

**U.S. Department of the Interior  
Bureau of Land Management  
White River Field Office  
220 E Market St  
Meeker, CO 81641**

## **DETERMINATION OF NEPA ADEQUACY (DNA)**

NUMBER: DOI-BLM-CO-110-2011-0022-DNA

CASEFILE/PROJECT NUMBER: amend COC73610

PROJECT NAME: Exxon PWDD lines and injection well sites

LEGAL DESCRIPTION: Sixth Principal Meridian  
T.2S., R.96W.,  
sec. 6, lots 28-32, inclusive,  
sec. 8, lot 16,  
sec. 17, lots 1, 2.  
T.2S., R.97W.,  
sec. 1, NE $\frac{1}{4}$ SE $\frac{1}{4}$ .

APPLICANT: Exxon Mobil Corp

ISSUES AND CONCERNS:

Standard pad size recently authorized for an injection well is 200 feet by 200 feet, or approximately 1 acre. The existing well pads are approximately 2 acres. Exxon has addressed this concern by providing plans to do interim reclamation of the pad to the area necessary to the injection sites.

BACKGROUND: The pipelines would be located in a developed area near the Magnolia facility sites. Exxon's Produced Water Distribution and Disposal (PWDD) system serves both the Piceance Creek Unit (PCU) and the Freedom Unit (FRU), and is authorized by off-unit rights-of-way for trunk and connecting pipelines as well as injection well sites. The system concept was analyzed as a part of the PDP document. Both proposed route locations have been analyzed for pipelines and access in [WRFO-2001-135-EA](#) and other NEPA documents. Both lines would be constructed in the same right-of-way as existing pipelines and would connect into the existing 10-inch PWDD truck pipeline authorized as COC73610.

Current direction is that injection of produced water is the generally preferred method of disposal (Onshore Order #7). Injection disposal was addressed and approved in the Piceance Development Proposal (PDP) [CO-110-2005-219-EA](#), including a potential 91 injection wells, and that these sites could be served by pipelines. The State of Colorado carries out their responsibility for implementing the Clean Water Act by reviewing and issuing underground water injection permits.

WRFO-2001-135-EA discusses safety and hazardous materials control for oil and gas facilities. Applicable mitigations developed for the producing well will be carried forward for the conversion and use of these sites and are included in Exhibit B.

**DESCRIPTION OF PROPOSED ACTION:** Exxon Mobil Corporation (Exxon) has applied to the White River Field Office for authorization to construct two new 4-inch buried PWDD pipelines to connect the existing PWDD system to two proposed (PCU T88X-8G and T86X-1G) injection wells and the site facilities for each well. A Notice of Intent to Convert was received for the PCU T88X-8G well and a Subsequent Report has been submitted, but not approved. A Notice of Intent to Convert and a Subsequent Report have been submitted and approved for the T86X-1G well. The Colorado Oil and Gas Commission (COGCC) has approved the conversion of both wells to Wasatch A produced water disposal wells. ExxonMobil has conducted Mechanical Integrity Tests and provided that information. Data for the two lines is shown in the following Table 1.

Well#	Length - feet	Construction width feet	Construction disturbance	Permanent width - feet	Permanent encumbrance
T88X-8G	2729	50	3.12 acres	35	2.19 acres
T86X-1G	3000	50	3.44 acres	35	2.41 acres
Injection facility*			0.92 acre each =1.84 acres		1.84 acres
Total disturbance	5729	50	8.56**	35	6.44 acres

\* Exxon has submitted a plan of interim reclamation for each existing well pad to reduce the long term disturbance to 1 acre each.

\*\* All construction would take place on the previously disturbed surface of the existing well pads. Final reclamation is required for pipelines immediately following completion of construction.

The POD attached to the applications describes the pipe specifications, developed pursuant to ExxonMobil’s standards, and the construction/ reclamation process to be conducted as per Gold Book standards. These documents are located in the case file.

The Sundry Notices of Intent to convert these wells were received and approved March 6, 2009. Applications for the pipeline construction were received on December 12, 2009 but were not acted upon pending final authorization by COGCC and acceptance of the Subsequent Reports.

