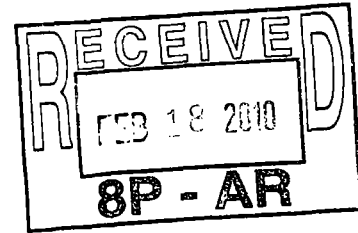




Davis Graham & Stubbs LLP

February 17, 2010



**Via Hand Delivery**

Ms. Claudia Young Smith  
Environmental Scientist  
Air and Radiation Program, 8P-AR  
U.S. Environmental Protection Agency Region 8  
1595 Wynkoop Street  
Denver, CO 80202

Re: Supplemental Comments on Florida River Plant Renewal  
Title V Operating Permit

Dear Ms. Smith:

I have enclosed three copies of BP America Production Company's ("BP") supplemental comments regarding EPA Region VIII's pending renewal of the Title V Operating Permit for BP's Florida River Plant.

If you need additional copies of the supplemental comments or have any questions, please call me at the number below.

Very truly yours,

Charles L. Kaiser  
for  
DAVIS GRAHAM & STUBBS LLP

CLK/ldrm  
Enclosures

cc: Jeff Conrad, w/encl.  
John Jacus, w/encl.  
Charlie Breer, w/encl.

Charles L. Kaiser . 303 892 7369 . chuck.kaiser@dgsllaw.com

**Supplemental Comments of BP America Production Company  
Regarding The Pending Renewal Title V Operating Permit For  
Its Florida River Plant**

**Submitted to EPA Region VIII  
February 17, 2010**

**NOTE: Certain attachments to these supplemental comments contain or constitute Confidential Business Information within the meaning of 40 CFR Part 2. BP America Production Company specifically reserves all claims of the confidentiality of such material to which it may be entitled, all of which is marked with the legend "Confidential Business Information" on each page.**

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## INTRODUCTION

BP America Production Company ("BP") submits this memorandum and the attached materials in (i) support of the U.S. Environmental Protection Agency ("EPA") Region VIII's pending issuance of a renewal Title V operating permit for BP's Florida River Plant ("Florida River" or the "Plant") and (ii) opposition to Rocky Mountain Clean Air Action, n/k/a WildEarth Guardians ("WEG"), comments urging EPA to aggregate hundreds or thousands of BP-operated wells across the Northern San Juan Basin ("NSJB") and BP's Wolf Point compressor station in the renewal permit for Florida River.

BP respectfully submits that BP-operated wells and the Wolf Point compressor station should not be aggregated with Florida River on numerous grounds, including the following:

- The aggregation of such sources with Florida River is contrary to the legal requirements for combining sources for Title V and prevention of significant deterioration ("PSD") program purposes;
- EPA's 1980 preamble statements concerning its final PSD regulations defining stationary source (on which source aggregation is based), do not support aggregating such sources;
- Aggregating other sources with Florida River in the pending renewal permit would be contrary to the multiple prior permitting decisions made by EPA and the State of Colorado regarding Florida River, their periodic inspections of the Plant to evaluate its compliance with the Act, and actions following BP's meeting with EPA on oil and gas operations and aggregation nearly a decade ago;
- The wells and other sources WEG seeks to have aggregated are not located on contiguous or adjacent properties and aggregation of those sources does not comport with the "common sense notion of a plant;"
- The aggregation of sources asserted by WEG in its prior comments would confound the efficient administration of Clean Air Act ("CAA" or "Act") operating and PSD permits without reasonably advancing the purposes of the PSD program, contrary to controlling case law;<sup>1</sup>

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<sup>1</sup> 42 U.S.C. 7401 et seq.

- Aggregating additional sources with Florida River would be an arbitrary and capricious departure from EPA's prior decisions not to aggregate the same facilities under the same governing legal standard; and
- After conducting a legal and factual review of BP's renewal application and WEG's comments, the Southern Ute Indian Tribe ("Southern Utes" or "Tribe") concluded in its own submission to EPA that "emissions of the Florida Facility are properly not aggregated with emissions from other BP facilities and wells on the Reservation because the Florida Facility is not contiguous with or adjacent to those other sources and they do not together constitute a plant, facility or installation." Exhibit A (January 13, 2010 Letter from the Tribe to EPA).

For all of these reasons, BP urges EPA to issue a final renewal operating permit for Florida River that does not aggregate wells and/or other compression facilities, and to reject the source aggregation arguments of WEG as both unsupportable and unworkable.

#### LEGAL STANDARD

The CAA seeks to protect human health and the environment from emissions that pollute the ambient air by requiring EPA to establish minimum national standards for air quality, and assigns primary responsibility to the states to assure compliance with those standards. Since the adoption of final regulations in 1980, large new sources of air pollution (and, under certain conditions, major modifications to large existing sources) have been subject to preconstruction review and permitting under the CAA. The type of preconstruction review and permitting depends on whether the source will be located in an area that is in "attainment" or in "nonattainment" with any of the National Ambient Air Quality Standards. Large new sources are subject to the PSD program if in an attainment area. If in a nonattainment area, such a source is subject to nonattainment new source review. In either case, the program is focused on permitting major new stationary sources of air pollutants.

Title V of the Act, enacted ten years after the final PSD regulations were promulgated, also focuses on "major sources" of air pollutants, requiring them to obtain a CAA operating

permit.<sup>2</sup> The main purpose of the Title V operating permit program is to compile into one document all CAA requirements applicable to a particular source.<sup>3</sup> Thus, both the PSD and Title V programs define, and apply their requirements to, "major stationary sources."

EPA's PSD regulations define "stationary source" as "any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant." The regulations also define the terms "building," "structure," "facility," or "installation" to include:

[A]ll of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel.<sup>4</sup>

EPA's regulations implementing Title V rely on a similar definition.<sup>5</sup> These definitions of major sources for PSD and Title V program purposes establish the three requirements that must be satisfied before aggregating stationary sources under the CAA. All three of these factors must be satisfied in order for separate sources to be properly aggregated, and even then there are additional overarching principles that must be satisfied. The overarching principles are that (i) the source must meet the "common sense notion of a plant" and (ii) a source determined by aggregating emissions from otherwise separate sources must still meet the ordinary meaning of a "building," "facility," "structure" or "installation."<sup>6</sup>

EPA determined in its 1980 PSD regulations that applying the definition of "stationary source" to particular facilities would need to be done on a case-by-case basis.<sup>7</sup> Much more recently, EPA has issued informal guidance memoranda concerning CAA source determinations

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<sup>2</sup> CAA §§ 501-507, 42 U.S.C. §§ 7661-7661f. The Title V regulations are set forth at 40 C.F.R. Part 70 (state operating permit programs) and Part 71 (federal operating permit programs).

<sup>3</sup> 40 C.F.R. § 71.1.

<sup>4</sup> 40 C.F.R. § 51.166(b)(6).

<sup>5</sup> 40 C.F.R. § 71.2 (definition of "major source").

<sup>6</sup> 45 Fed. Reg. 52676, 52694-695 (August 7, 1980).

<sup>7</sup> 45 Fed. Reg. at 52695.

for the oil and gas industries.<sup>8</sup> These memoranda, though opposed to one another in some respects, are in agreement that “whether or not a permitting authority should aggregate two or more pollutant-emitting activities . . . remains a case-by-case decision in which permitting authorities retain discretion to consider the factors relevant to the specific circumstances of the permitted activities.”<sup>9</sup> The most recent of these memoranda states that “source determinations within the oil and gas industries will continue to be complex, involving in some cases in-depth analyses of ownership and operational issues.” It is largely because these determinations remain fact-intensive that BP has submitted these supplemental comments and the attached factual materials for EPA’s consideration in making its source determination for Florida River’s renewal operating permit.<sup>10</sup>

## FACTS

### A. Florida River Plant.

BP’s Florida River Plant (i) compresses coalbed methane gas produced in the region to pressures necessary to meet interstate pipeline specifications and (ii) uses an amine process to reduce CO<sub>2</sub> levels in the gas stream to 2% or less, the interstate pipeline standard. Amoco Production Company (predecessor to BP) first permitted Florida River for construction in 1987 as a true minor source for PSD program purposes by the State of Colorado’s Air Pollution Control Division (“APCD”). By 1991, the facility handled 60 MMSCFD of gas at the tailgate of the Plant. Between 1992 and 1998, the plant added a number of items of equipment and increased the volume of gas being handled to 200 MMSCFD, but was still a PSD minor source,

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<sup>8</sup> See “Source Determinations for Oil and Gas Industries,” memorandum from William L. Wehrum to Regional Administrators (January 12, 2007) and “Withdrawal of Source Determinations for Oil and Gas Industries,” memorandum from Gina McCarthy to Regional Administrators (September 22, 2009).

<sup>9</sup> 45 Fed. Reg. at 52695.

<sup>10</sup> Certain attached documents are subject to BP’s timely claim of business confidentiality pursuant to 40 C.F.R. § 2.203(b). BP has affixed a prominent legend which reads “**Confidential Business Information**” in large red type on each page of the particular attachments to these comments for which BP seeks to claim and thereby preserve confidentiality, including Exhibits T, U, and V.

as well as a minor source for Title V purposes. El Paso Natural Gas ("EPNG") contemporaneously constructed its own Florida River compression facility on ground leased from Amoco at Florida River using two stationary gas-fired turbines. The El Paso Florida turbines were permitted by the State of Colorado, first as a minor source for both Title V and PSD purposes, and later as a Title V major source and PSD minor source.<sup>11</sup> Modifications to each of the facilities (Amoco and EPNG) were also permitted by Colorado. On multiple occasions, EPA considered whether Florida River should be aggregated with other facilities.

1. EPA's aggregation meeting with BP.

In September 2000, BP held a day and a half long meeting with the head of EPA's Region VIII and virtually all (30-40) of Region VIII's air permitting and enforcement personnel to discuss oil and gas operations in the context of aggregation. See Exhibit C (Affidavit of Gordon Reid Smith at ¶5 and attached meeting power point slides). BP's presentation to EPA included a detailed discussion and power point slide of how BP's gas flowed to (i) different compressors, (ii) different gathering lines, (iii) various third party gas plants and BP's Florida River Plant, and (iv) different interstate gas transmission lines. *Id.* at ¶5 (and attached slide of BP operations). Significant purposes of that meeting were to provide EPA with an understanding of the oil and gas exploration and production industry with respect to aggregation and to illustrate why aggregation was not workable for exploration and production operations. *Id.*

2. EPA aggregated BP's Florida River with EPNG's facilities.

After BP purchased EPNG's Florida River facility, EPA and BP agreed that the EPNG turbines should be aggregated with Florida River as one major source under both the PSD and Title V rules. See Exhibit D (February 28, 2001 BP Letter to EPA). That conclusion was

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<sup>11</sup> See Letter from L. GHearhart, EPNG, to J. Geier, APCD, dated May 19, 1993, and excerpt from the enclosed permit application prepared for EPNG by D. Downard, Pilko & Associates, Inc., dated May 1993 (copy attached as Exhibit B).

appropriate because the facilities were on contiguous or adjacent properties, belonged to the same industrial grouping, BP owned and controlled both sources after the purchase from EPNG, and the facilities were collectively part of a single plant.

3. EPA's additional permitting and inspection activities for Florida River.

EPA has continued to routinely permit and inspect Florida River over the past decade. First, EPA issued a Part 71 permit to BP in June 2001 and a renewal Part 71 operating permit to BP for Florida River on September 21, 2005. Second, in July/August 2001, EPA considered BP's installation of a gas-fired Waukesha L579T lean-burn compressor engine. Third, on June 4, 2004, EPA issued a significant modification to BP's Part 71 permit to establish synthetic minor limits for NOx emissions for 12 diesel generators involving control with selective catalytic reduction and an enforceable NOx emissions limit cap over all of the generators of 39.1 tons per year. Fourth, EPA and Colorado have routinely inspected Florida River for compliance with all CAA requirements.<sup>12</sup> EPA's most recent inspection was in 2008. That representative inspection report is attached as Exhibit F.

Other than the decision to aggregate the former EPNG turbines with Florida River after being acquired by BP, neither Colorado nor EPA has sought to aggregate Florida River and any other facilities for CAA permitting purposes. This is significant in that these permitting and inspection efforts by state and federal regulators were founded upon a thorough understanding of the nature and purpose of BP's operation of the sources permitted at the Plant, as well as sources separate from the Plant but also operated by BP.

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<sup>12</sup> See Inter-Office Communication from B. Jorgenson to D. Fox, APCD, re: Final Approval Inspection, dated Feb. 28, 1989 at p. 4 (copy attached as Exhibit E).

B. The Surface And Mineral Estates In The NSJB Are Sharply Divided.

1. Ownership pattern in the greater NSJB area.

The surface and mineral estates in the Northern San Juan Basin are highly fractured and owned by a mix of entities, including the Southern Utes, many federal agencies, State and local governments, and private parties. Maps showing the intermingled Tribal, Federal, State, and private surface and mineral ownership patterns are attached as, respectively, Exhibits G (surface) and H (minerals). The Florida River plant and many of the wells which typically flow to Florida River are located on the Southern Ute Indian Reservation. Ownership of those lands is highly checkerboarded due to conflicting United States land policies toward Native Americans, patents to homesteaders which reserved some minerals but not others, and Supreme Court case law.

In the early 1900s the United States sought to assimilate the Southern Utes by opening up lands previously held by the Tribe to homesteaders. Those lands were typically patented under the 1909 and 1910 Coal Lands Act which reserved coal to the United States but not gas and other minerals. Amoco Production Company v. Southern Ute Indian Tribe, 526 U.S. 865, 870 (1999) (coal estate owner does not own gas estate). The United States later abandoned its assimilationist policy in the 1930s and restored to the Tribe (i) those lands which had not been homesteaded and (ii) the reserved coal. Those lands and minerals returned to the Tribe are held in trust by the United States for the benefit of the Tribe. Ownership of the surface lands remains highly divided due to many years of homesteading. The mineral estate also remains fractured, in part because of the United States' limited mineral reservations, but also because of BP's agreement with the Southern Ute Indian Tribe to, among other things, form Resolution Partners LLP ("Resolution"), a limited partnership in which the Tribe acquired a 32% interest in many BP

wells located on the Reservation. The Tribe's interest in Resolution is in addition to the royalty interest it owns in those lands where the Tribe holds beneficial title to the gas.<sup>13</sup>

2. Ownership pattern in the vicinity of Florida River.

The surface and mineral ownership pattern near Florida River is complex, as evidenced by the fact that BP has over 60 surface use agreements, pipeline agreements, and rights-of-way in the area near Florida River. The mingled surface agreements are shown on a map attached as Exhibit I. It is virtually impossible to move anywhere on the surface without going through the boundary lines of the various agreements. Id. There are also multiple oil and gas leases near Florida River. A map showing the boundaries of the area oil and gas leases is attached as Exhibit J. A few representative leases are attached as Exhibit K. Those representative leases were executed more than a half-century ago, decades before Florida River was constructed. The oil and gas leases, like the surface use agreements, create a maze of boundary lines. See Exhibit J.

C. Gas Wells in the NSJB.

1. Wells in the greater NSJB area.

The entire gas field is approximately 20 miles (north to south) by 30 miles (east to west) and contains thousands of wells. BP-operated wells are spread across a vast area. Some BP wells are located up to 18 miles distant from the Florida River facility while other wells are located in sight of Florida River. Most of the wells in the field, particularly to the north, are coalbed methane wells drilled into the Fruitland coal formation by BP and many other oil and gas companies over the past 25 years. See Exhibit H (map shows coalbed methane wells in green). BP also has many wells located in conventional (non-coal) formations to the south. Id.

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<sup>13</sup> As described supra at 2, the Tribe's position is that Florida River is properly not aggregated with BP-operated wells or with other facilities.



(conventional wells in red). The gas composition among wells varies. Conventional gas typically has liquids which need to be removed. Coalbed methane does not contain liquids, but often has high levels of CO<sub>2</sub> which needs to be removed because it would otherwise mix with moisture and form carbonic acid in the pipelines. The level of CO<sub>2</sub> in coalbed methane varies, with wells in the south having higher levels than wells to the north. Some BP-operated wells are electrified; that is, any wellhead compressors or lift equipment runs on electricity. Other wells use gas-fired compressor engines and lift equipment. Wells in some areas have wellhead compressors whereas in other areas they do not.

2. Well location factors in the greater NSJB area.

The location of gas wells must conform to the spacing area established by the relevant jurisdictional authority.<sup>14</sup> The spacing unit reflects the area one well can efficiently drain. Early coalbed methane wells in the NSJB area were spaced on the basis of two wells per 320 acre spacing unit, or 160 acres. However, the COGCC concluded in a series of orders that technological advances and geological data showed that 80-acre spacing was necessary to maximize recovery and minimize waste for coalbed methane wells drilled in the Fruitland coal seam. See, e.g., COGCC Order Nos. 112-180 and 112-190, attached as Exhibit M.<sup>15</sup> Those spacing orders additionally limit where wells can be drilled within the spacing unit, e.g., wells must be drilled no closer to a unit boundary than 660 feet, and wells must be drilled from a single pad. A memorandum of understanding BP entered into with La Plata County further limits

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<sup>14</sup> Spacing in the NSJB area is complicated. The Colorado Oil and Gas Conservation Commission ("COGCC") determines proper spacing on fee and state lands; the Bureau of Land Management ("BLM") has authority to determine spacing on federal lands; and the Southern Ute Tribe has substantial authority over spacing on Tribal lands. Through a memorandum of understanding between the Tribe, the Bureau of Indian Affairs ("BIA"), and BLM, and a separate memorandum of understanding between BLM and COGCC the various authorities allow COGCC to make initial spacing determinations which the Tribe, BIA, and BLM may then accept or not for lands within their respective jurisdiction. See Exhibit L.

<sup>15</sup> The Tribe and BLM concur with 80-acre spacing for the Fruitland formation. See, e.g., Draft Programmatic Environmental Assessment for 80 Acre Infill Oil and Gas Development on the Southern Ute Indian Reservation (2009).

KSP 7/26/2010 Version. Incorporates comments from OAQPS, OGC, and ORC. Draft. Internal Deliberative  
Attachments:

**Comment [SLL1]:** Please include these in the administrative record we're compiling and indexing for this decision.

**Comment [R2R1]:** ok

August 18, 1997, source determination for the Great Salt Lakes Minerals plant and a pump station

August 27, 1996, Analysis of the Applicability of Prevention of Significant Deterioration to the Anheuser-Busch, Incorporated Brewery and Nutri-turf, Incorporated Landfarm

August 21, 2001 determination made by EPA in defining a "source" for the Forest Oil Kustatan and Osprey Platform Construction Permitting

May 21, 1998, Response to Request for Guidance in Defining Adjacent with Respect to Source Aggregation (aka Utility Trailer)

potential well locations and requires the use of existing infrastructure to reduce surface impacts. La Plata County MOU at 5-6, Exhibit N. BP also has its own internal factors for locating wells and will choose those locations with optimal geology, engineering, topography, access, power, and surface owner compatibility.

3. Well location factors for those wells closest to Florida River.

A map showing the BP-operated wells located closest to Florida River is attached as Exhibit O (blue rings represent distances of  $\frac{1}{4}$ ,  $\frac{1}{2}$ , and  $\frac{3}{4}$  miles). Those wells were drilled at various times over the past 25 years. Several of the closest wells were drilled in the mid-1980s, before Florida River was even built, including the Federal Land Bank GU C#1 (1985), Federal Land Bank GU B#1 (1986), and Piccoli Ranches #1 (1987). Those well locations were driven in part by surface owner preferences, as well as spacing orders. See Exhibit P (internal memorandum on Piccoli Ranches #1 asking for "the district's best effort to accommodate the surface owner's wishes in locating the roads and location"). In contrast, other wells located within sight of Florida River were drilled less than a year ago (more than 20 years after Florida River was constructed), including the Federal Land Bank GU B#3, Federal Land Bank GU B#4, and Jefferies GU A#3. The newest wells drilled in 2009 are (i) based on COGCC 80-acre spacing orders, (ii) directionally drilled from a single pad, and (iii) electrified consistent with BP's La Plata County MOU. BP chose the drilling location for the three newest wells due to problems with other locations which included "difficult terrain," "the proximity of residences and property lines," and the "proximity of BP offices and pipelines." Exhibit Q (BP letter to COGCC dated November 4, 2008). Because the new wells are directionally drilled, the bottom hole location is not necessarily where the well pad is located. For example, by directionally drilling the Jefferies GU A#3 1500 feet to the north of the well pad, BP was able to avoid

potential conflicts with the owners of a new house that was being built. See Exhibit R (internal BP email explaining locations); Exhibit O (showing bottom hole locations).

D. Gas Flow.

The flow of gas in the NSJB field is a dynamic process. Gas can be gathered on several gathering lines, including those of BP, Red Cedar Gathering Company (a joint venture between the Southern Ute Indian Tribe and Kinder Morgan) ("Red Cedar"), and Williams Four Corners LLC ("Williams"), and can flow to any number of facilities, including Florida River, Wolf Point, and several other compressor stations and plants owned by BP, Red Cedar, or Williams. See Exhibit S (gas flow chart). A significant portion -- more than one-third -- of the gas produced from BP-operated wells flows to third-party facilities under normal operating conditions. For BP-operated production,

- 63% flows to Florida River;
- 25% flows to Red Cedar's Arkansas Loop;
- 8% flows to Red Cedar's Coyote Gulch;
- 3% flows to Red Cedar's Outlaw facility; and
- 1% flows to Williams.

