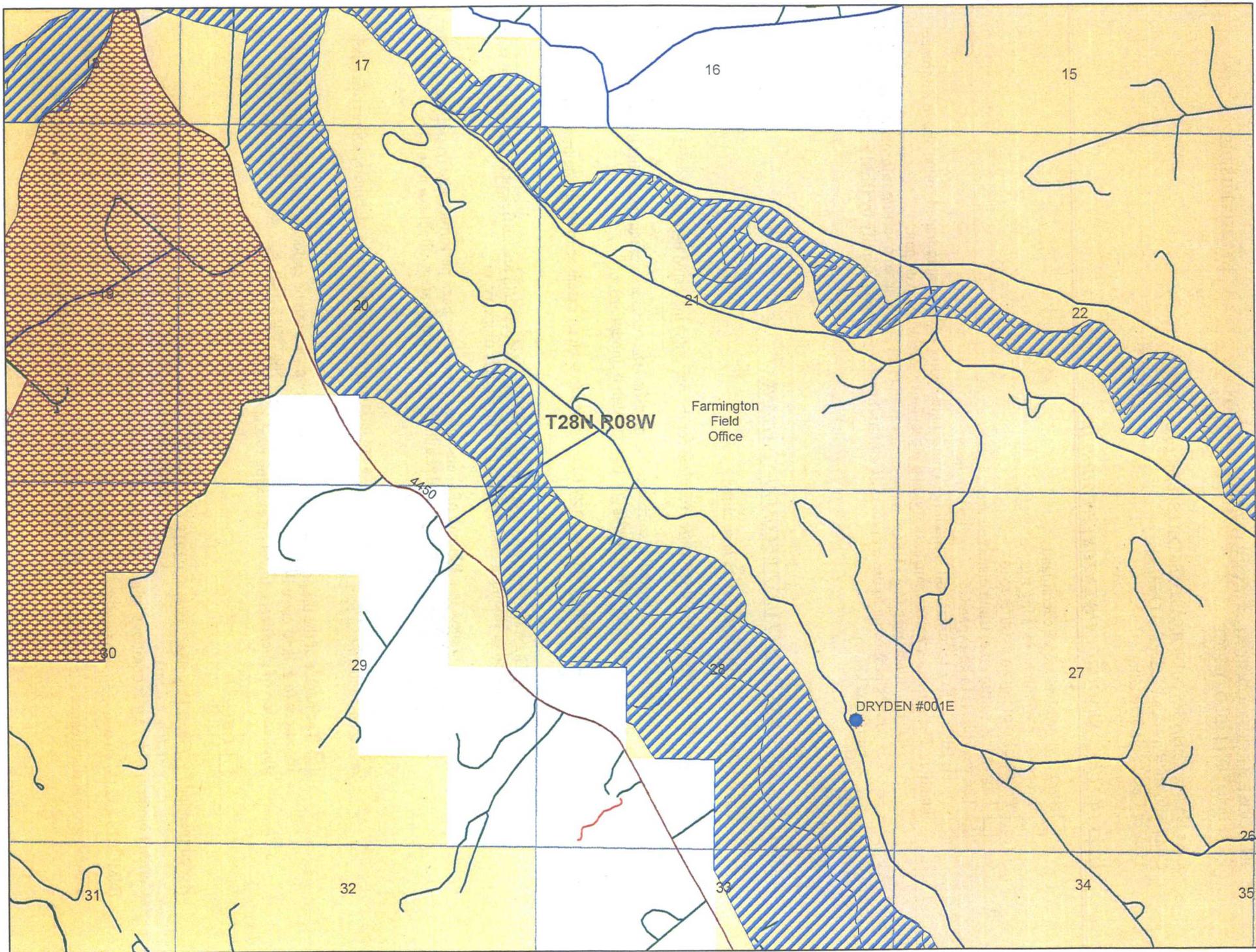
**CULTURAL RESOURCE SPECIALIST RECOMMENDATIONS**