**LAND USE PLAN (LUP) CONFORMANCE REVIEW:** The proposed action is subject to and has been reviewed for conformance with (43 CFR 1610.5, BLM 1617.3) the following plan:

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

  x   The Proposed Action is in conformance with the LUP because it is specifically provided for in the following LUP decision(s):

Decision Number/Page: Page 2-49

Decision Language: “To make public lands available for the siting of public and private facilities through the issuance of applicable land use authorizations, in a manner that provides for reasonable protection of other resource values.”

REVIEW OF EXISTING NEPA DOCUMENTS:

List by name and date all existing NEPA documents that cover the proposed action.

Name of Document: White River Resource Area Proposed Resource Management Plan and Final Environmental Impact Statement (PRMP/FEIS).

Date Approved: July 1, 1997

Name of Document: Piceance Development Project, CO-110-2005-219-EA

Date Approved: April 23, 2007

Name of Document: Gas Pipelines, WRFO-2001-135-EA

Date Approved: July 7, 2001

NEPA ADEQUACY CRITERIA:

1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial?

*Documentation of answer and explanation:* Yes, CO-110-2005-219-EA for the Piceance Development Project analyzed the concept of injection wells and pipelines. WRFO-2001-135-EA analyzed site specific pipelines in the same location as the proposed action. The proposed action is for additional pipelines to be installed directly adjacent to the previously analyzed routes and for change in use of the existing wells.

2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action, given current environmental concerns, interests, and resource values?

*Documentation of answer and explanation:* Four alternatives, including the No Action Alternative, were analyzed in CO-110-2005-219-EA. The alternative selected did not allow large evaporation ponds but approved injection wells for disposal of produced water. Two alternatives, covering a reasonable range of alternatives (Proposed Action

and the No Action Alternative) were analyzed in WRFO-2001-135-EA. No reasons were identified to analyze additional alternatives and these alternatives are considered to be adequate and valid for the proposed action.

3. Is the existing analysis valid in light of any new information or circumstances (such as, rangeland health standard assessment, recent endangered species listings, updated lists of BLM-sensitive species)? Can you reasonably conclude that new information and new circumstances would not substantially change the analysis of the new proposed action?

*Documentation of answer and explanation:* Yes, the existing analysis remains valid. Additional review of existing projects confirms that there is no new information that would substantially change the analysis for the new proposed action.

4. Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document?

*Documentation of answer and explanation:* Yes, CO-110-2005-219-EA addressed direct, indirect, and cumulative effects of up to 91 disposal wells and alternative methods of disposal. Currently, 17 Exxon water disposal wells have been approved or are pending, including these 2 wells.

5. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current proposed action?

*Documentation of answer and explanation:* Yes, the process of public involvement and interagency review associated with CO-110-2005-219-EA and WRFO-2001-135-EA remains adequate for this proposed action. The process includes posting on the NEPA register on the public website. The CO-110-2005-219-EA was also subject to public review and comment.

#### INTERDISCIPLINARY REVIEW:

The proposed action was presented to, and reviewed by, the White River Field Office interdisciplinary team on December 21, 2009. A list of resource specialists who participated in this review is available upon request from the White River Field Office.

#### REMARKS:

*Cultural Resources:* The produced water pipeline route for the T86X-1G well is in an area that has been inventoried at the Class III (100% pedestrian) level (Brant and Hoefler 2005 Compliance Dated 9-29-2005, Conner and Davenport 2000 Compliance Dated 4/27/2000, Hauck

2001b Compliance Dated 5/21/2001, Pennefather-O'Brien et al. 1992 Compliance Dated 12-17-1992. Schneider et al. 2007 Compliance Dated 1-31-2008) with no cultural resources identified in the project area during the surveys. If the project related disturbance is confined to the existing disturbance there will be no impacts to any known cultural resources.