BP and Red Cedar have significant flexibility in determining where and how gas flows. See Exhibit S. There are dozens of points across the field where BP-gathered gas can be either offloaded to other companies' pipelines and compressors or BP may accept gas from non-BP-operated wells and systems. Representative agreements are attached as Exhibit T.

BP has agreements with other third-party oil and gas gathering companies to accept BP's gas and for BP to accept third-party gas. A redacted copy of BP's standard agreement for gathering third-party gas is attached as Exhibit U. BP has agreements with Red Cedar to gather, compress, and treat gas from BP operated wells. A partially redacted copy of one of those agreements is attached as Exhibit V. Production from hundreds of BP-operated wells flows in the normal course to Red Cedar under that agreement. BP and Williams are also "parties to a

natural gas gathering and processing agreement” which, among other things, includes an “interconnection between BP’s and Williams’ gathering systems at the ... Wolf Point Exchange CDP.” See Exhibit W (January 22, 2010 Letter from Williams).<sup>16</sup>

Gas which would normally flow to Florida River can flow to Red Cedar and other third parties if Florida River is off line. Likewise, if Wolf Point shuts down, then gas that normally would flow to Wolf Point can flow to Williams or to Red Cedar. See Exhibit W (Williams Letter) and Exhibit S (gas flow chart). Conversely, if Red Cedar or another third party’s facility shuts down, then that gas can flow to Florida River. See Exhibit V (Red Cedar/BP Agreement at § 2.18).

Whether gas flows to a BP facility or to a third-party facility may also be a function of the gas pressure at any particular point in time. The facility to which the gas flows will change based on increases or decreases in gas pressure as new wells are drilled and older wells are reworked, go into decline, etc. Gas produced from BP operated wells in the Wolf Point area, for example, moves back and forth between Wolf Point and Bondad (owned by Red Cedar) based on pressures. In each instance where “BP gas”<sup>17</sup> is transferred to third parties or BP receives third-party gas, the gatherer takes custody of and assumes liability for the gas while in the gatherer’s possession, the gas is measured by the gatherer, and the shipper verifies those volumes with its own check meter. See Exhibit U (BP Agreement).

E. Wolf Point Compressor Station.

Wolf Point is a compressor station which went on line in May of 2001 operating with three lean-burn compressor engines. Wolf Point is a central delivery point/compressor station

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<sup>16</sup> The agreements are confidential and proprietary. Williams was not willing to allow the release of the agreement, but did provide the letter attached as Exhibit W.

<sup>17</sup> “BP gas” refers to gas from BP-operated wells, regardless of BP’s ownership of the gas, if any, apart from its operator status.

for coalbed methane gas produced by BP-operated wells and by third parties. Gas handled by Wolf Point is compressed and dehydrated, and then flows via medium-pressure pipelines (both BP and third-party owned and operated) to Florida River or other third-party owned and operated central delivery points (CDPs). See Exhibit S.

Wolf Point is physically and operationally separate from Florida River. Wolf Point is located approximately 4½ miles away from Florida River and separated by rugged terrain. By vehicle (SUV with four-wheel drive), one can travel from Wolf Point to Florida River in approximately 20 minutes, in good weather. At that distance, the Florida River plant (larger and more visible than Wolf Point) is not easily discernible when viewed from Wolf Point. See Exhibit X (photos of Florida River viewed from Wolf Point without zoom and with a digital zoom). BP personnel responsible for Wolf Point's day-to-day operations are officed in the BP Operations Center, while Florida River plant personnel are officed at the Plant itself.

Because Wolf Point is within the exterior boundaries of the Southern Ute Indian Reservation, and because there is no federal minor source permit program applicable to Wolf Point, BP was required to obtain a Title V operating permit under EPA's Part 71 rules. EPA issued Wolf Point its first operating permit on February 27, 2003. That permit confirmed that Wolf Point was a minor source for PSD program purposes. EPA has continued to handle various permit and facility modifications for Wolf Point in the past several years. The first modification of Wolf Point involved the addition of another lean-burn compressor engine in 2005 by BP, but the facility remained a PSD true minor source. Based on a review of the facility's emission factors for formaldehyde, EPA determined that Wolf Point had become a major source of formaldehyde with the 2005 addition of a fourth engine, and thus had become a major source as defined by the maximum achievable control technology requirements (MACT standards) for

control of HAPs under Subpart ZZZZ of 40 CFR Part 63. In March 2006, BP requested a further modification of Wolf Point for the replacement of all four engines with three new lean-burn engines equipped with oxidation catalyst emission controls and an enforceable formaldehyde limit for the facility. This resulted in a Part 71 significant permit modification which made the facility a synthetic minor source of HAPs, effective July 31, 2006. Installation, start up, and shakedown of the new replacement engines is planned for completion by the end of March 2010, including the decommissioning of the existing engines. EPA has never sought to aggregate Wolf Point with any other facilities or wells.

F. BP Management Structure.

BP has separate personnel and equipment devoted to (i) locating, drilling, producing, and maintaining BP-operated gas wells and (ii) operation and maintenance of Florida River, Wolf Point and other non-well facilities. BP's Plant personnel (team leaders and operators) are responsible for the Plant operations, but not for well production activities, and are officed at the Plant. A separate well production team leader and his "pumpers" are responsible for the operation of wells. In the NSJB, this is the Northwest Production Team Leader. He is officed at the BP Operations Center with personnel on the well production team. Additionally, wells do not share pollution control equipment or other equipment with Florida River or Wolf Point. Equipment and materials for BP-operated wells and Wolf Point are not stored at Florida River (other than some bulk storage of methanol and gasoline). The only tie between these distinct and separate groups is that they report to the same ultimate Florida River Operations Manager for purposes of business efficiency and accountability.

G. WEG Claims.

EPA and/or Colorado have on many occasions issued and amended CAA permits for the Florida River and Wolf Point facilities. Supra at 4-6, 12-14. Most of those permitting decisions

were available for public comment and noticed in the Federal Register or Colorado Register. Despite numerous opportunities to comment, WEG never previously claimed that Florida River should be aggregated with Wolf Point or BP-operated wells. WEG's May 2008 comments on the draft Florida River Title V permit claim for the first time that "EPA has not considered emissions from all interrelated pollutant emitting activities, namely BP's coalbed methane wells and the Wolf Point Compressor Station." WEG comments at 2. WEG asserts that BP's wells in La Plata County should be aggregated with Florida River because (i) "[t]he fact that BP's producing coalbed methane wells are all located primarily within La Plata County strongly indicates these pollutant emitting activities are adjacent to the Florida River Compression Facility for PSD purposes" and (ii) BP's wells "have a functional interrelationship with the Florida River Compression Facility" -- that is, without Florida River, BP's wells "would cease to operate as there would be no means of compressing, processing, and transporting natural gas to market pipelines." *Id.* at 4, 5. WEG further claims that "there is no question that the Wolf Point Compressor Station is interrelated and adjacent to the Florida River Compression Facility" because gas from Wolf Point flows to Florida River. *Id.* at 5.

### ANALYSIS

#### A. EPA Legal Standard For Aggregating Activities.

EPA's PSD regulations define "stationary source" as "any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant." *Supra* at 3; 40 C.F.R. § 51.166(b)(5). The terms "building," "structure," "facility," or "installation" are defined to include the familiar three-part test for aggregation:

[A]ll of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel.



40 C.F.R. § 51.166(b)(6). The Title V permitting regulations identify the same three factors.

40 C.F.R. § 71.2. All three factors must be satisfied for EPA to aggregate the Florida River plant with BP-operated wells and/or the Wolf Point compressor station.

In addition to these three aggregation factors in the regulations, EPA expressly adopted the limits placed upon its ability to aggregate pollutant-emitting activities established by the court in Alabama Power Company v. Costle, 636 F.2d 323 (D.C. Cir. 1980):

In EPA's view, the December opinion of the court in Alabama Power sets the following boundaries on the definition for PSD purposes of the component terms of 'source': (1) it must carry out reasonably the purposes of PSD; (2) it must approximate a common sense notion of 'plant'; and (3) it must avoid aggregating pollutant-emitting activities that as a group would not fit within the ordinary meaning of 'building,' 'structure,' 'facility,' or 'installation.'

45 Fed. Reg. at 52694-95. Those additional limits imposed by Alabama Power and adopted by EPA cannot be exceeded even when the three regulatory factors are satisfied. The EPA aggregation standard has remained the same since 1980.

B. The Florida River Plant, The Wolf Point Compressor Station, And BP-Operated Wells Are Not On "Contiguous Or Adjacent Properties."

The common dictionary definition of "adjacent" is "near or close; next to or contiguous." See Random House College Dictionary 17 (rev. ed. 1988). Since "contiguous" generally means "touching," and none of the BP-operated wells have surface sites actually touching the boundary of the Plant, we focus on whether any of the BP-operated wells is "adjacent" to the Plant.

WEG's assertions made in its comments on the draft renewal permit for Florida River bear no relationship whatsoever to the common definition of "adjacent." According to WEG, "[t]he fact that BP's producing coalbed methane wells are all located primarily within La Plata County strongly indicates these pollutant emitting activities are adjacent to the Florida River Compression facility for PSD purposes." WEG comments at 5. The fact that many of BP's NSJB wells are located in La Plata County does not mean they are "adjacent." La Plata County

covers 1692 square miles or nearly 1.1 million acres. See La Plata County Comprehensive Plan. Wells that happen to be co-located within such a large area cannot reasonably be said to be “near or close” to one another. Moreover, WEG says nothing of the (i) vast, intermingled surface and mineral estates throughout the NSJB that separate BP-operated wells, Florida River and Wolf Point or (ii) COGCC spacing orders that dictate the wells’ proximity to each other. Supra at 7-10. Any assertion of adjacency that fails to take these important spatial attributes into account should be rejected as mere argument, and wholly lacking in factual and analytical support.

1. Florida River and Wolf Point are not on contiguous or adjacent properties.

The facts described supra at 7-8, 12-13 are dispositive in showing that Florida River is not adjacent to Wolf Point. Wolf Point is approximately 4½ miles and a 20 minute drive away from Florida River. Wolf Point is located on Tribal lands while Florida River is located on fee lands. There are many intervening surface and mineral properties between the two facilities, and as the photos attached in Exhibit X show, Florida River is not readily visible from Wolf Point. These two facilities are simply not on “adjacent properties” within the plain meaning of that term.

2. Florida River and BP-operated wells are not on contiguous or adjacent properties.

Many of BP’s wells are located a significant distance (up to 18 miles) from Florida River, and so they are not “near or close.” Nor are BP-operated wells and Florida River located on “contiguous or adjacent properties.” BP-operated wells are (i) located on surface lands owned by scores of different public and private landowners and (ii) drilled into mineral estates leased by BP from a vast number of different mineral owners. Supra at 7-11. Maps of surface use agreements and oil and gas leases on lands near Florida River collectively show dozens of different surface use and oil and gas lease agreements. See Exhibits I and J. For the 600 square

mile NSJB field or the more expansive La Plata County area (which WEG uses to define contiguous or adjacent, supra at 14-15), there is an exponential increase in the numbers of surface and mineral estate owners and agreements covering the many properties that separate wells and CDPs by great distances in this wide open, western landscape. Those intervening, separately-owned estates render it impossible for the many individual, widely dispersed wells located on small operating pads to be considered located on "adjacent properties" within the plain meaning of that phrase.

A small handful of BP-operated wells are within sight of Florida River. Their location does not, however, mean they can or should be aggregated with the Plant for CAA permitting purposes. Those BP-operated wells closest to Florida River are depicted on Exhibit O, and are located within the ½ mile line depicted on that map. As discussed supra at 10, several of these wells pre-date the Plant, while others were drilled more than two decades after the Plant was built. Their proximity to the Plant is a function of spacing, surface owner preferences, and other factors, rather than distance from (or relationship to) the Plant. They are no more adjacent to the Plant than other wells much further removed, and should therefore not be aggregated with it. And even if EPA were to decide that these closest BP-operated wells (within ½ mile) are sufficiently "adjacent" to Florida River, there is still no basis for aggregating such wells with the Plant, because (i) together they do not fit within the "common sense notion of a plant," (ii) their aggregation would not reasonably advance the purposes of PSD, and (iii) aggregating those wells with Florida River would be an arbitrary and capricious departure from EPA's and Colorado's longstanding practice.<sup>18</sup>

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<sup>18</sup> EPA cannot aggregate Florida River, Wolf Point, and BP-operated wells because the facilities are not on contiguous or adjacent properties and EPA cannot aggregate facilities when any of the three elements are missing. Consequently, it is not necessary to address the other elements of (i) common ownership and control and (ii) the standard industrial classification code. With respect to those other factors, the Tribe has a substantial interest in

C. Florida River, BP-Operated Wells, And Wolf Point Do Not Meet The Common Sense Notion Of A Plant.

Even if WEG could successfully show that Florida River, BP-operated wells, and Wolf Point satisfy the three part aggregation standard, WEG must additionally show that aggregating those facilities meets the “common sense notion of a plant.” Florida River, BP-operated wells, and Wolf Point, if aggregated in any combination, do not meet the common sense notion of a plant within the oil and gas industries.

BP’s Florida River, Red Cedar’s Arkansas Loop, and Williams’ Milagro are frequently referred to as “plants” by their respective operators, regulatory agencies, and even the courts.<sup>19</sup> That is the common sense notion of those facilities.<sup>20</sup> Individual wells or groups of wells which may flow to any of those plants are not referred to as “plants” and are not referred to as an integral part of those three plants, i.e., that is not the common sense notion among knowledgeable professionals in the industry or the agencies which primarily regulate the industry. Wells which flow to Florida River or other plants in the area are routinely bought and sold, yet those purchases and sales of wells have no bearing on Florida River, again indicating they are not part of the same plant. Indeed, some wells were drilled before Florida River was built, some wells are electrified while other wells are gas-fired, some wells produce gas from conventional formations, while other wells produce coalbed methane. All wells are permitted under a separate regulatory scheme involving individual applications for permits to drill granted by the COGCC and subject to mandatory spacing orders.

---

many BP-operated wells and those wells are on land and minerals owned by many different entities. Florida River, Wolf Point, and BP-operated wells all have the same SIC code.

<sup>19</sup> See, e.g., Williams Production Co., MMS-02-0007 (2004) (Minerals Management Service referring to “Milagro Plant”); Amoco Production Co. v. Watson, 410 F.3d 722, 727, 730 (D.C. Cir. 2005), aff’d, 127 S.Ct. 638 (2006) (referring to San Juan Basin facilities for removing excess CO<sub>2</sub> as “treatment plants”).

<sup>20</sup> The agreement between BP and Red Cedar confirms that common sense notion of a plant. The agreement defines “plant” to mean “one or more of the amine-treating plants that Red Cedar owns, operates, or has contractual rights to deliver gas to be treated for the removal of CO<sub>2</sub>, and that are used by Red Cedar to provide services to Producer under this Agreement.” Exhibit V at 5.

Nor does BP treat wells that it operates and Florida River as a single plant. There are completely separate groups of BP employees responsible for (i) drilling and well maintenance and operation and (ii) Florida River operations. The only tie between Florida River and the wells is that there is a connecting pipeline which, depending on the location of the wells and the flow of the gas, may or may not be owned by BP. Moreover, if a mere connecting pipeline were the test, then the gas infrastructure across the entire western United States would be considered a single "plant," given the flow of most NSJB gas to Southern California. It is telling that EPA has never treated BP-operated wells and Florida River as a "plant."

BP-operated wells closest to Florida River also would not comport with the common sense notion of a plant, if aggregated with the Plant for permitting. The locations of those wells were dictated by spacing orders, the preference of surface landowners, topography, and other conflicting uses. Supra at 10-11. The locations of those wells closest to Florida River have nothing to do with the proximity of Florida River. Of the ten wells closest to Florida River, three were drilled even before Florida River was built. Supra at 10. Wells drilled before Florida River was built cannot be part of the same plant. The ten closest wells rely on different fuel sources (four are electrified while six are natural gas-fired), which also tends to indicate they are not all part of the same plant. The three most recent wells were drilled on a single pad north of Florida River. Those wells were drilled on a single pad to satisfy COGCC orders and the La Plata County MOU. Supra at 10. The surface location of the single pad was driven by conflicts with property lines and terrain in other locations. Id. The proximity of the well pad and pumpjacks for several of the most recent wells do not even reflect the downhole location of the wells because the wells were directionally drilled. Supra at 10-11 (e.g., Jefferries GU A#3 directionally drilled 1500' to the north to avoid potential conflicts with a new house being built).

Thus, these locations are not related to Florida River, do not suggest they are part of a single plant, and therefore they should not and cannot properly be aggregated.

Wolf Point and Florida River also do not satisfy the common sense notion of a plant when evaluated for possible aggregation. WEG's claim is that Wolf Point should be aggregated with Florida River because Wolf Point gas flows to Florida River. The fact that gas may flow from one compressor to another or to some other facility can be said of virtually any oil and gas operation across the West, if not the entire country. Such flow does not suggest the existence of a single "plant." Wolf Point gas can flow back and forth with Red Cedar's Bondad station, and Wolf Point gas can flow to Red Cedar's Outlaw station. Wolf Point is also interconnected with the Williams facilities. Supra at 12. Such dynamic and variable gas flow does not comport with the common sense notion of a single plant.

Other factors also show that Florida River and Wolf Point are not the same plant. Florida River was built 15 years before Wolf Point. Florida River and Wolf Point are physically far removed from each other. Supra at 13. Separate teams of BP personnel operate and maintain the Florida River and Wolf Point facilities, respectively. And EPA has never sought to aggregate Wolf Point with Florida River in any prior permitting or inspection decisions for those facilities. Florida River and Wolf Point are two widely separated and distinct facilities which should not now be aggregated for Title V or PSD permitting purposes.<sup>21</sup>

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<sup>21</sup> EPA concluded in its 1980 rulemaking that an additional boundary established by Alabama Power is that the agency also "must avoid aggregating pollutant-emitting activities that as a group would not fit within the ordinary meaning of 'building,' 'structure,' 'facility,' or 'installation.'" 45 Fed. Reg. at 52694-95. Florida River, BP-operated wells, and Wolf Point can no more fit within the ordinary meaning of those terms than they could constitute the "common sense notion of a plant."

D. Aggregating Florida River, Wolf Point, And Numerous Wells Would Not Reasonably Advance The Purposes Of PSD.

According to both EPA and the court in Alabama Power, the determination of a source that involves aggregation "must carry out reasonably the purposes of PSD." 42 Fed. Reg. at 52694-95. The primary purpose of the PSD program is to address major new sources of air pollutants in nonattainment areas in order to maintain air quality within applicable increments. The program is not focused upon long pre-existing sources that have been duly permitted and inspected, like Florida River and Wolf Point.

Aggregating Florida River, BP-operated wells, and/or Wolf Point would not "carry out reasonably the purposes of PSD" because there would be no appreciable environmental benefit, and trying to treat these long-established and properly permitted sources as if they were new major sources triggering PSD creates far more problems than it could possibly solve. That is because all of the sources being evaluated for source determination purposes as a result of WEG's comments are already subject to numerous federal, state, and local requirements which effectively control their emissions of air pollutants, in furtherance of the CAA. These include NSPS and NESHAP program standards, as well as state-only requirements adopted very recently under Colorado AQCC Regulations 3 and 7. Such pre-existing control requirements very likely meet or exceed the BACT controls that would be required if these widely dispersed and disparate sources were aggregated for PSD and Title V purposes, so the benefits of such aggregation would be negligible, at best.

WEG-style aggregation in this circumstance would also cause significant practical problems. Permit issuance and administration for EPA would become far more burdensome and complex because permits would be in a constant state of revision, to accommodate each new well or rework, for example, and far more PSD permits would be required. Lead times for such

permits could only get longer, and they are already the longest of any category of CAA permit currently required, for which the PSD/NSR program is often criticized. Such a permitting scheme could even have adverse environmental impacts because it would discourage discrete facility upgrades, and it would discourage investment in this type of energy production due to the significant additional delays and uncertainties in project permitting that it would cause. In short, aggregating sources as WEG has advocated would not "reasonably carry out the purposes of PSD," and should therefore be rejected by EPA.

E. Functional Interdependence Is Not An Element Of The Proximity Factor.

WEG repeatedly claims that BP-operated wells and the Wolf Point compressor station must be aggregated with Florida River because they "have a functional interrelationship with the Florida River Compression Facility." WEG comments at 2-6. EPA's aggregation regulations do not refer to functional interrelationships or interdependence as a factor to consider in determining whether activities should be aggregated. Supra at 15-16. To the contrary, EPA considered and rejected "any assessment of functional interrelationships" in its 1980 PSD rulemaking because it would "have made administration of the definition substantially more difficult" and "embroiled the agency in numerous fine-grained analyses." 45 Fed. Reg. at 52695. EPA's only reference to functional interdependence in the preamble is specific to how SIC major group codes may be applied when considering sources with different SIC major codes, but that appear to have some form of functional interdependence. Id. EPA's entire discussion of primary and support facilities, i.e., functional interrelationships between stationary sources, in the 1980 preamble is confined to how CAA permitting authorities are to evaluate the industrial grouping factor through the application of SIC major group codes. There is nothing in the 1980 preamble providing that a support facility analysis should override or relate in any way to the separate requirement that sources be "contiguous or adjacent." Given the agency's decision to reject



interrelatedness in its 1980 preamble and EPA's recent reaffirmation that the 1980 preamble controls source determinations, supra at 23 and n.8, EPA could not now consider interrelatedness as a factor without engaging in new rulemaking.<sup>22</sup> Notwithstanding that significant limitation, WEG's claimed interdependence rationale is, in all events, wrong, and not a basis for the aggregation of sources (i) that are not also contiguous or adjacent and (ii) which together do not meet the "common sense notion of a plant."