- Inventory for cultural resources is required.
- Inventory for cultural resources is **not** required for the reason(s) indicated below.
  - Previous natural ground disturbance has modified the surface so extensively that the likelihood of finding cultural properties is negligible (e.g., within a floodplain), or
  - Human activity has created a new land surface to such an extent as to eradicate traces of cultural properties, or
  - Existing Class II or equivalent inventory or environmental data are sufficient to indicate that there is no likelihood of finding a National Register or eligible property, or
  - Inventory at the Class III level of intensity has previously been performed and records adequately documenting the location, methods, and results of the inventory are available in report no. \_\_\_\_\_, or
  - Natural environmental characteristics are unfavorable to the presence of cultural properties (such as recent landslide or rock falls), or
  - The nature of the proposed action is such that no impact can be expected on significant cultural resources (e.g. land use will not require any surface disturbing action, e.g., aerial spraying, hand application of chemicals, travel on existing roads, etc.), or
  - Other:

Recommended by: Geoff Haymes Date: 4/9/2018  
Archaeologist



Cultural Notes (if any, e.g., conditions, stipulations, etc.): Previously inventoried, though not to current standards (NMCRIS #5233, 80-SJC-260. No known sites adjacent to the pad. No further inventory needed for shredding within existing ground disturbance -- expansion off the pad would likely require new inventory and/or monitoring.



Operator: BP America Production Company  
Well Name: Dryden 001E/3004525566  
Legal Description: Sec 28, T28N, R08W

## Conditions of Approval

**Disclaimers:** BLM's approval of this remediation plan does not relieve the lessee and operator from obtaining any other authorizations that may be required by other jurisdictional entities.

1. This location has a ranking score of 10 due to being <100 feet depth to groundwater, <1,000 horizontal feet from Surface Water body and >1,000 within a Wellhead protection area in accordance with NMOCD's Guidelines for Remediation of Leaks, Spills and Releases and BLM-FFO NTL 94-1. This release will need to be cleaned to this regulatory standard; therefore, TPH needs to be <1,000 ppm, BTEX <50 ppm, and benzene <10 ppm.
2. BP will notify the BLM at least 24 hours prior to any conformation soil sampling event.
3. Any disturbance of the Interim Reclaimed area will be reclaimed back to pre-project Interim Reclamation. Any new disturbance outside of the original approved area in the permit will be reclaimed to the Interim Reclamation size.
4. This approval is for the use of the Soil Shredding technique on the pre-disturbed well pad location only. Offsite access is not approved, if offsite access is found to be required an additional sundry will have to be submitted with any new details of the project.
5. Construction, construction maintenance or any other activity outside the approved areas will require additional approval and may require a new cultural survey and clearance.
6. All employees of the project, including the Project Sponsor and its contractors and sub-contractors will be informed that cultural sites are to be avoided by all personnel, personal vehicles and company equipment. This includes all personnel associated with construction, use, maintenance and abandonment of the well pad, well facilities, access and pipeline. They will also be notified that it is illegal to collect, damage, or disturb cultural resources, and that such activities are punishable by criminal and or administrative penalties under the provisions of the Archaeological Resources Protection Act (16U.S.C. 470aa-mm).
7. If, in its operations, operator/holder discovers any previously unidentified historic or prehistoric cultural resources, then work in the vicinity of the discovery will be suspended and the discovery promptly reported to BLM Field Manager. The BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of discovery and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. Minor recordation, stabilization, or data recovery may be performed by a BLM or permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator/holder prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is

completed. Failure to notify the BLM about a discovery may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).

8. If monitoring confirms the presence of previously unidentified cultural resources, then work in the vicinity of the discovery will be suspended and the monitor will promptly report the discovery to the BLM Field Manager. The BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. A Bureau of Land Management or permitted cultural resources consultant may perform minor recordation, stabilization, or data recovery. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator/holder prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is completed.
9. If, in its operations, operator/holder damages, or is found to have damaged any previously documented or undocumented historic or prehistoric cultural resources, excluding "discoveries" as noted above, the operator/holder agrees at his/her expense to have a permitted cultural resources consultant prepare and have executed a BLM approved data recovery plan. Damage to cultural resources may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).