Only portions of the proposed pipeline route for the T88X-8G produced water disposal line have been inventoried at the Class III (100% pedestrian) level (Hauck 2001a Compliance Dated 5/21/2001, Kintz 2009 Compliance Dated 5/18/2009, M<sup>c</sup>Donald and Metcalf 1994 Compliance Dated 12/29-1994). The central portion of the proposed pipeline, where it descends and ascends the wash/gully has not been inventoried. Due to the steepness of the terrain, inventory can be waived in accordance with BLM Manual 8110.23(B)(4). It is unlikely that cultural resources will be impacted by the pipeline. (MRS 11/26/2010)

*Native American Religious Concerns:* No Native American Religious Concerns are known in the area, and none have been noted by Northern Ute tribal authorities. Should recommended inventories or future consultations with Tribal authorities reveal the existence of such sensitive properties, appropriate mitigation and/or protection measures may be undertaken. (MRS 11/26/2010)

*Paleontological Resources:* The proposed produced water distribution and disposal pipelines are located in an area generally mapped as the Uinta Formation (Tweto 1979) which the BLM WRFO has classified as a PFYC 5 formation meaning it is known to produce scientifically noteworthy fossils (Armstrong and Wolny 1989). (MRS 11/26/2010)

*Threatened and Endangered Wildlife Species:* There are no wildlife-related issues or concerns associated with the proposed action. Based on a February 25, 2011 email from Exxon-Mobil in response to a WRFO inquiry regarding equipment (as source of wildlife disturbance) that would be necessary for injection well conversion, analysis was predicated on there being no new pumps or engines (e.g., power generation) used in conjunction with this project and there would be no fluid storage required (e.g., tanks) on this site. Surface facilities would be limited to a 10 ft. x 12 ft. building erected to house the wellhead for heating purposes. (LB 12/15/10; EH 2/28/2011)

*Threatened and Endangered Plant Species:* There are no special status plants or plant habitat within the vicinity of the proposed action. (MLD 2/9/2011)

#### REFERENCES CITED:

Armstrong, Harley J., and David G. Wolny  
1989 Paleontological Resources of Northwest Colorado: A Regional Analysis. Museum of Western Colorado, Grand Junction, Colorado.

Brant, Suzanne, and Ted Hoefler

- 2008 Class III Cultural Resource Inventory of the Enterprise Meeker Plant to Greasewood Station Pipelines, Rio Blanco County, Colorado. Cultural Resource Analysts, Inc., Longmont, Colorado. (08-162-05)

Conner, Carl E., and Barbara J. Davenport

- 2000 Class III Cultural Resource Inventory Report for the Yankee Gulch Sodium Minerals Project Proposed Piceance to Parachute Pipeline in Garfield and Rio Blanco Counties, Colorado, for American Soda, L.L.P. Grand River Institute, Grand Junction, Colorado. (00-11-04)

Hauck, F. Richard

- 2001a Cultural Resource Evaluation of 14 Proposed Locations & a Compressor Site Location in the Magnolia Ridge Locality of Rio Blanco County, Colorado. Archeological-Environmental Research Corporation, Bountiful, Utah.
- 2001b Cultural Resource Evaluation of Proposed Well Locations & Pipeline Corridors in the Magnolia Locality of Rio Blanco County, Colorado. Archeological-Environmental Research Corporation, Bountiful, Utah. (01-28-06)

Kintz, Kimberly

- 2009 ExxonMobil Corporation: A class III cultural Resources Inventory of the Proposed Produced Water Line from PCU 296-17A to PCY296-18, in Rio Blanco County, Colorado. Metcalf Archaeological Consultants, Inc., Eagle, Colorado. (09-54-29)

M<sup>c</sup>Donald, Kae, and Michael D. Metcalf

- 1994 Greasewood Compressor Station to Parachute Creek, A Class III Cultural Resource Inventory on Phase I of a Proposed Pipeline for Colorado Interstate Gas Company, Rio Blanco County and Garfield Counties, Colorado. Metcalf Archaeological Consultants, Inc., Eagle, Colorado (94-54-28)

Pennefather-O'Brien, Elizabeth, Patrick Lubinski, and Michael D Metcalf.

- 1992 Colorado Interstate Gas Company Uinta Basin Lateral 20" Pipeline: Class III Cultural Resource Final Report Utah, Colorado and Wyoming. Metcalf Archaeological Consultants, Inc., Eagle, Colorado. (92-54-26)

Schneider, Edward, James Low, and Nancy Pahr

- 2007 Class III Cultural Resource Inventory for White River Hub, LLC's White River Hub Project, Rio Blanco County, Colorado. TRC, Laramie, Wyoming. (08-22-01)

Tweto, Ogden

- 1979 Geologic Map of Colorado. United States Geological Survey, Department of the Interior, Reston, Virginia.