F. Aggregating Florida River With BP-Operated Wells Or Wolf Point Would Be Arbitrary And Capricious.

EPA's aggregation standard is settled law. The standard has been litigated in Alabama Power and EPA accepted those limitations imposed by the court's decision in the 1980 preamble. 45 Fed. Reg. at 52694-95. The standard has remained unchanged for nearly 30 years and has governed EPA's and/or Colorado's multiple permit, renewal, and inspection/enforcement decisions issued for Florida River and Wolf Point facilities during that time. There is no doubt that when EPA rendered its permitting decisions, the agency understood BP's infrastructure in the NSJB and how BP's gas flowed. BP discussed the Florida River infrastructure with 30-40 EPA Region VIII representatives at an extended meeting on oil and gas in the context of aggregation. Supra at 5. That presentation comprehensively showed how BP's gas flowed in the NSJB. Yet based on the same aggregation standard currently in place and EPA's knowledge of BP's facilities in the context of aggregation, EPA never sought to aggregate any gas wells with Florida River and did not seek to aggregate Florida River with Wolf Point. EPA cannot now change its position without adopting a new aggregation standard or providing a rational basis for departing from its past permitting decisions. There is no new standard and there is no rational

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<sup>22</sup> See, e.g., Paralyzed Veterans of America v. D.G. Arena L.P., 117 F.3d 579, 586 (1997) ("Once an agency gives its regulation an interpretation, it can only change that interpretation as it would formally modify the regulation itself: through the process of notice and comment rule-making.").

basis for now seeking to aggregate Florida River with wells or Wolf Point when the aggregation standard remains unchanged. The only change over time has been that BP, Red Cedar, and other companies have constructed additional infrastructure to allow gas to flow in more directions, which only further confirms and supports EPA's prior decisions not to aggregate Florida River with other facilities.

### CONCLUSION

BP appreciates the opportunity to provide these supplemental comments and the attached factual information to EPA Region VIII in connection with issuance of a renewal Title V operating permit for Florida River. We felt that providing thorough coverage of the issues and the pertinent background materials was necessary given the complexity of the underlying facts. We respectfully request EPA to reject WEG's definition of "adjacent" and characterization of the "common sense notion of a plant." WEG's suggested source aggregation would, among other things, run afoul of Alabama Power by applying an "unreasonable literal application" of what may constitute a "building, structure, facility or installation." We urge EPA to reject WEG's assertions and issue a renewal operating permit for Florida River that does not include BP-operated wells or the Wolf Point CDP as covered sources.



# SOUTHERN UTE INDIAN TRIBE

January 13, 2010

Claudia Smith  
Part 71 Permit Contact  
U.S. Environmental Protection Agency, Region 8  
1595 Wynkoop Street (8P-AR)  
Denver, Colorado 80202


**Re: BP America Production Company Florida River Compression Facility  
Proposed Title V Permit No. V-SU-0022-05.00**

Dear Ms. Smith:

I am writing to express the support of the Southern Ute Indian Tribe for the issuance of the above-referenced proposed Title V permit. The Florida River Compression Facility is an important facility for the processing of coal bed methane gas produced on the Southern Ute Indian Reservation, including gas in which the Tribe has a beneficial ownership interest. In considering the proposed permit, our staff and legal counsel have reviewed BP's Renewal Application, EPA's Statement of Basis for Draft 1<sup>st</sup> Renewal Permit, EPA's draft proposed permit, as well as the comments on the draft proposed permit submitted by Rocky Mountain Clean Air Action, and BP's response to RMCAA's comments.

Based on that review, we believe that issuance of the proposed permit would be in compliance with applicable Clean Air Act requirements, and we urge EPA to issue the permit. The Tribe specifically concurs with BP's position that emissions of the Florida Facility are properly not aggregated with emissions from other BP facilities and wells on the Reservation because the Florida Facility is not contiguous with or adjacent to those other sources and they do not together constitute a plant, facility or installation.

Sincerely,

  
Matthew J. Box, Tribal Chairman  
Southern Ute Indian Tribal Council



P. O. BOX 1492  
EL PASO, TEXAS 79978  
PHONE: 915-541-2600

May 19, 1993

RECEIVED

MAY 20 1993

Mr. Jim Geier  
Permit Chief  
Stationary Source Program (APCD-SS-B1)  
Colorado Department of Health  
4300 Cherry Creek Drive South  
Denver, Colorado 80222-153

AIR POLLUTION DIVISION  
STATIONARY SOURCES PROGRAM

Reference: Minor Source Permit Application for Additional Compression at El Paso Natural Gas Company's Florida River Station in La Plata County

Dear Mr. Geier:

Please find enclosed with this letter one copy of an application to install 4,329 additional site horsepower at our existing Florida River Station (90LP014-1). Also please find check #4017 for \$75.00, the APEN fee for the new source.

Because of weather constraints, El Paso Natural Gas needs to start construction sometime in September or sooner if the permitting process can be expedited. If you have any questions or need additional information, please give me a call at 915/541-5341. Thank you.

Sincerely yours,

Loren E. Gearhart, P.E.  
Principal Environmental Engineer  
Environmental Affairs Department

Attachments

:leg

cc: P. L. Baca w/o attachments  
R. A. Duarte w/o attachments  
D. M. Kelsey w/o attachments  
J. M. Peters w/o attachments  
R. I. Trevino  
Skip George  
Henry Van w/o attachments  
File: 5228(air)

EXHIBIT B

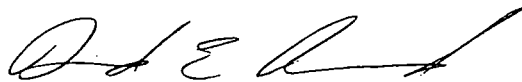
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# **Permit Application El Paso Natural Gas Company Florida River Compressor Station Durango, Colorado**

**For**

**El Paso Natural Gas Company**

*For PILKO & ASSOCIATES, INC.*



David E. Downard, P.E.

(3022/104885.00)  
Revision 0

May 1993  
05/17/93

**Headquarters:**  
2707 North Loop West  
Suite 900  
Houston, TX 77008  
(713) 861-1417

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6351 Owensmouth Avenue  
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(818) 716-9311

**East Coast Office:**  
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Cherry Hill, NJ 08054  
(609) 795-9696

**Midwest Office:**  
333 West Wacker Drive  
Suite 700  
Chicago, IL 60606  
(312) 440-2015

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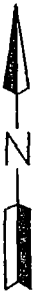
<b>2.0-A</b>	<b>EMISSION SUMMARY</b>	<b>2-1</b>
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## 1.0 INTRODUCTION

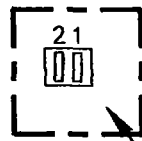
El Paso Natural Gas (EPNG) is proposing the installation of one additional 4329 Site hp Solar Centaur H turbine. The turbine will be owned and operated by EPNG and will be located on 0.9 acres of land leased from Amoco Production Company (Amoco) within Amoco's POD-1 facility. EPNG will be compressing area coal seam gas for transportation through EPNG pipelines. The turbine will operate 24 hours per day, 365 days per year, and increase the pressure of 50 MMSCF per day of coal seam gas by 500 psi. A plot plan and location map for the EPNG facility are shown on Figures 1.0-A and 1.0-B, respectively.

The proposed additional EPNG turbine will be fired by natural gas which contains no fuel-bound nitrogen and only traces of sulfur compounds. The proposed turbine will emit a total of 100.7 tons per year of nitrogen oxides, 20.2 tons per year of carbon monoxide, 0.3 tons per year of sulfur dioxide, 0.9 tons per year of particulates (as PM<sub>10</sub>), and 7.2 tons per year of volatile organic compounds (VOCs). The proposed EPNG facility is not listed as one of the 28 processes subject to 40 CFR 52 § 52.21(b)(1)(i)(a), which requires a Prevention of Significant Deterioration (PSD) review when pollutants are emitted in quantities greater than 100 tons per year. A PSD review for this project could be required for facilities with emissions greater than 250 tons per year of SO<sub>2</sub>, NO<sub>x</sub>, or CO (15 tons per year of PM<sub>10</sub>). A PSD review will not be necessary for this permit application. A PSD review for this specific site would be required under specific Condition Number 10 of Emission Permit Number 90LPO14-1 should the total emissions from the existing turbine and the proposed turbine exceed PSD limits. The total emissions are detailed in Table 2.0-A, Emission Summary. None of the listed criteria pollutants exceed the 250-ton per year threshold, and as such, PSD review does not apply.



AMOCO  
POD-1  
FACILITY

EPNG BOOSTER  
COMPRESSORS



EPNG  
COMPRESSOR  
STATION

LEGEND

RED - PROPOSED

NOTE: NOT TO SCALE

FIGURE 1.0-A  
EL PASO NATURAL GAS  
COMPANY  
FLORIDA COMPRESSOR STATION  
PLOT PLAN  
PILKO & ASSOCIATES, INC.

ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII

In re	)	
	)	
BP AMERICA PRODUCTION COMPANY	)	AFFIDAVIT OF
FLORIDA RIVER COMPRESSION FACILITY	)	GORDON REID SMITH
AIR POLLUTION CONTROL	)	
TITLE V PERMIT TO OPERATE	)	
V-SU-0022-05.00	)	

STATE OF TEXAS            )  
                                  ) ss.  
COUNTY OF HARRIS        )

Gordon Reid Smith, being duly sworn, deposes and states as follows:

1. I am the Senior GHG Management Advisor for BP. Prior to taking this position about two years ago I was the Senior Environmental Advisor for BP's North America Gas and had oversight for air quality compliance; strategy; advocacy; and technical advice, analysis, and research. In 2000 I was the environmental team leader with air quality oversight responsibilities for facilities in the Durango, Colorado area.

2. Beginning on September 25, 2000, the Environmental Protection Agency ("EPA") hosted a day and a half meeting entitled "Gas Field Training - Energy and Production Air Quality Issues." The meeting provided EPA with information how BP and the oil and gas industry in general conduct oil and gas exploration, production, and processing operations so that EPA could better understand the oil and gas business and properly exercise its legal authority to protect air resources.

3. Participants at the meeting from BP included myself, Dave Brown of BP, Jeffrey Panek and James McCarthy of Gas Technology Institute, and Doug Blewitt, an air consultant. The EPA team was headed up by EPA's Catherine Collins and included virtually everyone from EPA Region 8 with significant air responsibilities. My recollection is that approximately 30-40 EPA employees from all the relevant EPA branches (e.g., permit writing, enforcement) attended the meeting.

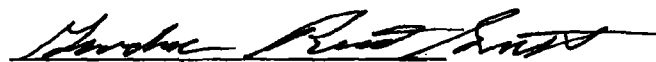
4. The first day of the meeting was a full day (8:30-4:30) of presentations by myself and others on oil and gas operations, including well site considerations (e.g., spacing), production, facilities such as compressors, and air permitting for oil and gas equipment and facilities.

5. BP's presentation included a detailed discussion of how gas produced from BP operated wells flowed (i) to various compressors; (ii) through different gathering lines; (iii) to various third party plants and the BP Florida River plant; and (iv) ultimately

to various interstate pipelines. Powerpoint slides from the meeting, including the detailed gas flowchart for BP operated wells and Florida River, are attached as Tab 1. An important purpose of providing the flowchart and similar materials was to (i) provide EPA with an understanding of the exploration and production side of the oil and gas industry with respect to aggregation and (ii) illustrate why aggregation would not be workable for exploration and production operations.

6. In the years following the meeting BP went through various permitting processes for Florida River and other Durango area facilities. However, EPA did not seek to aggregate Florida River with wells or other facilities in the Northern San Juan Basin in any of those permitting processes.

Dated this 17<sup>th</sup> day of February, 2010.

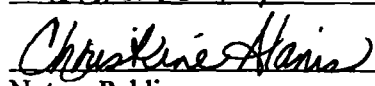
  
Gordon Reid Smith

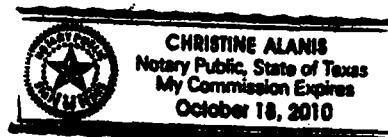
STATE OF TEXAS           )  
                                  ) ss.  
COUNTY OF HARRIS       )

The foregoing instrument was acknowledged before me this 17th day of February, 2010 by Gordon Reid Smith.

Witness my hand and official seal.

My commission expires:

October 18, 2010  
  
Notary Public



# **Introduction and Objectives**

**Catherine Collins  
USEPA Region VIII**

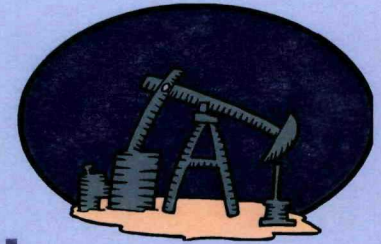
**And**

**Jeffrey Panek  
Gas Technology Institute**



# Objectives

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- Obtain an Understanding of Exploration and Production & Transmission and Distribution Activities
- Identify Sources of Air Pollutant Emissions Within Typical E&P/TS&D Operations
- Understand Typical Controls and Strategies to Reduce/Eliminate Air Emissions
- Define Regulated Activities and Understand The Need for Permit Flexibility



# Items To Be Covered

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- Overview of Natural Gas Production
- Exploration and Lease Agreements
- Natural Gas Properties and Measurement
- Well Life Cycle
- Production Phase
- Compressors and Other I/C Engines
- Gas Plant Operations
- Typical Air Emissions Sources
- Air Quality Regulations Pertaining to E&P and TS&D Activities
- Transmission and Distribution Overview



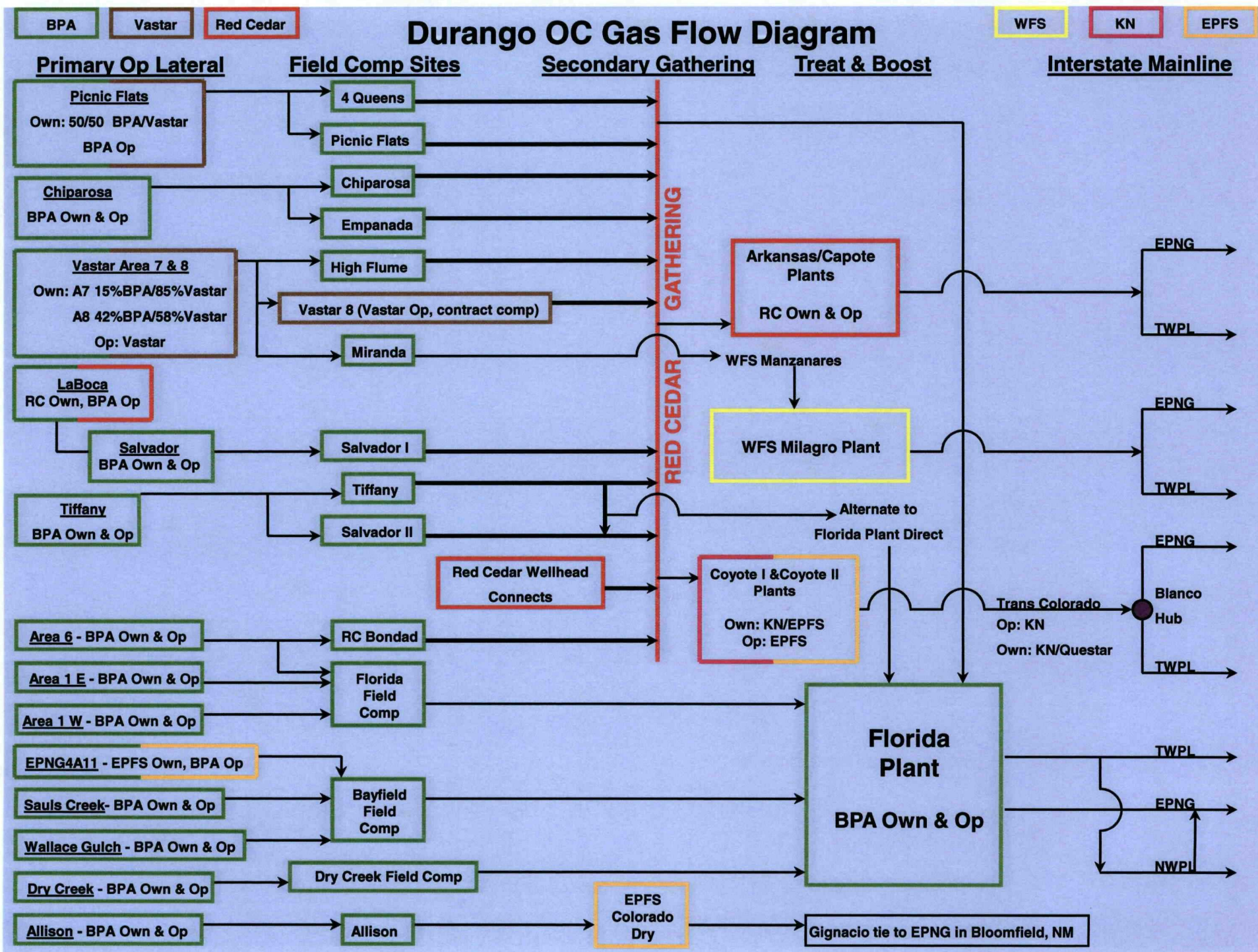
# Presenters and Contact Info.....

---

- **Jeff Panek – Gas Technology Institute - Chicago**  
Ph: (773) 399-8285  
Email: [jeffrey.panek@gastechnology.org](mailto:jeffrey.panek@gastechnology.org)
- **Jim McCarthy - GTI - Chicago**  
Ph: (773) 399-8174  
Email: [jim.mccarthy@gastechnology.org](mailto:jim.mccarthy@gastechnology.org)
- **Reid Smith – BP- Houston**  
(281) 366-7515
- **Dave Brown – BP- Denver**  
(303) - 830 - 3241



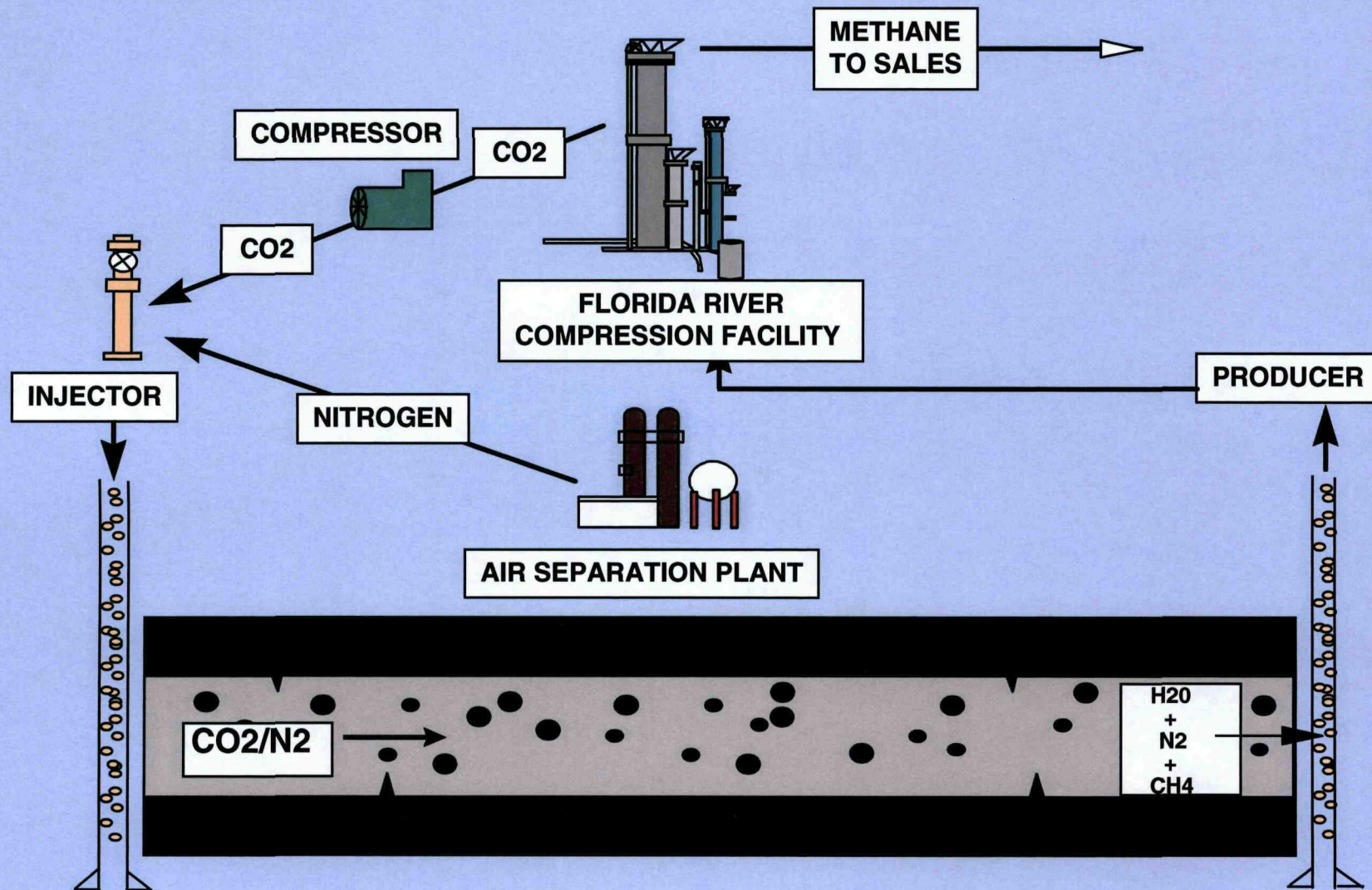






# BP Amoco

## *CO<sub>2</sub> Sequestration & N<sub>2</sub> ECBM Project*





# Well Siting Considerations

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- **Geology & Geotechnical**
- **Spacing**
- **Topography**
- **Environmental**
  - **Wildlife Restrictions**
  - **Proximity to Surface Water**
- **Public**
- **Accessibility**



# Gas Compression

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- **Reciprocating Internal Combustion Engines and Gas Turbines Used to Drive Compressors**
  - Increase pressure to move gas through the pipe
  - Reciprocating Internal Combustion Engines more typical in U.S.
    - Offer load flexibility
    - Excess capacity in interstate pipelines conducive to regular maintenance
    - Lack of excess capacity at gas plants requires operation
  - Some small turbines in use on mainline interstate natural gas pipelines where large, constant baseload exists







## **Pre-Construction Permitting Major Sources**

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- **Major Sources >250 Tons/year Which Are Not One of the Listed Sources Need a PSD Permit (e.g. Compressors)**
- **If Major Source >100 Tons/year & 1 of 28 Listed Sources, Need a PSD Permit (e.g. Sour Gas Sulfur Plants)**
- **In Theory Such a Permit Could Be Issued by State, Tribe or EPA (Most Likely State or EPA on Tribal Land)**



## Operating Permits

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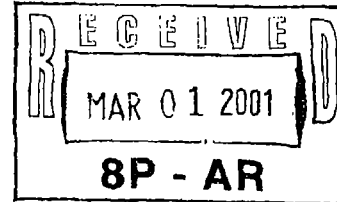
- **For Sources Having Emissions in Excess of 100 Tons/year a Part 70 or 71 Permit Is Required.**
- **Depending on the State Regulations or SIP, Operating Permits May Be Needed for Minor Sources**



BP America, Inc.  
Durango Operations Center  
380 Airport Rd.  
Durango, CO 81303

February 28, 2001

Colorado Department of Public Health and Environment  
Air Pollution Control Division  
OED-OPPI-A5  
4300 Cherry Creek Drive South  
Denver, Colorado 80246-1530  
Attention: Mr. Jim King



RE: Annual and Semi-Annual Certification Report; Florida River Compression Facility; Operating Permit No. 95OPLP004; La Plata County, Colorado

Dear Mr. King:

Please find attached the annual and semi-annual compliance certification for the turbines located at the subject compression facility. As you know, Amoco has assumed Title V compliance for the turbines from El Paso Natural Gas and is now submitting the certification. Attached are the annual and semi-annual certifications for the turbines located at Florida River Facility.

