

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

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-NM0175791

6. If Indian, Allottee or Tribe Name

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

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator  
BP America Production Company

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

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

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

8. Well Name and No.  
Gallegos Canyon Unit 089E

9. API Well No.  
30004526187 <sup>At</sup>

10. Field and Pool or Exploratory Area  
Dakota

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
L-06-T27N-R12W; 1840 FSL, 980 FWL

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
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	hydrocarbon impacted
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	soil

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 recomple 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 recomple 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

JUN 01 2018

DISTRICT 111

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 Supervising IRS  
Office FFO

Date MAY 24 2018

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.

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), Steve Austin (NNEPA)  
From: Steve Moskal (BP)  
CC: Jeff Blagg (Blagg Engineering), Emmanuel Adeloye (BLM)  
Date: 4/3/2018  
Re: GALLEGOS CANYON UNIT No. 089E- Ex-situ Soil Remediation – Soil Shredding (L) S-6, T27N, R12W; API #30-045-26187; Serial No.:NM-SF-01757591

NMOCD

JUN 01 2018

DISTRICT III

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

The Gallegos Canyon Unit (GCU) 089E 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 Navajo Tribal with federal mineral managed Bureau of Land Management Farmington Field Office (BLM-FFO) and is in an area primarily used for oil and gas production in the vicinity of Navajo Agricultural Products Inc operated land.

### Background

Historical impacts were identified at the location on February 26, 2018 during the closure of a below grade tank (BGT). 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' (0 points)
- Nearest surface water source <200' (20 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, NNEPA 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 2-3weeks. 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.

Operator: BP America Production Company  
Well Name: Gallegos Canyon Unit 089E/3004526187  
Legal Description: T27N R12W Sec 06

## 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, <200 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







Case No./Name: Gallegos Canyon Unit 098E Date Submitted: 04/16/2018  
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: Abiodun Adeloje (Emmanuel)

**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. SJC-84-197, 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: Tamara Billie Date: 05/24/18  
Archaeologist

Cultural Notes (if any, e.g., conditions, stipulations, etc.):

Thanks!

**Sarah Scott**

Supervisory Natural Resource Specialist  
BLM Farmington Field Office  
6251 College Blvd., Suite A  
Farmington, NM 87402  
Office: (505)564-7689  
Cell: (505)592-3766

[National BLM Oil and Gas Program Website](#) (link to website)

[BLM Oil and Gas Forms](#) (link to website)

[AFMSS 2 Information](#) (link to website)

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**Tamara Billie** <[tbillie@navajo-nsn.gov](mailto:tbillie@navajo-nsn.gov)>  
To: "Adeloye, Abiodun" <[aadeloye@blm.gov](mailto:aadeloye@blm.gov)>

Thu, May 24, 2018 at 12:20 PM

Emmanuel,

After research, the area for the Gallego Canyon Unit 098E was surveyed for archaeological resources under a 1984 Report.

No Historic Properties determination is recommended.

Tamara

**From:** Adeloye, Abiodun <[aadeloye@blm.gov](mailto:aadeloye@blm.gov)>  
**Sent:** Friday, April 6, 2018 2:55 PM  
**To:** Tamara Billie <[tbillie@navajo-nsn.gov](mailto:tbillie@navajo-nsn.gov)>  
**Subject:** Gallegos Canyon Unit 089E Cultural

Tamara,

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 **Gallegos Canyon Unit 089E In-House Cultural (002).doc**  
44K

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**Adeloye, Abiodun** <[aadeloye@blm.gov](mailto:aadeloye@blm.gov)>  
To: Tamara Billie <[tbillie@navajo-nsn.gov](mailto:tbillie@navajo-nsn.gov)>

Thu, May 24, 2018 at 12:26 PM

Thank you very much. I really appreciate it. Have a great day.  
Emmanuel

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Adeloye, Abiodun &lt;aadeloye@blm.gov&gt;

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**Gallegos Canyon Unit 089E T & E In-House Service.**

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Nora Talkington <ntalkington@nndfw.org>  
To: "Adeloye, Abiodun" <aadeloye@blm.gov>  
Cc: Pamela Kyselka <pkyselka@nndfw.org>

Mon, Apr 9, 2018 at 10:59 AM

Hello Emmanuel,

Thanks for the information about Gallegos Canyon Unit. If all activities are occurring within an existing oil pad, the Natural Heritage Department does not have endangered species concerns. However, if activities will go beyond the pad please inform us because there are Navajo endangered plant and animal species in the area.

Thanks,  
Nora

**Nora Talkington, Botanist**  
**Navajo Natural Heritage Program**  
**Navajo Fish and Wildlife**  
**Deaver Herbarium, Northern Arizona University**  
**Flagstaff, AZ**  
**Email: [ntalkington@nndfw.org](mailto:ntalkington@nndfw.org)**



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