## MITIGATION:

1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

3. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO).

Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

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4. If it becomes necessary to excavate into the underlying rock formation to bury any of the produced water disposal lines, a paleontological monitor shall be present prior to the beginning of all such excavations.

COMPLIANCE PLAN: On-going compliance inspections and monitoring will be conducted by White River Field Office staff during construction, operation, maintenance, and reclamation of the project. Specific mitigation developed in this document and the terms and conditions of the original associated grants will be followed.

NAME OF PREPARER: Linda Jones

NAME OF ENVIRONMENTAL COORDINATOR: Heather Sauls

DATE: 3/10/11

ATTACHMENTS:

Exhibit A, Map

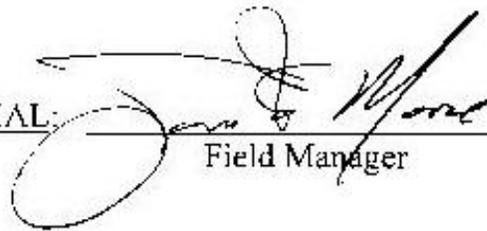
Exhibit B, COAs

## CONCLUSION

DOI-BLM-CO-110-2011-0022-DNA

Based on the review documented above, I conclude that this proposal in consort with the applied mitigation conforms to the land use plan and that the NEPA documentation previously prepared fully covers the Proposed Action and constitutes BLM's compliance with the requirements of NEPA.

SIGNATURE OF RESPONSIBLE OFFICIAL:



Field Manager

DATE SIGNED: 3/10/11

Note: The signed Conclusion on this worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision.