You should also be aware that we have filed a Title V Part 71 application with the EPA for the Florida River Facility. The application aggregates emissions of both the El Paso turbines and the Amoco equipment, since Amoco is now responsible for the turbines. Once the Part 71 permit has been issued, we will notify the Air Pollution Control Division to cancel both the Part 70 Title V permit for the turbines and the minor permits for the Amoco sources.

Should there be any additional questions, please feel free to contact me at (970) 247-6815.

Sincerely,

Kourtney Williams  
Environmental Coordinator

cc: Environmental Protection Agency  
Region 8  
999 18<sup>th</sup> Street  
Denver, CO 80202  
Attn: Ms. Cathleen Passer

EXHIBIT D



Colorado Department of Health  
Air Pollution Control Division  
INTER-OFFICE COMMUNICATION

TO: Dick Fox

DATE: February 28, 1989

FROM: Bob Jorgenson

SUBJECT: Final Approval Inspection  
Amoco Production Company,  
Salvador, Mayfield, Tiffany  
Lemon, Southern Ute  
Compressor Stations, Permit  
Number 88LP048  
(1,2,3,5,6,7,8,9,10)

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On February 15 and 16, 1989 I inspected these Amoco Production Company compressor stations in La Plata County: Salvador, Mayfield, Tiffany, Lemon, Southern Ute. The County number is 1300; the source numbers are as follows:

Salvador 88LP048 (1 and 2) Source #32 This site consists of two Ajax compressors, 88LP048 (1) 1-DPC 180 horsepower, Serial #77021 and 1-88LP048 (2), 1 DPC 280 horsepower, Serial #81112.

The permit conditions are virtually the same for each permit. Compliance is listed below:

1. No visible emissions were observed during my inspections.
2. The permit number was marked on the engines.
3. The serial numbers are listed above.
4. The engines are in compliance with the emission limits as best as could be determined.
5. In compliance.
6. No odors were observed during my inspections.
7. Construction is completed.

Final approval is recommended for these two permits.

Mayfield 88LP048 (3) Source #33

This site consists of a Caterpillar 415 horsepower engine with the following two numbers: Serial #72B01011 and AR #3N3371

There apparently is a discrepancy in the horsepower of this engine. The permit lists the horsepower as 300. I asked Dave Brown to confirm the horsepower prior to final approval. Permit condition compliance is listed below:

EXHIBIT E

Memorandum to  
Dick Fox  
February 28, 1989  
Page Two

1. No visible emissions were observed.
2. The permit number was marked on the engine.
3. The serial numbers are listed above.
4. The engines are in compliance with the emission limits as best as could be determined.
5. In compliance.
6. No odors were observed.
7. Construction is completed.

Final approval is recommended as soon as the horsepower discrepancy is cleared up.

Tiffany 88LP048 (5 and 6) Source #35

This site has two engines 88LP048 (5) one Ajax DCP-360 horsepower serial #80754, 88LP048 (6) one Ajax DCP 800 horsepower serial #82576.

The permit conditions are virtually identical for the two permits. Compliance is as is listed below:

1. There were no visible emissions during my inspections.
2. The permit number was marked on the engine.
3. The serial numbers are listed above.
4. The engines are in compliance with the emission limitations as best as could be determined.
5. In compliance.
6. No odors were observed during my inspection.
7. Construction is completed.

Final approval is recommended for permit 88LP048 (5 and 6).

Lemon 88LP048 (7 and 8) Source #36

This site consists of two engines: 88LP048 (7) one Ajax DPC 360 horsepower serial #80750 and 88LP048 (8) one Ajax DPC 540 horsepower serial # unknown; it was reported as 5402. The serial number could not be found on the second engine. The number 5402 is a number the owner and operator, Tidewater Company, has put on the engine. It is not on a nameplate on the engine. The

Memorandum to  
Dick Fox  
February 28, 1989  
Page Three

permit conditions are virtually identical for both engines and compliance status is found below:

1. There were no visible emissions during my inspections.
2. The permit number was marked on the engine.
3. The serial numbers are listed above; they were unavailable for one engine.
4. The engines are in compliance with the emission limitations as best as could be determined.
5. In compliance.
6. No odors were observed during my inspection.
7. Construction is completed.

Southern Ute 88LP048 (9 and 10) Source #37

This site has two engines which are described incorrectly in the permit. The description needs to be changed.

88LP048 (9) 1-Waukesha VRG 220, Serial #396351  
88LP048 (10) 1- Waukesha VRG-220 Serial #396325

The permit conditions for the two permits are virtually identical. Compliance status is listed below:

1. There were no visible emissions during my inspections.
2. The permit number was marked on the engine.
3. The serial numbers are listed below.
4. The engines are in compliance with the emission limitations as best as could be determined.
5. In compliance.
6. No odors were observed during my inspection.
7. Construction is completed.

Final approval is recommended once the description of the engines has been revised.

Memorandum to  
Dick Fox  
February 28, 1989  
Page Four

POD-1 (Florida River Compressor Station) 88LP048 (4) #Source #34

This permit should be removed from this number and placed with the other four compressor engines which have been permitted for this same site under permit number 88LP186 (1-4). In addition, this site is no longer known as the POD-1 site and the name should be changed to the Florida River Compressor Station. 88LP048 (4) 1- White Superior 8 GTLA Serial #287569. Compliance with the permit conditions is found below.

1. There were no visible emissions during my inspections.
2. The permit number was marked on the engine.
3. The serial numbers are listed above.
4. The engine is in compliance with the emission limitations as best as could be determined.
5. In compliance.
6. No odors were observed during my inspection.
7. Construction is completed.
8. There was no leakage of air contaminants prior to the control equipment.

Final approval should be issued for this permit once the name of the site has been changed and the permit number has been changed.

0202g/3-6

## BP AMERICA PRODUCTION CO – FLORIDA RIVER COMPRESSION FACILITY

**Inspection Date:** September 16 and 18, 2008  
**Inspection Report Date** July 30, 2009  
**EPA Representative:** Emilio Llamozas *EL*  
**Tribal Representative:** Mike King and Brenda Sakizzie  
**Company Representative:** Julie Best  
**Inspection Report Reviewed By:** Cindy Reynolds *CR*  
**Last Inspection:** October 7, 2004

---

**Permit Number:** V-SU-0022-00.04      **Replaces Permit No.:** V-SU-0022-00.03  
**Issue Date:** September 21, 2005  
**Effective Date:** September 21, 2005  
**Expiration Date:** June 5, 2006

### I. Source Identification and Unit-Specific Information

#### I.A. General Source Information

**Parent Company name:** BP America Production Company  
**Plant Name:** Florida River Compression Facility  
**Plant Mailing Address:** 380 Airport Road, Durango, CO 81303  
**Plant Location:** SE 1/4, SW1/4 of Section 25, T34N, R9W  
**Region:** 8      **State:** Colorado      **County:** La Plata  
**Reservation:** Southern Ute      **Tribes:** Southern Ute  
**Company Contact:** Julie Best      **Phone:** 970-375-7540  
**Responsible Official:** Kourtney K. Hadrick      **Phone:** 970-375-5705  
**Tribal Contact:** James Temte      **Phone:** 970-563-4705  
**SIC Code:** 1311  
**AFS Plant Identification Number:** 08-067-00034  
**AIRS Class:** A  
**Regulations:** Part 71 Title V, Synthetic Minor for PSD, and NSPS GG

**Other Clean Air Act Permits:** No other Federal Clean Air Act Permits

**Compliance Assistance:** Since the peaker engines serial numbers observed in the field did not match the serial numbers in the permit, we asked the facility to update the serial numbers in their Title V permit.

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**Summary of Enforcement Actions:**

There has been no enforcement action in past 5 years at this facility.

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**Compliance Status:**

The following violations were noted at the facility:

- BP America replaced/overhauled the engine component (gas compressor module, power turbine module and the accessory drive) of turbine A-02 the week of May 25, 2008. BP America did not submit to EPA Region 8 an off permit change letter for the replacement/overhaul of the engine component for turbine A-02 as required by section IV. R Off Permit Changes 4 and 7.
- The peaker engine serial numbers observed in the field did not match the serial numbers listed in the permit. BP America stated that they have not replaced any of the peaker engines and that a possible explanation of why the serial numbers are different is that the wrong serial numbers were supplied in the Title V application
- The inlet temperature and pressure drop catalyst data for the peaker engines was requested from November 2004 to the present. BP conducted an extensive investigation into EPA's request; however, BP America found that some of the inlet temperatures and pressure drops data for the peaker engine catalysts were potentially corrupted and missing. BP provided the data they collected during the investigation.

**Description of Process:**

The Florida River Compression Facility processes coal bed methane gas in order to reduce CO<sub>2</sub> and water content to within pipeline specifications and compresses this gas for delivery into interstate pipelines. The plant has four medium pressure gas inlets (Area 6, ECBM, MPP, Red Cedar) and two low pressure gas inlets (Area 1 East, Area West). Current plant throughput averages around 380 million standard cubic feet per day (MMscfd) with plant process capacity around 400 MMscfd. Low pressure gas (about 105 MMscfd) enters the plant through an inlet separator to remove free liquids after which it is compressed from 50 to 300 psig. Initial compression of low pressure gas is done by two electric driven, ammonia refrigerated screw compressors and two electric driven reciprocating compressors.

About 20 MMscfd of the low pressure gas is then commingled with medium pressure gas and treated by methyl-di-ethanol-amine (MDEA) sweetening to remove CO<sub>2</sub>, followed by triethylene glycol (TEG) dehydration to remove water vapor from the gas. The low pressure gas bypassing amine mixes with amine treated gas in the dehydration header such that all gas is blended and identical going to the three dehydrators. The CO<sub>2</sub> and water vapor are vented to the atmosphere. The gas is then compressed to 800 psig and sent to El Paso, Transwestern or Northwest Pipeline for transport to market via interstate pipeline.

Gas from Area 6, ECBM and Red Cedar (about 75 MMscfd) enters the plant at 300 psig, goes directly to the treating processes and is then compressed to 800 psig and sent to market. Gas from the medium pressure pipeline enters the plant already low in CO<sub>2</sub> and previously dried at upstream compression. It is commingled with the processed gas and compressed for transport via pipeline.

The treating processes include two MDEA trains to remove CO<sub>2</sub> and three (TEG) dehydration units. Gas fired heaters are utilized to heat ethylene glycol (EG) which is used as the heat medium to generate lean MDEA from CO<sub>2</sub> saturated (rich) MDEA and for heating some tanks in the plant. The dehydrators are fired on natural gas to evaporate water from rich TEG. Post treatment compression consists of three electric driven centrifugal compressors, two "temporary" electric driven reciprocating compressors and two natural gas fired Solar Centaur turbine driven centrifugal compressors.

The plant is equipped with a ground flare "candle" system to combust gases that for various reasons cannot be sent to market. The flare system disposes of a minimum of about 100,000 scfd, but is designed to handle the full inlet for a very brief time in an emergency or plant upset situations.

Twelve 2922 hp diesel fired generator sets were installed at the plant in 2004 for the purpose of reducing plant electric load during times of monthly peak electrical grid load; which has the effect of significantly reducing the plant's electrical bill. Due to the infrequency of use combined with use of selective catalytic reduction for NO<sub>x</sub> control, the emissions impact from these generators is minimal.

Current pigging operations include four receivers with varying diameters: two 16 inch, two 12 inch, one 10 inch, and one 8 inch, each about 6 feet long and operated at about 50 psi. Pigging operations occur once per month on average, totaling about 322 cubic feet at 50 psi.

The potential to emit for the facility as a whole are as follows:

Nitrogen Oxides (NO<sub>x</sub>) – 282.07 tpy  
Carbon Monoxide (CO) – 181.94 tpy  
Volatile Organic Compounds (VOC) – 30.27 tpy  
Small Particulates (PM<sub>10</sub>) – 7.95 tpy  
Sulfur Dioxide (SO<sub>2</sub>) – 24.23 tpy  
Total Hazardous Air Pollutants (HAPs) – 4.14 tpy  
Largest Single HAP (formaldehyde, CH<sub>2</sub>O) – 1.20 tpy

#### **General Inspection Observations and Commentary:**

On September 16, 2008 Hans Buenning, Laurie Ostrand and I from EPA and Southern Ute air quality specialists, Mike King and Brenda Sakizzie, met with BP America at the Southern Ute Environmental office in Ignacio. Representing BP America was Julie Best. After meeting at the Southern Ute Environmental Office we inspected different BP America compressor stations. On September 18, 2008 we looked at the records at the BP America main offices.

#### **Opening Meeting –**

- We stated that the purpose of this inspection was to evaluate compliance with the Title V permit.

- We asked BP America if we could walk through the facility and then indicated that we would like to check their records.
  - Annual compliance certifications and emission inventories
  - Replacement engine notifications to the EPA
  - Engine maintenance logs
  - Daily average gas throughput
  - Pressure and sources of inlet gas
  - Pressure and sources of outlet gas
- We also informed them that we would like to have them walk us through how they estimate their annual actual emissions.
- Before entering the Florida River Compression Facility we watched the safety video for the plant. After watching the safety video we took an exam to make sure we understood the safety rules for the facility.

**Walk Through Inspection Observations –**

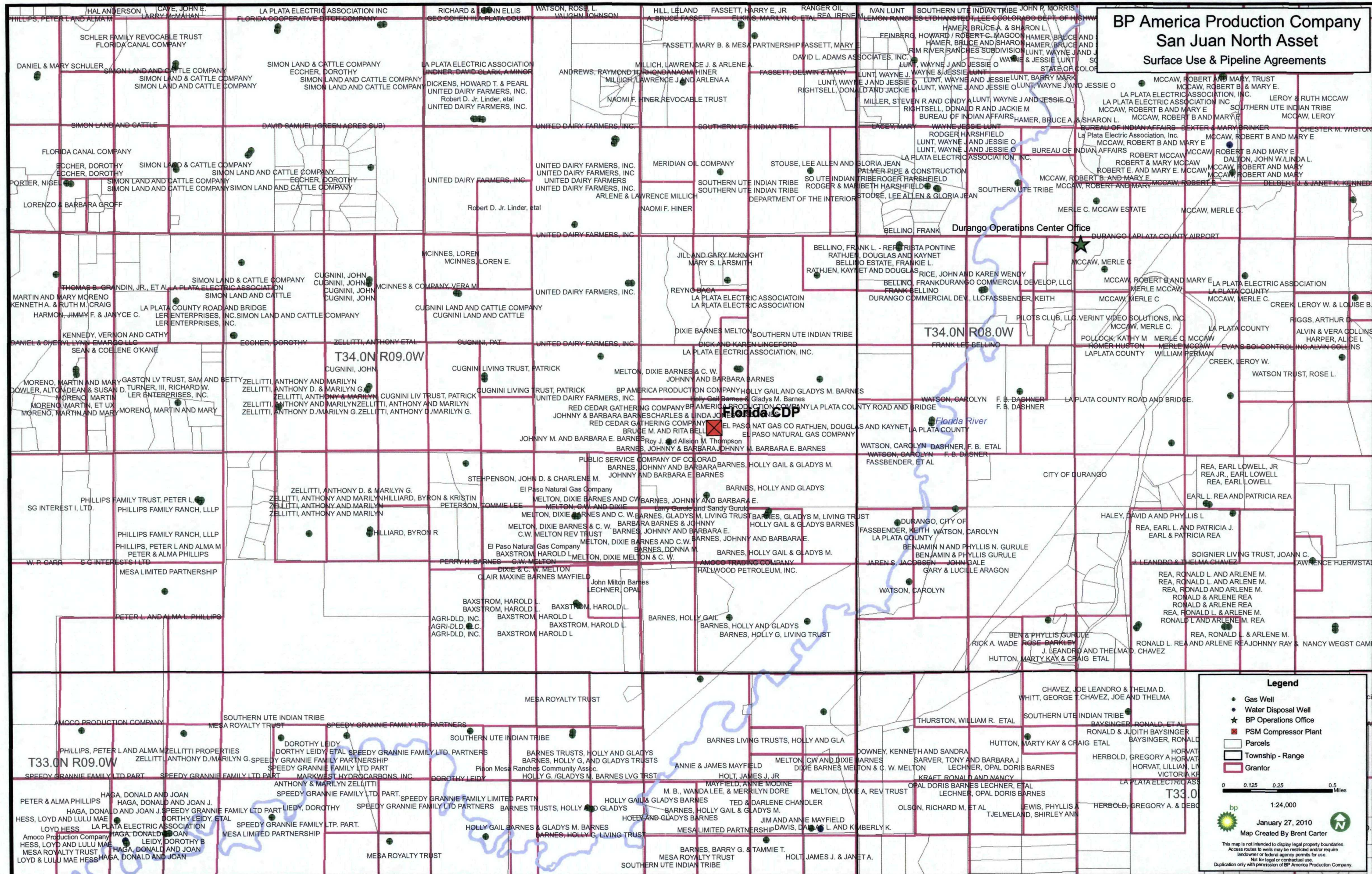
Upon entering the facility we did not observe any visible emissions. We arrived at the facility at 4:22 pm and toured the facility.







**BP America Production Company**  
**San Juan North Asset**  
**Surface Use & Pipeline Agreements**



**Legend**

- Gas Well
- Water Disposal Well
- BP Operations Office
- PSM Compressor Plant
- Parcels
- Township - Range
- Grantor

0 0.125 0.25 0.5 Miles

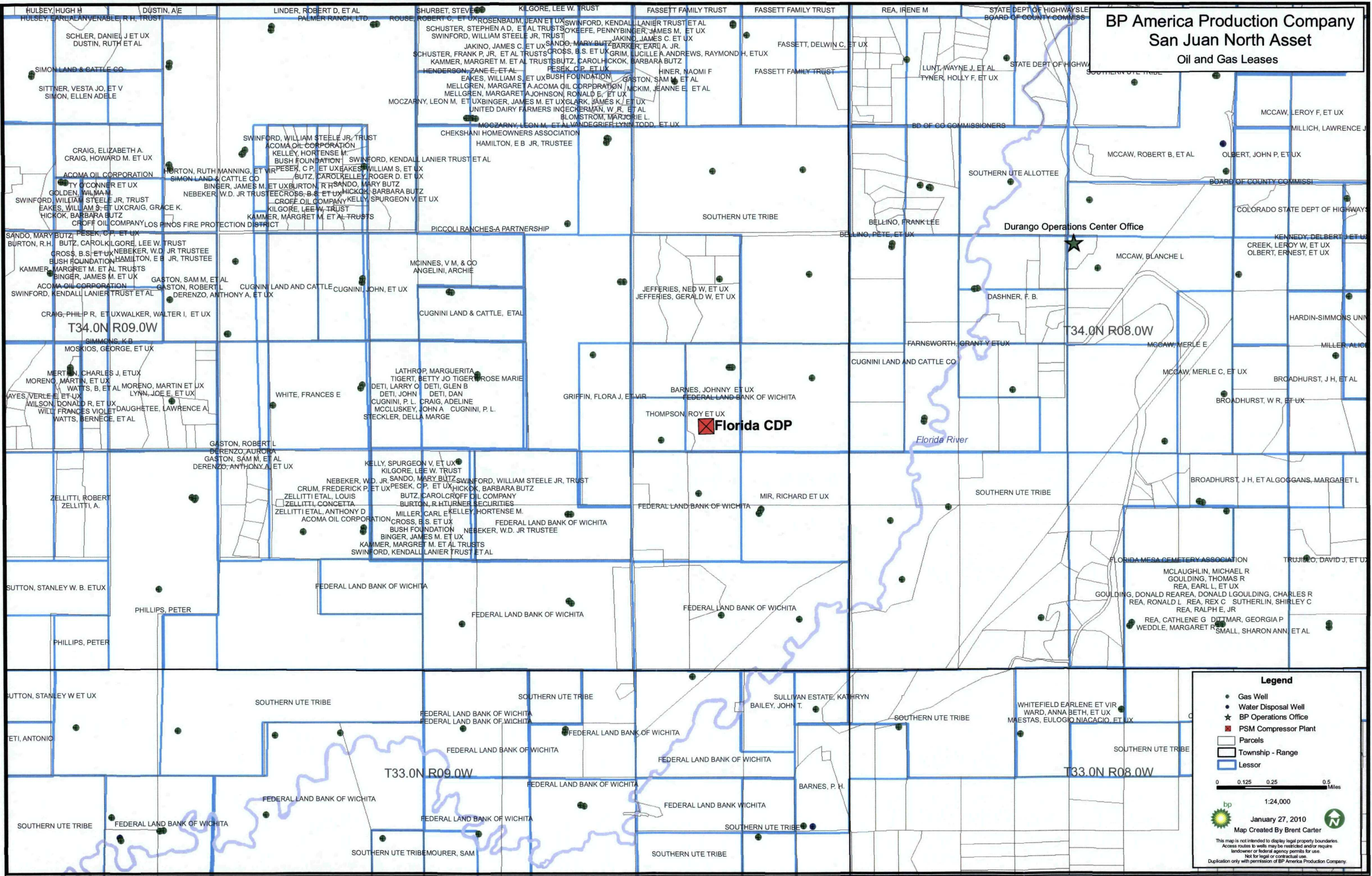
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January 27, 2010  
Map Created By Brent Carter

This map is not intended to display legal property boundaries. Access routes to wells may be restricted and/or require landowner or federal agency permits for use. Not for legal or contractual use. Duplication only with permission of BP America Production Company.



**BP America Production Company**  
**San Juan North Asset**  
Oil and Gas Leases



**Legend**

- Gas Well
- Water Disposal Well
- BP Operations Office
- PSM Compressor Plant
- Parcels
- Township - Range
- Lessor

0 0.125 0.25 0.5 Miles

1:24,000

January 27, 2010  
Map Created By Brent Carter

This map is not intended to display legal property boundaries. Access routes to wells may be restricted and/or require landowner or federal agency permits for use. Not for legal or contractual use. Duplication only with permission of BP America Production Company.



## OIL AND GAS LEASE

AGREEMENT, Made and entered into April 9, 1946, by and between:  
 The Federal Land Bank of Wichita, Wichita, Kansas, a corporation  
 Party of the first part, hereinafter called lessor (whether one or more) and Stanolind Oil and Gas Company

Party of the second part, hereinafter called lessee.  
 WITNESSETH, That the said lessor, for and in consideration of One and No/100 DOLLARS, cash in hand paid, receipt of which is hereby acknowledged, and of the covenants and agreements hereinafter contained on the part of lessee to be paid, kept and performed, has granted, demised, leased and let and by these presents does grant, demise, lease and let unto said lessee, for the sole and only purpose of mining and operating for oil and gas, and laying pipe lines, and building tanks, power stations and structures thereon to produce, save and take care of said

products, all that certain tract of land, together with any reversionary rights therein, situated in the County of La Plata State of Colorado described as follows, to-wit: An undivided one-fourth mineral interest in, on and under the following land: Southwest Quarter (SW $\frac{1}{4}$ ); East Half (E $\frac{1}{2}$ ) of the Northwest Quarter (NW $\frac{1}{4}$ ) of Section Thirty-five (35), Township Thirty-four (34) North, Range Nine (9) West of the New Mexico Meridian; North Half (N $\frac{1}{2}$ ) of the Southeast Quarter (SE $\frac{1}{4}$ ) of Section Thirty-four (34), Township Thirty-four (34) North of Range Nine (9) West;

of Section 320 Township 34 Range 9 and containing ten (10) acres more or less.

It is agreed that this lease shall remain in full force for a term of ten (10) years from this date, and as long thereafter as oil or gas, or either of them, is produced from said land by the lessee, or the premises are being developed or operated.

In consideration of the premises the said lessee covenants and agrees:

1st. The lessee shall deliver to lessor as royalty, free of cost, into the pipe line to which lessee may connect its wells the equal  $\frac{1}{4}$  part of all oil produced and saved from the leased premises, or at the lessee's option, may pay to the lessor for such  $\frac{1}{4}$  royalty the market price for oil of like grade and gravity prevailing on the day such oil is run into the pipe line or into storage tanks.

2nd. The lessee shall pay to lessor for gas produced from any oil well and used by the lessee for the manufacture of gasoline or any other product as royalty  $\frac{1}{4}$  of the market value of such gas at the mouth of the well; if said gas is sold by the lessee, then as royalty  $\frac{1}{4}$  of the proceeds of the sale thereof at the mouth of the well. The lessee shall pay lessor as royalty  $\frac{1}{4}$  of the proceeds from the sale of gas at such at the mouth of the well where gas only is found and where such gas is not sold or used, lessee shall pay or tender annually at the end of each yearly period during which such gas is not sold or used as royalty, an amount equal to the delay rental provided in the next succeeding paragraph hereof, and while said royalty is so paid or tendered this lease shall be held as a producing lease under the above term paragraph hereof; the lessor to have gas free of charge from any gas well on the leased premises for stoves and inside lights in the principal dwelling house on said land by making his own connections with the well, the use of such gas to be at the lessor's sole risk and expense.

If no well be commenced on said land on or before April 9, 1947, this lease shall terminate as to both parties, unless the lessee on or before that date shall pay or tender to the lessor, or to the lessor's credit in The Federal Land Bank of Wichita, Kansas xxx at Wichita, Kansas

or its successors, which shall continue as the depository regardless of changes in the ownership of said land, the sum of One Hundred Sixty and No/100 DOLLARS, which shall operate as a rental and cover the privilege of deferring the commencement of a well for twelve months from said date. In like manner and upon like payments or tenders the commencement of a well may be further deferred for like periods or the same number of months successively. All such payments or tenders of rental may be made by check or draft of lessee or any assignee thereof, mailed or delivered on or before the rental paying date either direct to lessor or assignee or to said depository bank. And it is understood and agreed that the consideration first recited herein, the down payment, covers not only the privileges granted to the date when said first rental is payable as aforesaid, but also the lessee's option of extending that period as aforesaid, and any and all other rights conferred. Lessee may at any time execute and deliver to lessor, or place of record, a release or releases covering any portion or portions of the above described premises and thereby surrender this lease as to such portion or portions and be relieved of all obligations as to the acreage surrendered, and thereafter the rentals payable hereunder shall be reduced in the proportion that the acreage covered herein is reduced by said release or releases.

Should the first well drilled on the above described land be a dry hole, then, and in that event, if a second well is not commenced on said land within twelve months from the expiration of the last rental period for which rental has been paid, this lease shall terminate as to both parties, unless the lessee on or before the expiration of said twelve months shall resume the payment of rentals in the same amount and in the same manner as hereinbefore provided. And it is agreed that upon the resumption of the payment of rentals, as above provided, that the last preceding paragraph hereof, governing the payment of rentals and the effect thereof, shall continue in force just as though there had been no interruption in the rental payments.

If said lessor owns a less interest in the above described land than the entire and undivided fee simple estate therein, then the royalties and rentals herein provided shall be paid the lessor only in the proportion which his interest bears to the whole and undivided fee. However, such rental shall be increased at the next succeeding rental anniversary after any reversion occurs to cover the interest so acquired.

Lessee shall have the right to use, free of cost, gas, oil, and water produced on said land for its operation thereon, except water from wells or ponds of lessor.

When requested by lessor, lessee shall bury its pipe lines below plow depth.

No well shall be drilled nearer than 200 feet to the house or barn now on said premises, without the written consent of the lessor.

Lessee shall pay for damages caused by its operations to growing crops on said land.

Lessee shall have the right at any time to remove all machinery and fixtures placed on said premises, including the right to draw and remove casing.

If the lessee shall commence to drill a well within the term of this lease or any extension thereof, the lessee shall have the right to drill such well to completion with reasonable diligence and dispatch, and if oil or gas, or either of them, be found in paying quantities, this lease shall continue and be in force with the like effect as if such well had been completed within the term of years herein first mentioned.

If the estate of either party hereto is transferred, and the privilege of transferring in whole or in part is expressly allowed, or if the rights hereunder of either party hereto are vested by descent or devise, the covenants hereof shall extend to and be binding on the heirs, devisees, executors, administrators, successors, or assigns, but no change in the ownership of said land or of any right hereunder shall be binding on the lessee until after lessee has been furnished with the original or a certified copy thereof of any transfer by lessor or with a certified copy of the will of lessor together with a transcript of the probate thereof or, in the event lessor dies intestate and his estate is being administered, with a transcript of the administration proceedings or, in the event of the death of lessor and no administration being had on the estate, with an instrument satisfactory to lessee executed by lessor's heirs authorizing payment or deposit or tender for deposit to their credit as hereinbefore provided, at least thirty days before said rentals and royalties are payable or due, and it is hereby agreed in the event this lease shall be assigned as to a part or as to parts of the above described lands and the assignee or assignees of such part or parts shall fail or make default in the payment of the proportionate part of the rents due from him or them, such default shall not operate to defect or affect this lease in so far as it covers a part or parts of said lands upon which the said lessee or any assignee thereof shall make due payments of said rentals. In case lessee assigns this lease, in whole or in part, lessee shall be relieved of all obligations with respect to the assigned portion or portions arising subsequent to the date of assignment. If the leased premises are now or hereafter owned in severalty or in separate tracts, the premises, nevertheless, may be developed and operated as an entirety, and the royalties shall be paid to each separate owner in the proportion that the acreage owned by him bears to the entire leased area. There shall be no obligation on the part of the lessee to offset wells on separate tracts into which the land covered by this lease may hereafter be divided by sale, devise, or otherwise, or to furnish separate measuring or receiving tanks for the oil produced from such separate tracts.

Lessor hereby warrants and agrees to defend the title to the lands herein described, and agrees that the lessee shall have the right at any time to redeem for lessor by payment, any mortgages, taxes or other liens on the above described lands. In the event of default of payment by lessor, and be subrogated to the rights of the holder thereof and may reimburse itself from any rental or royalties accruing hereunder.

The terms, covenants, and conditions hereof shall run with said land and herewith and shall be binding upon the parties hereto, their heirs, administrators, devisees, executors, successors and assigns; however, all express or implied covenants of this lease shall be subject to all Federal and State Laws, Executive Orders, Rules or Regulations, and this lease shall not be terminated, in whole or in part, nor lessee held liable for failure to comply therewith, if compliance is prevented by, or if such failure is the result of, any such Law, Order, Rule or Regulation.

IN WITNESS WHEREOF, We sign the day and year first above written.

ATTEST:

J. A. Carrico, Assistant Secretary

THE FEDERAL LAND BANK OF WICHITA

By: Geo. H. Humker (SEAL)

Geo. H. Humker (SEAL)

Geo. H. Humker, Vice-President (SEAL)

(SEAL)

(SEAL)

71810-I

EXHIBIT K

STATE OF KANSAS  
COUNTY OF SEDGWICK } ss.

Before me, the undersigned, a Notary Public in and for said County and State, on this 9 day of April, 19 46, personally appeared Geo. H. Hunker

to me personally known and known to me to be the identical person who subscribed the name of The Federal Land Bank of Wichita, Wichita, Kansas, a corporation, to the foregoing instrument as its Vice-President, and he being by me duly sworn did say that he is such officer and that the seal affixed to said instrument is the corporate seal of said corporation and that the same was signed and sealed in behalf of said corporation by authority of its board of directors, and he acknowledged to me that he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of such corporation, for the uses and purposes set forth and specified therein.

WITNESS my hand and seal the day and year last above written.

My commission expires:

November 23, 1948

Georgie Porter  
Notary Public.

STATE OF KANSAS  
COUNTY OF SEDGWICK } ss.

Before me, the undersigned, a Notary Public in and for said County and State, on this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, personally appeared \_\_\_\_\_

to me personally known and known to me to be the identical person, who, as Vice-President of said Bank, subscribed the names of The Federal Land Bank of Wichita, Wichita, Kansas, a corporation (as Agent and Attorney-in-Fact) and the Federal Farm Mortgage Corporation, a corporation, to the foregoing instrument, and he being by me duly sworn, did say that he is such officer and that the seal affixed to such instrument is the corporate seal of said Bank, and that the same was signed and sealed in behalf of said Bank, as agent and attorney-in-fact for the Federal Farm Mortgage Corporation (under and by virtue of that certain power of attorney which is recorded in Book \_\_\_\_\_ at Page \_\_\_\_\_ of the records of \_\_\_\_\_ County, \_\_\_\_\_), and was signed in behalf of the Federal Farm Mortgage Corporation by said Bank, as agent and attorney-in-fact therefor, all by authority of the Board of Directors of said Bank, and he acknowledged to me that the foregoing instrument was executed by him as his free and voluntary act and deed and as the several free and voluntary acts and deeds of said Bank (as agent and attorney-in-fact) and the Federal Farm Mortgage Corporation, all for the uses and purposes set forth and specified therein.

WITNESS my hand and seal the day and year last above written.

My commission expires:

19\_\_\_\_

Notary Public.

COMPARED

No. 188028

OIL AND GAS LEASE

FROM

TO

Date

19\_\_\_\_

Section

Twp

Rge

No. of Acres

Term

County

STATE OF Colorado  
County of San Juan } ss.

This instrument was filed for record on the

at 1:29 day of Nov, 1946

in Book 259 of the

records of this office

EDITH C. KIEL, County Clerk

By

When recorded, return to

COMPARED

STATE OF \_\_\_\_\_ } ss.  
COUNTY OF \_\_\_\_\_

Before me, the undersigned, a Notary Public in and for said County and State, on this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, personally appeared \_\_\_\_\_

to me personally known and known to me to be the identical person \_\_\_\_\_ who executed the within and foregoing instrument and acknowledged to me that \_\_\_\_\_ executed the same as \_\_\_\_\_ free and voluntary act and deed for the uses and purposes therein set forth.

WITNESS my hand and official seal the day and year last above written.

My Commission expires:

19\_\_\_\_

Notary Public.



434

STATE OF Colorado } ss. ACKNOWLEDGMENT FOR INDIVIDUAL (Kans. O.R. and Colo.)  
COUNTY OF La Plata }  
Before me, the undersigned, a Notary Public, within and for said County and State, on this 7th

day of June, 1950, personally appeared Richard W.  
and Mario W. his wife,

to me personally known to be the identical person who executed the within and foregoing instrument and acknowledged to me  
that they executed the same as their free and voluntary act and deed for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal the day and year last above written.  
My commission expires March 6, 1951 E. E. Sullivan Notary Public

STATE OF Colorado } ss. ACKNOWLEDGMENT FOR INDIVIDUAL (Kans. O.R. and Colo.)  
COUNTY OF La Plata }  
Before me, the undersigned, a Notary Public, within and for said County and State, on this

day of June, 1950, personally appeared

to me personally known to be the identical person who executed the within and foregoing instrument and acknowledged to me  
that they executed the same as their free and voluntary act and deed for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal the day and year last above written.  
My commission expires March 6, 1951 E. E. Sullivan Notary Public

STATE OF Colorado } ss. ACKNOWLEDGMENT FOR CORPORATION  
COUNTY OF La Plata }  
Be it remembered that on this 7th day of June, 1950, before me, the undersigned, a

Notary Public, duly commissioned, in and for the County and State aforesaid, came

Richard W. and Mario W. his wife, president of La Plata  
a corporation of the State of Colorado, personally known to me to be such officer, and to be  
the same person who executed as such officer the foregoing instrument of writing in behalf of said corporation, and he duly ac-  
knowledged the execution of the same for himself and for said corporation for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal on the day and year last above written.  
My commission expires March 6, 1951 E. E. Sullivan Notary Public

No. 310-117

**OIL AND GAS LEASE**

FROM \_\_\_\_\_

TO \_\_\_\_\_

Date \_\_\_\_\_

Section \_\_\_\_\_

1/4 of \_\_\_\_\_

County \_\_\_\_\_

STATE OF Colorado  
County of La Plata

This instrument was filed for recording the  
day of June, 1950  
at 11:28 o'clock AM, and duly recorded  
in Book 287 Page 434  
the \_\_\_\_\_ of the office of  
La Plata County Clerk

By \_\_\_\_\_  
Witnessed by \_\_\_\_\_  
E. E. Sullivan  
Notary Public

THE KANSAS BLUE PRINT CO.  
101 NORTH MARKET ST. - WICHITA, KANSAS  
PHOTODUPLICATION SERVICE - 10-10 DATE ALL MAPS

NOTE: When signature by mark in Kansas, said mark to be witnessed by at least one person and also acknowledged.  
For acknowledgment by mark, use regular Kansas acknowledgment.

STATE OF Colorado } ss. ACKNOWLEDGMENT FOR INDIVIDUAL (Kans. O.R. and Colo.)  
COUNTY OF La Plata }  
Before me, the undersigned, a Notary Public, within and for said County and State, on this

day of June, 1950, personally appeared

to me personally known to be the identical person who executed the within and foregoing instrument and acknowledged to me  
that they executed the same as their free and voluntary act and deed for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal the day and year last above written.  
My commission expires March 6, 1951 E. E. Sullivan Notary Public

U.S. DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**  
Colorado**Colorado BLM/Southern Ute Indian Tribe/BIA MOU****MEMORANDUM OF UNDERSTANDING**  
**(Southern Ute Indian Tribe and Bureau of Land Management)**  
**AND**  
**INTERAGENCY AGREEMENT**  
**(Bureau of Indian Affairs and Bureau of Land Management)****I. Purpose**

This agreement between the Southern Ute Indian Tribe (Tribe), the Bureau of Indian Affairs (BIA) and the Bureau of Land Management (BLM) is intended to: (1) provide clear and consistent procedures and policy for the review and evaluation of proposed spacing, pooling, and field rule requests that come before the Colorado Oil and Gas Conservation Commission (COGCC); (2) avoid duplication of effort by the participants of this memorandum of understanding (MOU); and (3) define trust responsibility in matters of oil and gas spacing and pooling.

The parties recognize that the Tribe is the beneficial owner of lands held by the United States Government in trust for the Tribe and that the Tribe is entitled to monitor and participate in the spacing, pooling, and field rule requests.

For the purposes of this agreement, the term "Indian lands" shall mean those lands located within the exterior boundaries of the Southern Ute Indian reservation, including allotted Indian lands, in which the legal, beneficial, or restricted ownership of the underlying oil, gas, or coal bed methane or of the right to explore for and develop the oil, gas, or coal bed methane belongs to or is leased from the Southern Ute Indian Tribe or allottee.

The BIA and BLM are agencies of the federal government charged with overseeing certain oil and gas related activities on tribal and allotted lands in a manner consistent with the highest fiduciary and trust standards.

**II. Authority**

Authority for this MOU includes, but is not limited to, the following: Indian Mineral Leasing Act of 1938; the Indian Self Determination Act of 1968; the Indian Mineral Development Act of 1982; the Constitution of the Southern Ute Indian Tribe; the Mineral Leasing Act of 1920 as amended; the 1909 Mineral Leasing Act for allotted lands; and the Interior Department Secretarial Order No. 3087, as amended. This agreement shall not supersede existing law, rule, or regulation of either party; nor require commitments of manpower or funds beyond legal authority or appropriation. This agreement is not intended to abrogate or improperly delegate any of the Secretary of the Interior's fiduciary responsibilities towards Indian tribes within the State of Colorado.

**III. Procedures**

The Tribe, BIA, and BLM agree as follows:

**A. Point of Contact**

Each party shall appoint a specific person or persons who shall be the point of contact to facilitate communication and coordination in implementing the agreement.

**B. Coordination Meetings**

Coordination meetings will be held in conjunction with the established quarterly Tribe, BIA, and BLM coordination meetings. This agreement will be reviewed and updated from time to

**EXHIBIT L**



time as required in conjunction with coordination meetings, subject to lawful acceptance by the parties. In any event, however, this Agreement shall be reviewed at the first coordination meeting at the beginning of the calendar year.

### **C. Procedural Format**

In accordance with the terms of the Cooperative Agreement between the COGCC and the BLM, all spacing and pooling requests involving federal and Indian minerals shall initially be submitted to the COGCC.

#### **1. Oil and Gas Hearings**

The BLM will provide testimony or present evidence to the COGCC concerning hearings and other matters affecting Indian Lands.

##### **a. BLM Will:**

- (1) Administratively review hearing notices and notices of other matters to determine if Indian lands may be affected by an application. Forward copies of notices affecting Indian lands to the BIA and the Tribe within 3 working days of receipt.
- (2) Schedule any requested meetings with BIA and/or the Tribe concerning hearing applications or other matters for all trust lands.
- (3) Conduct a technical review and develop evidence of impact on Indian owned and allotted Indian lands. Nonconcurrence will be handled in accordance with COGCC/BLM MOU.
- (4) Attend all hearings affecting Indian and allotted Indian lands to present the BLM's position and provide any evidence.
- (5) Provide BIA and the Tribe with a copy of all decisions of the COGCC which concerns Indian lands within 5 working days after receipt of a decision from the Commission.