### EXXON PWDD LINES/INJECTION WELLS SITES

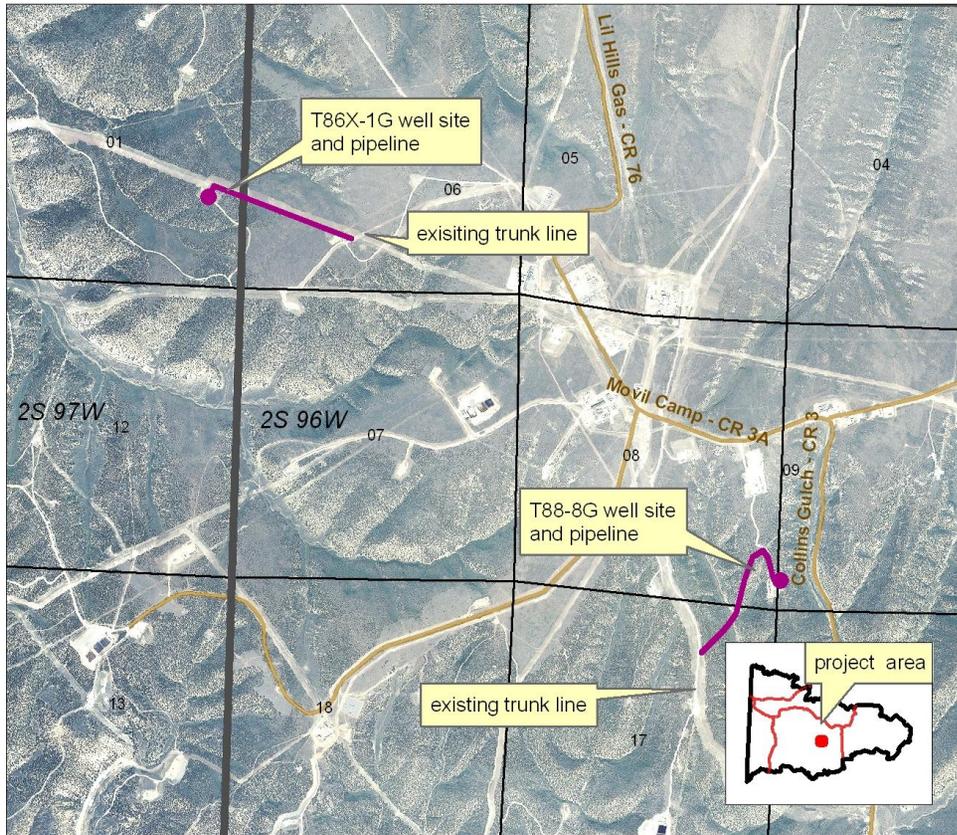


### EXHIBIT A

amend COC73610

DOI/BLM/CO100-2011-0022-DNA

Sixth Principal Meridian  
T.2S.,R.96W., sec 6,8,17  
T.2S.,R.97W., sec 1



#### LEASE\_NUM

CO-110-2011-0022-CX

PLSS\_Townships\_GCDB2008

PLSS\_Sections\_GCDB2008

County

State

BLM

CDW

County

FOR

NPS

PRI

STA



3/2011 LLJ

BLM is not responsible for the accuracy of the data used in this map. The user is responsible for verifying the accuracy of the data used in this map. The user is responsible for obtaining the necessary permits and approvals for any proposed project. The user is responsible for obtaining the necessary permits and approvals for any proposed project.

Exhibit B:

Conditions of approval developed in DOI-BLM-CO-110-2011-0022-DNA

1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

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2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

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4. If it becomes necessary to excavate into the underlying rock formation to bury any of the produced water disposal lines, a paleontological monitor shall be present prior to the beginning of all such excavations.

Conditions of approval developed in CO-110-2005-219-EA and WRFO-2001-135-EA

5. The holder is responsible for the eradication of all noxious and problem weed species on the project site. Species which are known to occur in close proximity to the project site are: Russian knapweed, spotted knapweed, black henbane, yellow toadflax, houndstongue, and mullein.
6. The holder will collect and properly dispose of any solid wastes generated. Use, storage, transport, and disposal of hazardous materials will be handled in accordance with applicable state and federal laws.
7. Following seeding and placement of biodegradable fabrics (if used), woody debris cleared during initial construction will be pulled back over the recontoured/partially reshaped areas to act as flow deflectors and sediment traps. Available woody debris will be evenly distributed over the entire portion of the reclaimed area and will not account for more than 20 percent of total ground cover.
8. The contractor shall redistribute large, woody material salvaged during clearing operations on BLM White River Field Office-administered lands as directed by the AO. Materials will be dispersed over the reclaimed portions of the rights-of-way and well sites from which the trees and brush were originally removed to meet fire management objectives and to provide wildlife habitat, seedling protection, and as a deterrent to vehicular traffic. Woody materials dispersed across reclaimed areas should be well scattered to avoid creating large piles of fuel, and should not exceed 3/5 tons/acre (20 percent surface coverage).
9. Unauthorized use by motor vehicles of cleared pipeline ROWs never intended or designed to accommodate traffic increases indirect impacts attributable to vehicle use and road/trail density on Public Lands (see discussion in White River RMP). Reclamation practices shall be employed to deter subsequent vehicle use.
10. All new surface facilities placed by the operator in the Project Area will be painted Shale Green (Munsell Soil Color 5Y 4/2) or similar BLM Standard Environmental Color. All aboveground facilities will be painted within six months of installation.

Hazardous Materials

11. As a reasonable and prudent lessee/operator in the oil and gas industry, acting in good faith, all lessees/operators and right-of-way holders will report all emissions or releases that may pose a risk of harm to human health or the environment, regardless of a substance's status as exempt or nonexempt and regardless of fault, to the BLM WRFO (970) 878-3800.
12. As a reasonable and prudent lessee/operator and/or right-of-way holder in the oil and gas industry, acting in good faith, all lessees/operators and right-of-way holders will provide for

the immediate clean-up and testing of air, water (surface and/or ground), and soils contaminated by the emission or release of any substance that may pose a risk of harm to human health or the environment, regardless of that substance's status as exempt or non-exempt. Where the lessee/operator or right-of-way holder fails, refuses, or neglects to provide for the immediate clean-up and testing of air, water (surface and/or ground), and soils contaminated by the emission or release of any quantity of a substance that poses a risk of harm to human health or the environment, the BLM WRFO may take measures to clean-up and test air, water (surface and/or ground), and soils at the lessee/operator's expense. Such action will not relieve the lessee/operator of any liability or responsibility