##### **b. BIA Will:**

- (1) Notify the BLM, by letter or memorandum, of any concerns affecting an application on Indian or allotted Indian lands within 5 working days after receipt of the hearing notice or notice of other matters.
- (2) Consult as necessary with the BLM, lessees, operators, Tribe, or allottees concerning all applications affecting Indian lands.
- (3) Notify BLM of concurrence within 5 working days of receipt, but not later than 3 days prior to hearing for allotted Indian lands. If concurrence is not received prior to the hearing, the BLM will be forced to object to any discussions relating to the application of concern.

##### **c. Tribe Will:**

- (1) Provide the BLM with a current Indian mineral ownership and lease status map depicting the area affected by an application as well as all known and proposed well locations. This map should be received by the BLM at least 5 working days prior to the hearing.
- (2) Notify BIA/BLM of concurrence within 5 working days of receipt, but

not later than 3 days prior to hearing. If concurrence is not received prior to the hearing, the BLM will be forced to object to any decisions relating to the application of concern. With respect to Tribal allotted lands, Tribal concurrence will not be considered necessary for action by BIA/BLM, however Tribal comment will be accepted and considered.

### **3. Existing COGCC Decisions**

Consistent with the terms of this agreement, all existing decisions of the COGCC involving federal and Indian minerals will remain in effect, subject to the right of the Colorado BLM to request that any specific orders be reviewed, recinded, or modified. All parties, Indian owners, or their representatives may request that specific orders be reviewed.

## **D. Special Provisions**

### **1. Confidentially**

Each agency will abide by the confidentiality requirements of its own laws and regulations with respect to determinations concerning and handling of proprietary data and any other statutes, regulations, or directives concerning restricted access to records or information in any form. With respect to any information supplied by the Tribe or generated by agencies in regard to a particular issue, the Tribe may request in writing that such matters be treated as confidential, and so long as not inconsistent with law, said request shall be honored.

### **2. Access to Records**

Each agency will provide public access in accordance with its own rules.

### **3. Information Sharing**

Each agency will provide the others with courtesy copies of all regulations changes and Instruction Memoranda that deal with common or pertinent issues.

### **4. Jurisdiction of COGCC**

It is the Tribe's position that the COGCC lacks the jurisdiction to issue an order or decision affecting Indian lands within the boundaries of the Southern Ute Indian Reservation. Pursuant to an MOU between the BLM and the COGCC, BLM has contracted with the state to conduct hearings and review matters affecting Indian lands, and to make decisions affecting Indian lands. Without the concurrence of the parties hereto to decisions rendered by the COGCC affecting Indian lands, the parties agree that the COGCC by itself lacks the jurisdiction to render such decisions. This Agreement is intended to provide an acceptable procedure for obtaining the concurrence of the parties needed to make any COGCC decision binding.

Should the COGCC render a decision or order after the parties have followed the approved procedures contained in this Agreement, said COGCC decision shall be deemed by the parties hereto to be a decision of the BLM. Any interested party shall have the same opportunity to appeal or challenge such decision as if said decision had been rendered exclusively by the BLM, Colorado State Director.

## **E. Effect on Prior Agreements**

There are no prior agreements among the Tribe, BLM, and BIA that this MOU would affect.

## **F. Administration**

This agreement shall become effective upon the date of execution by the last signatory party to this agreement.

This agreement may be amended by mutual consent of the parties at the same organizational level as sign this agreement.

Termination of this agreement may be effected by any party upon 60 days written notice to the other parties. Termination of this agreement may be effected at any time by written notification of the other parties.

This agreement shall terminate when no longer authorized by the U.S. Department of the Interior, by federal or state law, or if determined to be unenforceable by any court having jurisdiction over the parties.

IN WITNESS WHEREOF, the parties have executed this agreement on the date indicated for each respective party,

Date: 8/22/91

**BUREAU OF INDIAN AFFAIRS**

by: /s/ Ralph R. Pensoneau

Superintendent, Southern Ute Agency

Date: 8/22/91

**BUREAU OF LAND MANAGEMENT**

by: /s/ Bob Moore

State Director, Colorado

Date: 8/22/91

**SOUTHERN UTE INDIAN TRIBE**

by: /s/ Leonard Burch

Chairman, Southern Ute Tribal Council

**Memorandum of Understanding  
Between The Colorado Bureau of Land Management  
And The Colorado Oil and Gas Conservation Commission**

**A.     Introduction**

For many years there has been a spirit of cooperation, communication, and trust between the Colorado Oil and Gas Conservation Commission (COGCC) and the Colorado Bureau of Land Management (BLM) in the management of lands in the state of Colorado and the development of our nation's oil and gas resources. Each agency's mission and staffing levels have grown during these years to the point where we believe it is important to formalize our excellent working relationship, as well as define each agency's role and responsibilities in our overlapping jurisdictions.

**B.     Purpose**

Most of our operations occur on adjacent lands or on the same lands, and it is important that both agencies provide oil and gas lessee/operators with consistent policy and procedures (including statewide oil and gas orders) on federal/Indian lands as well as nonfederal lands.

**C.     Objectives**

This memorandum of understanding (MOU) between the Colorado BLM and the COGCC is intended to (1) avoid duplication of effort by the responsible oil and gas permitting agencies and (2) clearly define jurisdictional authority.

**D.     Authorities**

The authorities for this agreement are the Mineral Leasing Act of 1920; the Interior Department Secretarial Order No. 3087, as amended; Title 34, Article 60, of the Colorado Revised Statutes; and 25 CFR Part 211. These agreements shall not supersede existing law, rule, or regulation of either party, nor require commitments of manpower or funds beyond legal authority or appropriation.

**E.     Definitions**

1. COGCC actions shall mean those actions taken by the COGCC to establish pooling, spacing, and other orders (field rules) to govern operations in specific fields.
2. Colorado BLM actions shall mean actions taken by the Colorado BLM in accordance with federal regulations (i.e., Application for Permit to Drill approvals, plugging orders, etc.).
3. For purposes of this agreement, the term "Indian lands" shall mean those lands located within the exterior boundaries of the Southern Ute Indian reservation, including allotted Indian lands, in which the legal, beneficial, or restricted ownership of the underlying oil, gas, or coal bed methane or of the right to explore for and develop the oil, gas, or coal bed methane belongs to or is leased from the Southern Ute Indian Tribe or allottee. This includes allotted Indian lands. The Colorado BLM will act in the same manner for actions involving Ute Mountain Ute land as for Southern Ute land.

4. Protest shall mean any objection to a proposed determination. A protest by the Colorado BLM to the COGCC shall be furnished in writing so as to be received by the COGCC at least three working days prior to the hearing or any appearance at the hearing. On Indian lands, the Colorado BLM will notify the COGCC in writing of protest or concurrence so as to be received by the COGCC at least three working days prior to the hearing or any appearance at the hearing. However, should the Colorado BLM fail to protest, and at a later date wish to protest, the Colorado BLM has the right to request that specific orders be reviewed.

F. Responsibilities

The Colorado BLM and the COGCC agree as follows:

1. Designated Official

Each party shall appoint a designated official to receive notices hereunder and to facilitate communication and coordination in implementing this agreement.

2. Coordination Meetings

Semiannual coordination meetings will be held to discuss orders, policies, and procedures. This MOU will be reviewed and updated, if necessary, at the first coordination meeting of every year. Prior to the meeting, each agency's respective staffs will identify issues that will be discussed/resolved at the meeting. An agenda will be prepared and distributed prior to the meeting. Other agency staff and/or interested parties may be included in these meetings, as agreed upon by the agencies. Any decisions and agreements reached as a result of these discussions will be addenda to this agreement, as appropriate.

3. Procedural Format

It is agreed that all matters which would require COGCC approval (whether administrative or COGCC decision) involving nonfederal minerals shall initially be submitted to the COGCC even if federal/Indian minerals are partially involved. All matters which would require COGCC approval (whether administrative or COGCC decision) where federal/Indian minerals are entirely involved shall be initially submitted to the COGCC. Both types of matters shall be heard and decided by the COGCC, subject to the conditions set forth below.

The COGCC shall furnish the Deputy State Director, Mineral Resources, in the Colorado BLM with notices of all requests for hearings which in any manner relate to or involve federal/Indian lands. As an additional courtesy, the COGCC will send notices of all requests for hearings to the Colorado BLM District Offices. The Colorado BLM shall be entitled to present expert testimony with respect to such determinations and hearings, and shall be informed in writing of any dispositions. If the Colorado BLM should desire to protest any requested determination, it shall do so by written protest delivered to the COGCC within three working days prior to the hearing or appearance at the hearing. Any such protest shall specify the Colorado BLM objections and the conditions, if any, under which the Colorado BLM will accept the relief requested. The COGCC shall either issue its order incorporating the conditions of the protest or shall relinquish jurisdiction to the Colorado BLM over the matter insofar as it relates to federal/Indian lands. Failure to object to any determination, and failure to appear and protest (either by witness or in writing) at any hearing, shall be construed as

concurrence by the Colorado BLM, with the exception of Indian lands. On Indian lands, the Colorado BLM will notify the COGCC of concurrence within three working days prior to the hearing or appearance at the hearing. Failure to concur shall cause the hearing for that issue to be postponed until the following month or until concurrence is obtained. Consistent with the terms of this agreement, all existing decisions of the COGCC involving federal and Indian minerals will remain in effect, subject to the right of the Colorado BLM to request that any specific orders be reviewed, rescinded, or modified.

G. Special Provisions

1. Confidentiality

Each agency will abide by the proprietary and confidential data requirements of its own laws and regulations, in accordance with 43 Code of Federal Regulations 3162.8 and Rule 306 of the Colorado Rules and Regulations, Rules of Practice and Procedure (as amended), and Oil and Gas Conservation Act.

2. Access to Records

Each agency will provide for public access in accordance with its own rules.

3. Information Sharing

Each agency will provide the other with courtesy copies of all regulation changes and Instruction Memoranda that deal with common or pertinent issues.

4. Jurisdiction of the COGCC

a. Federal lands – In the event any matter is submitted to the COGCC for decision or other order, and the Colorado BLM does not object to the COGCC order as provided in Section F, the COGCC shall exercise its jurisdiction over all private parties holding interests in federal oil and gas leases jointly with any nonfederal interests, other than Indian interests.

b. Indian lands – The Southern Ute Indian Tribe does not concur with the exercise of jurisdiction by the COGCC over Indian lands. The Tribe does, however, concur with the exercise of limited authority by the COGCC, but only with the concurrence of the BLM over certain aspects of oil and gas activities on tribal lands. Specifically, the Tribe and the BLM have entered into a separate MOU which secures to the Tribe the independent right to participate and concur through the BLM in any proposed COGCC action affecting tribal lands prior to said action becoming effective. The BIA and the BLM have entered into a separate interagency agreement which sets out procedures for allotted Indian participation through BLM in any proposed COGCC action affecting allotted Indian lands prior to said action becoming effective.

Should the COGCC render a decision or order after the parties have followed the approved procedures contained in this agreement, said COGCC decision shall be deemed by the parties hereto to be a decision of the BLM. Any interested party shall have the same opportunity to appeal or challenge such decision as if said decision had been rendered exclusively by the BLM, Colorado State Director, through the State Director Review process

outlined in 43 CFR 3165.3.

H. Affect on Prior Agreements

This agreement will supersede the previous agreement signed September 4, 1986, and incorporate the previous amendment signed September 22, 1989.

I. Administration

This agreement shall become effective upon the date of execution by the last signatory party.

This agreement may be amended by mutual consent of the parties.

Termination of this agreement may be effected by either party upon 60 days written notice to the other party. Termination of this agreement may be effected at any time by mutual written consent of the parties.

This agreement shall terminate when no longer authorized by the U.S. Department of the Interior, by federal or state law, or if determined to be unenforceable by any court having jurisdiction over the parties.

Signed by:

Dennis R Bicknell  
Director Colorado Oil and Gas Conservation Commission  
August 22, 1991

Bob Moore  
State Director  
Bureau of Land Management, Colorado State Office  
August 22, 1991

BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

IN THE MATTER OF THE PROMULGATION AND )  
CAUSE NO. 112 )  
ESTABLISHMENT OF FIELD RULES TO GOVERN )  
OPERATIONS IN THE IGNACIO-BLANCO FIELD, )  
ORDER NO. 112-180 )  
LA PLATA COUNTY, COLORADO )

REPORT OF THE COMMISSION

This cause came on for hearing before the Commission on September 26 and 27, 2005 in the Rolling Thunder Hall, Sky Ute Casino, 14826 Highway 172 North, Ignacio, Colorado on the verified application of BP America Production Company, for an order to allow the option of a total of four (4) wells in each 320-acre drilling and spacing unit for certain lands, with the permitted well to be located no closer than 660 feet to any outer boundary of the unit with no interior section line setback, utilizing a common or expanded pad with an existing well, for production of gas from the Fruitland coal seams.

FINDINGS

The Commission finds as follows:

1. BP America Production Company ("BP" or "the operator"), as applicant herein, is an interested party in the subject matter of the above-referenced hearing.
2. Due notice of the time, place and purpose of the hearing has been given in all respects as required by law.
3. The Commission has jurisdiction over the subject matter embraced in said Notice, and of the parties interested therein, and jurisdiction to promulgate the hereinafter prescribed order pursuant to the Oil and Gas Conservation Act and the terms of the Memorandum of Understanding ("MOU") between the Commission and the Bureau of Land Management ("BLM").
4. On July 11, 1988, the Commission issued Order No. 112-60, which established 320-acre drilling and spacing units for the production of gas and associated hydrocarbons from the Fruitland coal seams underlying certain lands, including the lands described below, with the permitted well to be located in the center of the NW $\frac{1}{4}$  and the SE $\frac{1}{4}$  of the section and no closer than 900 feet from the boundaries of the quarter section upon which it is located, nor closer than 130 feet to any interior quarter section line.
5. On May 15, 2000, the Commission issued Order No. 112-157, which allowed an optional additional well to be drilled for the production of gas from the Fruitland coal seams for certain lands, including the lands described below, with the permitted well when north of the north line of Township 32 North to be located in the NW $\frac{1}{4}$  and the SE $\frac{1}{4}$  of each section and when south of the north line of Township 32 North to be located in the NE $\frac{1}{4}$  and SW $\frac{1}{4}$  of each section, no closer than 990 feet from the boundaries of the quarter section, nor closer than 130

**EXHIBIT M**



feet to any interior quarter section line.

6. On August 8, 2005, BP, by its attorney, filed with the Commission a verified application for an order to allow a total of four (4) wells to be optionally drilled in each 320-acre drilling and spacing unit for the below-listed lands, with the permitted well to be located no closer than 660 feet to any outer boundary of the unit with no interior section line setback, utilizing a common or expanded pad with an existing well for production of gas from the Fruitland coal seams:

Township 33 North, Range 7 West, N.M.P.M.

Sections 5 and 6: All

Township 33 North, Range 8 West, N.M.P.M.

Section 1: All

Section 2: N½

Township 33 North, Range 9 West, N.M.P.M.

Sections 2 and 3: All

Township 34 North, Range 7 West, N.M.P.M.  
(S.U.L.)

Sections 4 thru 9: All

Sections 16 thru 21: All

Sections 28 thru 32: All

Section 33: N½

Township 34 North, Range 8 West, N.M.P.M.  
(S.U.L.)

Sections 1 thru 36: All

Township 34 North, Range 9 West, N.M.P.M.  
(S.U.L.)

Sections 1 thru 3: All

Sections 10 thru 15: All

Sections 22 thru 27: All

Sections 34 thru 36: All

7. On September 12, 2005, La Plata County, by right in accordance with Rule 509., filed with the Commission an intervention on the application.

8. On September 12, 2005, the San Juan Citizens Alliance ("SJCA" or "Alliance") filed with the Commission an intervention on the application.

9. On September 14, 2005, a prehearing conference was held, at which time the Hearing Officer ruled to accept SJCA's intervention limited to issues affecting public health, safety, welfare and the environment either not addressed or inadequately addressed in the Commission rules, Order No. 112-157 or in the BP/La Plata County Memorandum of Understanding ("MOU"), to bifurcate the application and conduct an administrative hearing on the technical issues on Thursday, September 15, 2005, to allow the parties to make their presentations at the September 26, 2005 hearing without cross examination, and to accept proposed conditions from the parties due by close of business on Wednesday, September 21, 2005 for consideration by the Commission for inclusion in any order it may enter.

10. At the time of the administrative hearing on September 15, 2005, the Hearing Officers heard testimony and reviewed exhibits that indicated that the application lands consist of sixty-six (66) sections in the Ignacio-Blanco Field in La Plata County, the application area is located approximately ten (10) miles southeast of Durango, Colorado, and the entire application area is located within the Southern Ute Indian Reservation.

11. Testimony and exhibits presented at the administrative hearing indicated that the majority of the surface in the area is privately owned with a small amount of surface owned by the Southern Ute Indian Tribe and the State of Colorado. Additional testimony indicated that the majority of the mineral ownership in the application area is private, with a small percentage of federal and state mineral ownership.

12. Testimony and exhibits presented at the administrative hearing indicated that notification of the application was given to operators and mineral owners both in the application lands and in a buffer area outside of the application lands due to proposed setback revisions for the permitted well locations.

13. Testimony and exhibits presented at the administrative hearing showed the change in drilling windows and setbacks from the section lines requested in the application, proposing one drilling window in each 320-acre drilling and spacing unit with a six hundred and sixty (660) foot setback from the unit boundary and no setbacks from interior quarter section lines.

14. Testimony and exhibits presented at the administrative hearing showed that the Fruitland coal seams are approximately eighty-nine (89) feet thick in the application area, that well performance varies and cumulative production is lower in comparison to performance and production in the fairway area, that the western portion of the application area has thicker average coals than the eastern portion, and that the coals are discontinuous, fractured and difficult to correlate, requiring additional wells to adequately drain the gas contained in the reservoir.

15. Testimony and exhibits presented at the administrative hearing showed recovery factors in the application area calculated on a one hundred and sixty (160) acre drainage area. Testimony indicated that much of the application area shows a less than fifty

percent (50%) recovery factor.

16. Testimony and exhibits presented at the administrative hearing showed examples of reserve calculations using the material balance method and the decline curve method. Testimony indicated that the mean recovery factor for original gas in place in the application area is 46.2% when calculated on 160-acre well spacing. Additional testimony indicated that economics for the proposed additional wells are positive with an internal rate of return of 31.2%.

17. No protests to the application were filed with the Commission or the Applicant. No interventions on the technical merits of the application were filed with the Commission or the Applicant.

18. BP agreed to be bound by oral order of the Commission and the Hearing Officers recommended to the Commission at its hearing on September 26, 2005 that the technical portion of the application be approved.

19. A written statement was filed with the Commission on September 19, 2005 by Brian Hoffman expressing his concerns regarding the application.

20. On September 20, 2005, a letter in support of the application was filed with the Commission by the Bureau of Land Management after consultation with the Southern Ute Indian Tribe's Department of Energy.

21. On September 26, 2005, at the time of the hearing, the Commission heard testimony from Scott Thompson, Director Infill Land Operations for BP who summarized the testimony using the exhibits presented at the administrative hearing regarding ownership of the land in the application area and the proposed drilling window and setback changes.

22. The Commission heard testimony from J.W. "Bill" Hawkins, San Juan Regulatory Consultant for BP who summarized the testimony using exhibits presented at the administrative hearing regarding geologic development and reservoir engineering. He opined that the Fruitland coal seams are discontinuous across the application area, that granting the application would minimize waste and maximize production from the Fruitland coal seams, that additional wells would recover additional reserves, protect correlative rights and prevent waste, and that the drilling of additional wells would be economic for the Applicant.

23. The Commission heard testimony from Chad Tidwell, Operations Manager for BP regarding the provisions contained in the MOU executed between BP and La Plata County, how the MOU will adequately protect public health, safety, welfare and the environment with the increased well density, and how BP will continue to be subject to the La Plata County Land Code.

24. The Commission heard testimony from David Brown, Manager of Regulatory Affairs, HSSE for BP who used a well development flowchart to describe how the Commission's existing rules, the provisions in Order No. 112-157, and the MOU will ensure protection of the environment, public health, safety and welfare from increased density wells. Mr. Brown testified that BP will use Best Management Practices for expanding well pads, has ceased using diesel fluids, and that hydraulic fracturing service companies will have available onsite Material Safety Data Sheets for all fracturing fluids used. He described the proposed

process for conducting water well testing under the MOU and requested for inclusion in any order the Commission may enter.

25. The Commission heard expert testimony from Dr. Anthony Gorody, consultant for BP regarding dissolved methane studies who opined that groundwater has not shown any discernable increase in methane concentrations as a result of the drilling of additional Fruitland coal seam wells.

26. The Commission heard fact testimony from Sheryl Ayers, Board of County Commissioners of La Plata County Chair who thanked the Commission for coming to La Plata County to conduct the hearing and thanked BP for working with the County to address public health, safety, welfare and environmental concerns resulting in the executed MOU. She opined that the provisions of the MOU in addition to conditions previously approved in Order No. 112-157 would adequately address the environment, public health, safety and welfare issues.

27. The Commission heard fact testimony from Nancy Lauro, Community Development Director for La Plata County regarding how the fees assessed in the MOU would be used to address road repairs in the application lands.

28. The Commission heard testimony from Michael Matheson, Oil and Gas Technical Advisor for La Plata County regarding how the water well monitoring provisions in the MOU will ensure that public health, safety, welfare and the environment will be protected.

29. The Commission heard testimony from Dan Randolph, SJCA staff regarding how the Alliance has worked on oil and gas issues since the early 1990s and the three (3) conditions it proposed for inclusion in any order the Commission may enter as follows: (1) All water wells within a one-quarter ( $\frac{1}{4}$ ) mile radius of both the surface location and the expected bottom hole location of a proposed additional well shall be sampled. If no water well is located within the one-quarter ( $\frac{1}{4}$ ) mile radius area of either the surface location or the bottom hole location, or if access is denied, then sampling shall not be required. Initial baseline water quality testing shall include all items listed in Order No. 112-157, (2) All water wells within a one-quarter ( $\frac{1}{4}$ ) mile radius of both the surface location and the expected bottom hole location of a proposed additional well shall be tested for quantity. If no water well is located within the one-quarter ( $\frac{1}{4}$ ) mile radius area of either the surface location or the bottom hole location, or if access is denied, then testing shall not be required. Such testing shall be repeated on a quarterly basis every third year after the additional well has been drilled, and (3) All drilling and completion fluids used in any additional well shall be disclosed and the use of diesel in such fluids shall be prohibited.

30. The Commission heard testimony from Rebecca Koeppen, SJCA board member regarding the need to test water wells in conjunction with allowing additional wells as proposed by BP.

31. The Commission heard testimony from Lisa Sumi, Research Director for the Oil and Gas Accountability Project regarding chemicals used in the drilling and completion of wells, hydraulic fracturing techniques and the use of diesel fluids. She requested that chemical names and quantities used during drilling and completion operations be disclosed to the general public.

32. Pursuant to Rule 510., Susan Franzheim provided a handout and made a

statement regarding the need to do more to protect public health, safety and welfare, including zero tolerance for non-compliance by contractors.

33. Pursuant to Rule 510., Heather Snow, who lives on Florida Mesa, made a statement regarding safety concerns near gas operations, the condition of her water well, the lack of vegetation on well pads, and diminished land values. She stated that she does not believe there is sound science to support increased well density.

34. Pursuant to Rule 510., Carl Weston, who lives near and west of the Nick Spatter #1 and Bryce 1-X Wells, made a statement regarding concerns about cathodic protection wells and hydraulic fracturing and the associated fluids that may be buried with the pit liner.

35. Pursuant to Rule 510., Bob Miller, an oil and gas attorney speaking on his own behalf, made a statement in support of the application, stating his belief that using best practices for increased well density is important, that the application will adequately address surface impacts, and that the application should be used as a model for future applications.

36. Pursuant to Rule 510., Matthew Whalawitsa, a Fort Lewis College student and summer intern with the SJCA made a statement regarding his concern about gas well activity in La Plata County. He asked various questions of the Commission on matters he did not believe were adequately addressed by the previous day's presentations.

37. Brian Macke, Commission Director ("Director") commended the parties for the high quality of the presentations, the extraordinary undertaking that resulted in the executed MOU which addressed a comprehensive list of environmental and public health, safety and welfare issues that he would like to see included in any order the Commission enters. He stated that the Commission staff believes that these provisions, along with the provisions in Order No. 112-157 and the Commission's Rules and Regulations will adequately protect public health, safety, welfare and the environment. Mr. Macke expressed concern that the SJCA proposal to test for water quantity would be difficult to implement. He indicated his intent to review the need and funding mechanisms for additional modeling to supplement the 3M work previously accomplished. Mr. Macke recommended that the application be approved including the proposed conditions from the MOU.

38. Based on the technical testimony presented by the Applicant and the recommendation by the Hearing Officers, the Commission finds that the current well density will not efficiently and economically drain the drilling and spacing units previously designated by the Commission, and that based on geological and engineering data presented at the hearing, additional wells are necessary to allow the gas to be produced at its maximum efficient rate, to prevent waste and protect correlative rights, and to efficiently and economically recover gas from the Fruitland coal seams within the application area.

39. Based on the facts stated in the application and the testimony and exhibits presented, the Commission finds that the request to allow a total of four (4) wells to be optionally drilled in each 320-acre drilling and spacing unit for production of gas from the Fruitland coal seams for the lands described above in Finding #6 should be approved. The permitted well shall be located no closer than 660 feet to any outer boundary of the unit with no interior section line setback, utilizing a common or expanded pad with an existing well.

40. Based on the testimony and exhibits presented at the hearing, and the request by BP and La Plata County to include conditions agreed upon in the MOU executed by the parties, the Commission should apply conditions to the order to protect the environment from significant adverse impacts and to protect the public health, safety, and welfare.

ORDER

NOW, THEREFORE, IT IS ORDERED, that Order No. 112-157 is hereby amended to allow a total of four (4) wells to be optionally drilled in each 320-acre drilling and spacing unit for the below-listed lands, with the permitted well to be located no closer than 660 feet to any outer boundary of the unit with no interior section line setback, utilizing a common or expanded pad with an existing well, for production of gas from the Fruitland coal seams:

Township 33 North, Range 7 West, N.M.P.M.

Sections 5 and 6:All

Township 33 North, Range 8 West, N.M.P.M.

Section 1:All

Section 2:N½

Township 33 North, Range 9 West, N.M.P.M.

Sections 2 and 3:All

Township 34 North, Range 7 West, N.M.P.M.  
(S.U.L.)

Sections 4 thru 9:All

Sections 16 thru 21:All

Sections 28 thru 32:All

Section 33:N½

Township 34 North, Range 8 West, N.M.P.M.  
(S.U.L.)

Sections 1 thru 36:All

Township 34 North, Range 9 West, N.M.P.M.  
(S.U.L.)

Sections 1 thru 3:All

Sections 10 thru 15:All

Sections 22 thru 27:All

Sections 34 thru 36:All

IT IS FURTHER ORDERED, that wells drilled in the above-described lands shall comply with the terms and provisions of all of the Commission's health, safety, welfare and environmental rules and regulations now or hereafter in effect.

IT IS FURTHER ORDERED, that wells drilled in the above-described lands shall comply with all applicable regulations of the BLM, Bureau of Indian Affairs and the Southern Ute Indian Tribe when conducting operations on lands subject to the respective jurisdiction of each agency.

IT IS FURTHER ORDERED, that wells drilled in the above-described lands shall comply with certain provisions of the MOU between BP and La Plata County, and shall comply with all terms, conditions and provisions of prior Commission Orders in Cause No. 112, including without limitation, the specific provisions of Order No. 112-157 including the Rule 508.j.(3)B. conditions attached thereto, to the extent they do not duplicate the provisions of the MOU. For convenience and ease of reference, the relevant conditions of the MOU and Order No. 112-157, including Rule 508.j.(3)B conditions, are set forth below. Conflicts between the conditions of the MOU set forth herein and the terms, conditions and provisions of Order No. 112-157 shall be resolved in favor of the MOU.

IT IS FURTHER ORDERED, that the following provisions of the MOU between BP and La Plata County found in Article V, VI and Subsections 2.1 and 2.2 shall be applied to additional wells where the surface location is proposed to be sited on lands subject to Commission jurisdiction, in addition to any requirements of applicable existing Commission Rules and Regulations or orders:

**Surface Density** The density of Fruitland Coal Well Pads within the Infill Application Area shall not exceed four (4) within any single 640-acre governmental section of real property. Notwithstanding the foregoing, nothing contained in this provision shall be construed so as to require the closure or abandonment of any existing gas well. "Fruitland Coal Well" means a gas well drilled for the purpose of producing gas from the Fruitland coal seams under the lands described in this Order No. 112-180. "Well Pad" means the flat graveled portion of the pad area in which permanent operations for the gas well take place and shall always include, at a minimum, that portion of the pad area occupied by the drilling rig anchors. "Infill Application Area" means the lands described in this Order No. 112-180.

**Well Location; Exceptions** The Commission may grant a special exception allowing for a greater density of Fruitland Coal Well Pads (i.e., more than 4 per 640-acre section), at the request of BP and after consultation with the Local Governmental Designee ("LGD"), based upon a finding by the Commission that one or more of the following factors apply in a manner such that use of an existing Well Pad is rendered impractical:

- a. topographic characteristics of the site;
- b. natural resource constraints (e.g., wetlands);

- c. the location of utilities or similar services;
- o d. geologic factors or where issues concerning distances between wells are present;
- e. other site conditions beyond the control of BP; or
- f. safety concerns.

**Storm Water Management and Spill Prevention Containment and Control**

Even if not required to do so by any applicable regulation or law, BP agrees to utilize best management practices for all pad expansions and new pads and for road and pipeline development or improvements. "Best management practices" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices intended to prevent or reduce the pollution of waters of the State of Colorado as described in the regulations of the Colorado Department of Public Health and Environment, as amended from time to time.

**Water Well Monitoring** If a conventional gas well exists within one quarter ( $\frac{1}{4}$ ) mile of the bottom hole location of a proposed Infill Well, then the two (2) closest water wells within a one-half ( $\frac{1}{2}$ ) mile radius of a conventional gas well shall be sampled by BP as water quality testing wells. If possible, the water wells selected shall be on opposite sides of the existing conventional gas well not exceeding one-half ( $\frac{1}{2}$ ) mile radius. "Infill Well" means wells drilled pursuant to this Order No. 112-180. "Conventional gas well" means a well producing from a non-coalbed methane formation found in the San Juan Basin, such as the Mesaverde or Dakota Sandstone Formation.

If water wells on opposite sides of the conventional gas well cannot be identified, then the two (2) closest wells within one-half ( $\frac{1}{2}$ ) mile radius shall be sampled. If two (2) or more conventional gas wells are located within one quarter ( $\frac{1}{4}$ ) mile of the bottom hole location of the proposed Infill Well, then the conventional gas well closest to a proposed Infill Well shall be used for selecting water wells for sampling.

If no conventional gas wells are located within one quarter ( $\frac{1}{4}$ ) mile radius of the bottom hole location of the proposed Infill Well, then the selected water wells shall be within one quarter ( $\frac{1}{4}$ ) mile of the bottom hole location of the proposed Infill Well. In areas where two (2) or more water wells exist within one quarter ( $\frac{1}{4}$ ) mile of the bottom hole location of the proposed Infill Well, then the two (2) closest water wells shall be sampled by BP. Ideally, if possible, the water wells selected shall be on opposite sides of the bottom hole location of the proposed Infill Well.

If water wells on opposite sides of the bottom hole location of the proposed Infill Well cannot be identified, then the two (2) closest wells within one quarter ( $\frac{1}{4}$ ) mile radius shall be sampled by BP. If two (2) water wells do not exist within one quarter ( $\frac{1}{4}$ ) mile radius, then the two closest water wells within a one-half ( $\frac{1}{2}$ ) mile radius shall be selected. If no water well is located within a one quarter ( $\frac{1}{4}$ ) mile radius area or if access is denied, two water wells within one-half ( $\frac{1}{2}$ ) mile of the bottom hole location of the Infill Well shall be selected. If there are no water quality testing wells meeting the foregoing criteria, then sampling shall not be required. If the BLM



or the Commission have already acquired data on a water well within one quarter ( $\frac{1}{4}$ ) mile of the conventional gas well, but it is not the closest water well, it shall be given preference in selecting a water quality testing well. The "initial baseline testing" described in this paragraph shall include all major cations and anions, total dissolved solids ("TDS"), iron and manganese, nutrients (nitrates and nitrites), selenium, dissolved methane, pH, presence of bacteria and specific conductance and field hydrogen sulfide.

If free gas or a methane concentration level greater than 2 milligrams/liter ("mg/L") is detected in a water quality testing well, compositional analysis and isotopic analyses of the carbon and hydrogen of the methane shall be performed to determine gas type (thermogenic, biogenic or an intermediate mix of both). If the testing results reveal biogenic gas, no further isotopic testing shall be done. If the carbon isotope test results in a thermogenic or intermediate mix signature, annual testing shall be performed thereafter and an action plan shall be drafted by BP to determine the source of the gas. If the methane concentration level increases by more than 5 mg/L between sampling periods, or increase to more than 10 mg/L, an action plan shall be drafted to determine the source of the gas.

The initial baseline testing shall occur prior to the drilling of the proposed Infill Well. Within one (1) year after completion of the proposed Infill Well, a "post completion" test shall be performed for the same parameters above and repeated three (3) and six (6) years thereafter. If no significant changes from the baseline have been identified after the third test (the six year test), no further testing shall be required. The testing schedule shall restart after the drilling of a new Infill Well on an existing Well Pad if the wells to be tested include those tested for the 160 acre infill program. Additional "post completion" test(s) may be required if changes in water quality are identified during follow-up testing. The Director of the Commission may require further water well sampling, which may include water quantity monitoring, at any time in response to complaints from water well owners.

Within three (3) months of collecting the samples used for the test, copies of all test results described above shall be provided to the Commission and the County and the landowner where the water quality testing well is located.

**Plugged and Abandoned Wells/Soil Gas Vapor Survey** A soil gas vapor-monitoring program shall be designed to determine a possible lack of zonal isolation along wellbores of plugged and abandoned wells. BP shall attempt to identify any plugged and abandoned wells located within one quarter ( $\frac{1}{4}$ ) mile of the bottom hole location of any Infill Well. Any plugged and abandoned well within one quarter ( $\frac{1}{4}$ ) mile of the bottom hole of an Infill Well shall be assessed for risk, taking into account cementing practices reported in the plugged and abandoned reports. BP shall notify the Commission of all results of all risk assessments of plugging procedures. The Commission may appropriate funds under Rule 701. (the Environmental Response Fund) to conduct soil gas monitoring tests to further define the risks. If the monitoring reveals a possible lack of zonal isolation, the Commission may then conduct or order any necessary remediation or other authorized activities.

IT IS FURTHER ORDERED, that the following terms, conditions and provisions

of Order No. 112-157 shall be applied to additional wells where the surface location is proposed to be sited on lands subject to Commission jurisdiction, in addition to any requirements of applicable existing Commission Rules and Regulations:

**Well Permit Limitations** A Commission hearing shall be required before a drilling permit may be issued for a well site located within one and one-half (1½) miles of the outcrop contact between the Fruitland and Pictured Cliffs Formations. The purpose of the hearing shall be to address potential adverse impacts to the Fruitland outcrop.

**Annual Drilling Plan** The Director shall survey the operator as to its drilling plans for the remainder of the year 2005 and for 2006, and annually thereafter. The survey results shall be reported to the Commission for its consideration with respect to the conditions attached to this order.

**Wildlife** The operator shall notify the Colorado Division of Wildlife ("CDOW") of the location of any proposed additional well site and advise the Director of the date such notice was provided. If the Director receives comments from the CDOW within ten (10) days of the date notice was provided, such comments may be considered in applying Rule 508.j.(3)B. conditions.

**Emergency Preparedness Plan** The operator submitting an Application for Permit-to-Drill for a proposed additional well under this order shall file and maintain a digital Emergency Preparedness Plan ("EPP") with La Plata County. The EPP shall include as-built facilities maps showing the location of wells, pipelines and other facilities, except control valve locations that which may be held confidential. The EPP shall include an emergency personnel contact list.

**Gas and Oil Regulatory Team** The Director shall ensure that the La Plata County Gas and Oil Regulatory Team ("GORT") continues to meet as appropriate, but no less than semiannually. GORT meetings may be scheduled more frequently if the members believe a meeting is appropriate. (GORT includes invited member representatives from La Plata County, BLM, SUIT, industry operators and Commission. Its meetings are open and typically attended by interested area residents.)

**3M Mapping, Modeling and Monitoring Project** The Director shall ensure that the 3M Technical Peer Review Team is invited to meet as appropriate, but no less than semiannually to review proposals and results related to the 3M Mapping, Modeling and Monitoring Project. 3M Technical Peer Review Team meetings may be scheduled more frequently if the members believe a meeting is appropriate.

**Post Completion Pressure Build-Up Tests** In addition to obtaining a bottom hole pressure on all wells drilled under this order, the operator shall conduct pressure build-up two (2) to three (3) months after initial production begins and once every three (3) years thereafter. The operator shall provide the data acquired, an evaluation of the data and the procedures utilized to conduct the pressure build-up tests to the Director within thirty (30) days of the conclusion of each test. After reviewing the quality of the pressure buildup data and the adequacy of the geographic distribution of the data, the Director may reduce the number of wells for

which pressure build-up testing is required.

IT IS FURTHER ORDERED, that the following Rule 508.j.(3)B. conditions from Order No. 112-157 shall be applied to additional wells where the surface location is proposed to be sited on lands subject to Commission jurisdiction, in addition to any requirements of applicable Commission Rules and Regulations:

Prior to approving any Application for Permit-to-Drill, the Director shall conduct an onsite inspection if the surface well location is proposed to be sited within any subdivision that has been approved by La Plata County. The Director shall conduct an onsite inspection if the surface well location is within two (2) miles of the outcrop contact between the Fruitland and Pictured Cliffs Formations and an onsite inspection is requested by the surface owner, LGD, operator, or Director.

Prior to approving any Application for Permit-to-Drill, the Director shall conduct an onsite inspection if the operator and the surface owner have not entered into a surface use agreement. If the reason the surface use agreement has not been executed is related to surface owner compensation, property value diminution, or any private property contractual issues between the operator and the surface owner, then no onsite inspection shall be required.

The purpose of the onsite inspection shall be to identify any potential public health, safety and welfare or significant adverse environmental impacts within Commission jurisdiction regarding the proposed surface location that may not be adequately addressed by Commission rules or orders. The onsite inspection shall not address matters of surface owner compensation, property value diminution, or any private party contractual issues between the operator and the surface owner.

When the Director conducts onsite inspections under the conditions in 1.) and 2.) above, the Director shall invite the representatives of the surface owner, the operator and LGD to attend. The Director shall attempt to select a mutually acceptable time for the representatives to attend. The inspection shall be conducted within ten (10) days, or as soon as practicable thereafter, of either the date the LGD advises the Director in writing that the proposed surface well site location falls within an approved subdivision or the date the operator advises the Director in writing that a surface use agreement has not been reached with the surface owner. If requested by the operator, the Director may delay the onsite inspection to allow for negotiation between the operator and surface owner or other parties.

Following the onsite inspection, the Director shall apply appropriate site specific drilling permit conditions if necessary to prevent or mitigate public health, safety and welfare or significant adverse environmental impacts taking into consideration cost-effectiveness and technical feasibility and relevant geologic and petroleum engineering conditions as well as prevention of waste, protection of correlative rights, and promotion of development.

Examples of the types of impacts and conditions that might be applied if determined necessary by the Director in 5.) above include (this list is not

prescriptive or all inclusive):

visual or aesthetic impacts - moving the proposed surface well site location or access road to take advantage of natural features for screening; installing low profile artificial lift methods; constructing artificial features for screening

surface impacts – moving or reducing the size, shape, or orientation of the surface well site location or access road to avoid disturbance of natural features or to enhance the success of future reclamation activities; utilizing an existing surface well site location or access road to avoid the impacts of new construction; utilizing a closed drilling fluid system instead of reserve pits to avoid impacts to sensitive areas

noise impacts – installing electric motors where practicable; locating or orienting motors or compressors to reduce noise; installing sound barriers to achieve compliance with Commission rules; confining cavitation completion operations (excluding flaring) to the hours of 7 a.m. to 7 p.m. and notifying all area residents within one-half (½) mile at least seven (7) days before cavitation is commenced

dust impacts – watering roads as necessary to control dust during drilling and completion operations

ground water impacts – collecting and analyzing water and gas samples from existing water wells or springs; installing monitoring wells, collecting samples, and reporting water, gas and pressure data

safety impacts – soil gas sampling and analysis; residential crawl space gas sampling and analysis; installing security fencing around wellheads and production equipment

outcrop impacts – performing outcrop gas seep surveys; performing produced water quality analysis; periodic pressure transient testing of high water/gas ratio wells; limiting water production in wells with anomalously high water rates and water/gas ratios; funding investigative reservoir modeling under the Director's supervision

wildlife impacts – limiting drilling and completion operations during certain seasonal time periods when specific site conditions warrant

If the operator objects to any of the conditions of approval applied under 6.) above, the Director shall stay the issuance of the drilling permit and properly notice and set the matter for the next regularly scheduled Commission hearing at which time the Commission may determine conditions of drilling permit approval.

If the Director has reasonable cause to believe that any existing or proposed oil and gas operations are causing, or are likely to cause, public health, safety and welfare or significant adverse environmental impacts within Commission jurisdiction that may not be adequately addressed by Commission rules or orders, the Director may properly notice and set the matter for the next regularly scheduled Commission hearing to order appropriate investigative or remedial action. Reasonable cause

may include, but is not limited to, information from the 3M Mapping, Modeling and Monitoring Project.

IT IS FURTHER ORDERED, that the provisions contained in the above order shall become effective forthwith.

IT IS FURTHER ORDERED, that the Commission expressly reserves its right, after notice and hearing, to alter, amend or repeal any and/or all of the above orders.

IT IS FURTHER ORDERED, that under the State Administrative Procedure Act the Commission considers this order to be final agency action for purposes of judicial review within thirty (30) days after the date this order is mailed by the Commission.

IT IS FURTHER ORDERED, that an application for reconsideration by the Commission of this order is not required prior to the filing for judicial review.

ENTERED this \_\_\_\_\_ day of October, 2005, as of September 26, 2005.

COMMISSION

OIL AND GAS CONSERVATION

OF THE STATE OF COLORADO

By \_\_\_\_\_ 9:

Patricia C. Beaver, Secretary

Dated at Suite 801

1120 Lincoln Street

Denver, Colorado 80203

October 25, 2005

BEFORE THE OIL & GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

IN THE MATTER OF THE PROMULGATION	)	CAUSE NO. 112
AND ESTABLISHMENT OF FIELD RULES TO	)	
GOVERN OPERATIONS IN IGNACIO-BLANCO	)	ORDER NO. 112-
190		
FIELD, LA PLATA COUNTY, COLORADO	)	

REPORT OF THE COMMISSION

This cause came on for hearing before the Commission at 9:00 a.m. on July 10, 2006, in Suite 801, The Chancery Building, 1120 Lincoln Street, Denver, Colorado, for an order to allow an optional third or fourth well, for a total of up to four (4) wells, to be drilled in each 320-acre drilling and spacing unit for certain lands in Townships 32 through 34 North, Ranges 6 through 9 West, N.M.P.M., for production from the Fruitland coal seams.

FINDINGS

The Commission finds as follows:

1. BP America Production Company ("BP") and the Southern Ute Indian Tribe, d/b/a Red Willow Production Company ("Red Willow"), as applicant herein, are interested parties in the subject matter of the above-referenced hearing.

2. Due notice of the time, place and purpose of the hearing has been given in all respects as required by law.

3. The Commission has jurisdiction over the subject matter embraced in said Notice, and of the parties interested therein, and jurisdiction to promulgate the hereinafter prescribed order pursuant to the Oil and Gas Conservation Act and the terms of the Memorandum of Understanding ("MOU") between the Commission and the Bureau of Land Management ("BLM").

4. On June 17, 1988, the Commission issued Order No. 112-60, which established 320-acre drilling and spacing units for production of gas from the Fruitland coal seams, with the permitted well to be located no closer than 990 feet to any outer boundary of the unit, nor closer than 130 feet to any interior quarter section line, including certain lands in Townships 32 through 34 North, Ranges 6 through 9 West, N.M.P.M.

5. On May 15, 2000 the Commission issued Order No. 112-157, which allowed an optional second Fruitland coal seam well to be drilled in each 320-acre drilling and spacing unit with such additional well being located no closer than 990 feet to any outer boundary of the unit, nor closer than 130 feet to any interior quarter section line, including certain lands in Townships 32 through 34 North, Ranges 6 through 9 West, N.M.P.M.

6. On May 22, 2006, BP and Red Willow, by their attorney, filed with the Commission a verified application for an order to allow an optional third or fourth well, for a total of up to four (4) wells, to be drilled in each 320-acre drilling and spacing unit for production of gas from the Fruitland coal seams, with the permitted well to be located no closer than six hundred sixty (660) feet from the unit boundary, with no interior section line setback for the below-listed lands. The surface location of each of the optional wells shall be located on a common or expanded pad with the existing well such that a total

of four (4) Fruitland coal well pads shall be authorized in each governmental section.

Township 32 North, Range 6 West, N.M.P.M.

Section 3: All

Section 8: E½

Sections 9 and 10: All

Section 15: W½

Section 16: All

Township 32 North, Range 7 West, N.M.P.M.

Section 3: N½

Section 5: S½

Sections 7 and 8: All

Sections 17 thru 19: All

Township 32 North, Range 8 West, N.M.P.M.

Sections 1 through 24: All

Township 32 North, Range 9 West, N.M.P.M.

Section 1: All

Sections 12 and 13: All

Section 24: All

Township 33 North, Range 6 West, N.M.P.M.

Sections 6 and 7: All

Township 33 North, Range 7 West, N.M.P.M.

Section 1: S½, N½

Section 4: All

Sections 7 and 8: All

Section 9: W½

Section 14: W½

Section 16: S½

Section 17: All

Section 18: E½

Sections 19 through 21: All

Section 26: W½

Sections 27 and 28: All

Section 29: E½

Section 30 N½

Section 34: All

Section 35: W½

Township 33 North, Range 8 West, N.M.P.M.

Section 2: S½

Section 3: N½

Section 4: All

Section 5: N½

Section 6: N½

Section 10: N½

Section 11: E½

Sections 12 and 13: All

Section 14: E½

Section 19: S½

Section 22: N½

Section 23: N½

Section 25: N½

Section 30: E½

Sections 31 and 32: All

Section 33: W½

Township 33 North, Range 9 West, N.M.P.M.



Section 1: All

Section 4: All

Sections 6 through 11: All

Section 12: W½

Section 13: W½

Section 14: All

Section 15: E½

Section 16: All

Section 19: E½

Section 21: All

Section 22: W½

Sections 23 through 25: All

Section 29: All

Township 34 North, Range 7 West, N.M.P.M.

Sections 2 and 3: All

Sections 10 and 11: All

Section 15: All

Sections 22 and 23: All

Section 24: S½

Section 25: W½, E½

Sections 26 and 27: All

Section 33: S½

Section 34: All

Section 35: N½

Section 36: N½

Township 34 North, Range 9 West, N.M.P.M.

Section 4: All

Section 9: All

Sections 16 and 17: All

Section 18: S½

Sections 19 through 21: All

Section 28: All

Section 30: N½

Section 31: All

Section 33: E½

Applicants further state that the requested additional wells can be developed in a manner consistent with protection of public health, safety and welfare. To this end, Co-Applicant BP shall propose a Health, Safety and Welfare Plan which is likely to be a portion of a Memorandum of Understanding by and between BP and La Plata County, Colorado ("HS&W Plan") which shall apply to operations on lands not within the jurisdiction of the Southern Ute Indian Tribe. The Applicants request a finding by the Commission that such HS&W Plan adequately addresses concerns related to the environment and public health, safety and welfare not otherwise addressed by Commission rule on such non-tribal lands. Moreover, new compressor installations shall use the best available emission control technology and Co-Applicant BP shall also provide a plan to the Southern Ute Indian Tribe to evaluate the modification of older compression installation emission technology in the field over the next five (5) years.

7. On June 20, 2006, La Plata County, by its attorney, filed with the Commission an intervention on the application. The County's intervention is regarding potential impacts to public health, safety, welfare and the environment, and it did not object to the technical merits of the application being heard at an administrative hearing.

8. On June 26, 2006, the San Juan Citizens Alliance filed with the Commission a request to intervene on the application.

9. On June 29, 2006, a prehearing conference was held and the intervention request of the San Juan Citizens Alliance was denied.

10. Testimony and exhibits presented at the administrative hearing showed that in order to minimize surface disturbance the 80-acre infill wells are proposed to be drilled directionally from four (4) existing well pad locations in the section.

11. Testimony and exhibits presented at the administrative hearing showed that coals in the Fruitland Formation are present throughout the application area, that the Fruitland coals exhibit highly variable reservoir properties both vertically and laterally because of barriers to vertical and lateral flow, and that more wells are needed to adequately drain the gas contained in this reservoir.

12. Testimony and exhibits presented at the administrative hearing showed that the average virgin reservoir pressure in the application area is 1,482 PSIA and that when the reservoir has been depleted to 50% of the original virgin pressure 80% of the original gas in place remains.

13. Testimony and exhibits presented at the administrative hearing showed that 80-acre infill is needed to improve recovery efficiency, that 80-acre infill will recover additional reserves, and that 80-acre infill is economic to develop in the application area.

14. Testimony and exhibits presented at the administrative hearing showed that current 160-acre well density in the application area will recover less than 50% of the original gas in place, that 80-acre infill wells are planned to be directionally drilled from four (4) well pads per section, that the drilling window setbacks should be reduced to six hundred sixty (660) feet from spacing unit boundary, and that BP America and La Plata County have negotiated a Memorandum of Understanding covering public health, safety and welfare issues which will be voted on by the La Plata County Commission in late in July/early August.

15. Letters of support for this application have been provided by the Bureau of Land Management and the Southern Ute Indian Tribe.

16. BP America Production Company and the Southern Ute Indian Tribe, d/b/a Red Willow Production Company agreed to be bound by oral order of the Commission.

17. Based on the facts stated in the verified application, having received no protests and having been heard by the Hearing Officer who recommended approval, the Commission should enter an order to allow an optional third or fourth well, for a total of up to four (4) wells, to be drilled in each 320-acre drilling and spacing unit for certain lands in Townships 32 through 34 North, Ranges 6 through 9 West, N.M.P.M., for production from the Fruitland coal seams.

#### ORDER

NOW, THEREFORE IT IS ORDERED, that an optional third or fourth well, for a total of up to four (4) wells, is hereby approved in each 320-acre drilling and spacing unit for the below-listed lands for production of gas from the Fruitland coal seams, with the permitted well to be located no closer than six hundred sixty (660) feet from the unit boundary, with no interior section line setback.

#### Township 32 North, Range 6 West, N.M.P.M.

Section 3: All

Section 8: E½

Sections 9 and 10: All

Section 15: W½

Section 16: All

#### Township 32 North, Range 7 West, N.M.P.M.

Section 3: N½

Section 5: S½

Sections 7 and 8: All

Sections 17 thru 19: All

#### Township 32 North, Range 8 West, N.M.P.M.

Sections 1 through 24: All

#### Township 32 North, Range 9 West, N.M.P.M.

Section 1: All

Sections 12 and 13: All

Section 24: All

Township 33 North, Range 6 West, N.M.P.M.

Sections 6 and 7: All

Township 33 North, Range 7 West, N.M.P.M.

Section 1: S $\frac{1}{2}$ , N $\frac{1}{2}$

Section 4: All

Sections 7 and 8: All

Section 9: W $\frac{1}{2}$

Section 14: W $\frac{1}{2}$

Section 16: S $\frac{1}{2}$

Section 17: All

Section 18: E $\frac{1}{2}$

Sections 19 through 21: All

Section 26: W $\frac{1}{2}$

Sections 27 and 28: All

Section 29: E $\frac{1}{2}$

Section 30 N $\frac{1}{2}$

Section 34: All

Section 35: W $\frac{1}{2}$

Township 33 North, Range 8 West, N.M.P.M.

Section 2: S $\frac{1}{2}$

Section 3: N $\frac{1}{2}$

Section 4: All

Section 5: N $\frac{1}{2}$

Section 6: N $\frac{1}{2}$

Section 10: N½

Section 11: E½

Sections 12 and 13: All

Section 14: E½

Section 19: S½

Section 22: N½

Section 23: N½

Section 25: N½

Section 30: E½

Sections 31 and 32: All

Section 33: W½

Township 33 North, Range 9 West, N.M.P.M.

Section 1: All

Section 4: All

Sections 6 through 11: All

Section 12: W½

Section 13: W½

Section 14: All

Section 15: E½

Section 16: All

Section 19: E½

Section 21: All

Section 22: W½

Sections 23 through 25: All

Section 29: All

Township 34 North, Range 7 West, N.M.P.M.

Sections 2 and 3: All

Sections 10 and 11: All

Section 15: All

Sections 22 and 23: All

Section 24: S½

Section 25: W½, E½

Sections 26 and 27: All

Section 33: S½

Section 34: All

Section 35: N½

Section 36: N½

Township 34 North, Range 9 West, N.M.P.M.

Section 4: All

Section 9: All

Sections 16 and 17: All

Section 18: S½

Sections 19 through 21: All

Section 28: All

Section 30: N½

Section 31: All

Section 33: E½

IT IS FURTHER ORDERED, that the surface location of each of the optional wells shall be located on a common or expanded pad with the existing well such that a total of four (4) Fruitland coal well pads shall be authorized in each governmental section.

IT IS FURTHER ORDERED, that wells drilled in the above-described lands shall comply with the terms and provisions of all of the Commission's health, safety, welfare and environmental rules and regulations now or hereafter in effect.

IT IS FURTHER ORDERED, that wells drilled in the above-described lands shall comply with all applicable regulations of the BLM, Bureau of Indian Affairs and the Southern Ute Indian Tribe when conducting operations on lands subject to the respective jurisdiction of each agency.

IT IS FURTHER ORDERED, that wells drilled in the above-described lands shall comply with certain provisions of the MOU between BP America Production Company and La Plata County, and shall comply with all terms, conditions and provisions of prior Commission Orders in Cause No. 112,



including without limitation, the specific provisions of Order No. 112-157 including the Rule 508.j.(3)B. conditions attached thereto, to the extent they do not duplicate the provisions of the MOU. For convenience and ease of reference, the relevant conditions of the MOU and Order No. 112-157, including Rule 508.j.(3)B conditions, are set forth below. Conflicts between the conditions of the MOU set forth herein and the terms, conditions and provisions of Order No. 112-157 shall be resolved in favor of the MOU.

IT IS FURTHER ORDERED, that the following provisions of the MOU between BP America Production Company and La Plata County found in Article V, VI and Subsections 2.1 and 2.2 shall be applied to additional wells where the surface location is proposed to be sited on lands subject to Commission jurisdiction, in addition to any requirements of applicable existing Commission Rules and Regulations or orders:

**Surface Density** The density of Fruitland Coal Well Pads within the Infill Application Area shall not exceed four (4) within any single 640-acre governmental section of real property. Notwithstanding the foregoing, nothing contained in this provision shall be construed so as to require the closure or abandonment of any existing gas well. "Fruitland Coal Well" means a gas well drilled for the purpose of producing gas from the Fruitland coal seams under the lands described in this Order No. 112-190. "Well Pad" means the flat graveled portion of the pad area in which permanent operations for the gas well take place and shall always include, at a minimum, that portion of the pad area occupied by the drilling rig anchors. "Infill Application Area" means the lands described in this Order No. 112-190.

**Well Location; Exceptions** The Commission may grant a special exception allowing for a greater density of Fruitland Coal Well Pads (i.e., more than 4 per 640-acre section), at the request of BP America Production Company and after consultation with the Local Governmental Designee ("LGD"), based upon a finding by the Commission that one or more of the following factors apply in a manner such that use of an existing Well Pad is rendered impractical:

- a. topographic characteristics of the site;
- b. natural resource constraints (e.g., wetlands);
- c. the location of utilities or similar services;
- d. geologic factors or where issues concerning distances between wells are present;
- e. other site conditions beyond the control of BP America Production Company; or
- f. safety concerns.

**Storm Water Management and Spill Prevention Containment and Control** Even if not required to do so by any applicable regulation or law, BP America Production Company agrees to utilize best management practices for all pad expansions and new pads and for road and pipeline development or improvements. "Best management practices" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices intended to prevent or reduce the pollution of waters of the State of Colorado as described in the regulations of the Colorado Department of Public Health and Environment, as amended from time to time.

**Water Well Monitoring** If a conventional gas well exists within one quarter ( $\frac{1}{4}$ ) mile of the bottom hole location of a proposed Infill Well, then the two (2) closest water wells within a one-half ( $\frac{1}{2}$ ) mile radius of a conventional gas well shall be sampled by BP America

Production Company as water quality testing wells. If possible, the water wells selected shall be on opposite sides of the existing conventional gas well not exceeding one-half ( $\frac{1}{2}$ ) mile radius. "Infill Well" means wells drilled pursuant to this Order No. 112-190. "Conventional gas well" means a well producing from a non-coalbed methane formation found in the San Juan Basin, such as the Mesaverde or Dakota Sandstone Formation.

If water wells on opposite sides of the conventional gas well cannot be identified, then the two (2) closest wells within one-half ( $\frac{1}{2}$ ) mile radius shall be sampled. If two (2) or more conventional gas wells are located within one quarter ( $\frac{1}{4}$ ) mile of the bottom hole location of the proposed Infill Well, then the conventional gas well closest to a proposed Infill Well shall be used for selecting water wells for sampling.

If no conventional gas wells are located within one quarter ( $\frac{1}{4}$ ) mile radius of the bottom hole location of the proposed Infill Well, then the selected water wells shall be within one quarter ( $\frac{1}{4}$ ) mile of the bottom hole location of the proposed Infill Well. In areas where two (2) or more water wells exist within one quarter ( $\frac{1}{4}$ ) mile of the bottom hole location of the proposed Infill Well, then the two (2) closest water wells shall be sampled by BP America Production Company. Ideally, if possible, the water wells selected shall be on opposite sides of the bottom hole location of the proposed Infill Well.

If water wells on opposite sides of the bottom hole location of the proposed Infill Well cannot be identified, then the two (2) closest wells within one quarter ( $\frac{1}{4}$ ) mile radius shall be sampled by BP America Production Company. If two (2) water wells do not exist within one quarter ( $\frac{1}{4}$ ) mile radius, then the two closest single water wells within either a one quarter ( $\frac{1}{4}$ ) mile radius or within a one-half ( $\frac{1}{2}$ ) mile radius shall be selected. If no water well is located within a one quarter ( $\frac{1}{4}$ ) mile radius area or if access is denied, a water well within one-half ( $\frac{1}{2}$ ) mile of the bottom hole location of the Infill Well shall be selected. If there are no water quality testing wells meeting the foregoing criteria, then sampling shall not be required. If the BLM or the Commission have already acquired data on a water well within one quarter ( $\frac{1}{4}$ ) mile of the conventional gas well, but it is not the closest water well, it shall be given preference in selecting a water quality testing well. The "initial baseline testing" described in this paragraph shall include all major cations and anions, total dissolved solids ("TDS"), iron and manganese, nutrients (nitrates and nitrites), selenium, dissolved methane, pH, presence of bacteria and specific conductance and field hydrogen sulfide.

If free gas or a methane concentration level greater than 2 milligrams/liter ("mg/L") is detected in a water quality testing well, compositional analysis and carbon isotopic analyses of methane carbon shall be performed to determine gas type (thermogenic, biogenic or an intermediate mix of both). If the testing results reveal biogenic gas, no further isotopic testing shall be done. If the carbon isotope test results in a thermogenic or intermediate mix signature, annual testing shall be performed thereafter and an action plan shall be drafted by BP America Production Company to determine the source of the gas. If the methane concentration level increases by more than 5 mg/L between sampling periods, or increase to more than 10 mg/L, an action plan shall be drafted to determine the source of the gas.

The initial baseline testing shall occur prior to the drilling of the proposed Infill Well. Within one (1) year after completion of the proposed Infill Well, a "post completion" test shall be performed for the same parameters above and repeated three (3) and six (6) years thereafter. If no significant changes from the baseline have been identified after the third test (the six year test), no further testing shall be required. The testing schedule shall restart after the drilling of a new Infill Well on an existing Well Pad if the wells to be tested include those tested for the 160 acre infill program. Additional "post completion" test(s) may be required if changes in water quality are identified during follow-up testing. The Director of the Commission may require further water well sampling, which may include water quantity monitoring, at any time in response to complaints from water well owners.

Within three (3) months of collecting the samples used for the test, copies of all test results described above shall be provided to the Commission and the County and the landowner where the water quality testing well is located.

**Plugged and Abandoned Wells/Soil Gas Vapor Survey** A soil gas vapor-monitoring program shall be designed to determine a possible lack of zonal isolation along wellbores of plugged and abandoned wells. BP America Production Company shall attempt to identify any plugged and abandoned wells located within one quarter ( $\frac{1}{4}$ ) mile of the bottom hole location of any Infill Well. Any plugged and abandoned well within one quarter ( $\frac{1}{4}$ ) mile of the bottom hole of an Infill Well shall be assessed for risk, taking into account cementing practices reported in the plugged and abandoned reports. BP America Production Company shall notify the Commission of all results of all risk assessments of plugging procedures. The Commission may appropriate funds under Rule 701. (the Environmental Response Fund) to conduct soil gas monitoring tests to further define the risks. If the monitoring reveals a possible lack of zonal isolation, the Commission may then conduct or order any necessary remediation or other authorized activities.

IT IS FURTHER ORDERED, that the following terms, conditions and provisions of Order No. 112-157 shall be applied to additional wells where the surface location is proposed to be sited on lands subject to Commission jurisdiction, in addition to any requirements of applicable existing Commission Rules and Regulations:

**Well Permit Limitations** A Commission hearing shall be required before a drilling permit may be issued for a well site located within one and one-half ( $1\frac{1}{2}$ ) miles of the outcrop contact between the Fruitland and Pictured Cliffs Formations. The purpose of the hearing shall be to address potential adverse impacts to the Fruitland outcrop.

**Annual Drilling Plan** The Director shall survey the operator as to its drilling plans for 2006, and annually thereafter. The survey results shall be reported to the Commission for its consideration with respect to the conditions attached to this order.

**Wildlife** The operator shall notify the Colorado Division of Wildlife ("CDOW") of the location of any proposed additional well site and advise the Director of the date such notice was provided. If the Director receives comments from the CDOW within ten (10) days of the date notice was provided, such comments may be considered in applying Rule 508.j.(3)B. conditions.

**Emergency Preparedness Plan** The operator submitting an Application for Permit-to-Drill for a proposed additional well under this order shall file and maintain a digital Emergency Preparedness Plan ("EPP") with La Plata County. The EPP shall include as-built facilities maps showing the location of wells, pipelines and other facilities, except control valve locations that which may be held confidential. The EPP shall include an emergency personnel contact list.

**Gas and Oil Regulatory Team** The Director shall ensure that the La Plata County Gas and Oil Regulatory Team ("GORT") continues to meet as appropriate, but no less than semiannually. GORT meetings may be scheduled more frequently if the members believe a meeting is appropriate. (GORT includes invited member representatives from La Plata County, BLM, SUIT, industry operators and Commission. Its meetings are open and typically attended by interested area residents.)

**3M Mapping, Modeling and Monitoring Project** The Director shall ensure that the 3M Technical Peer Review Team is invited to meet as appropriate, but no less than semiannually to review proposals and results related to the 3M Mapping, Modeling and Monitoring Project. 3M Technical Peer Review Team meetings may be scheduled more

frequently if the members believe a meeting is appropriate.

**Post Completion Pressure Build-Up Tests** In addition to obtaining a bottom hole pressure on all wells drilled under this order, the operator shall conduct pressure build-up two (2) to three (3) months after initial production begins and once every three (3) years thereafter. The operator shall provide the data acquired, an evaluation of the data and the procedures utilized to conduct the pressure build-up tests to the Director within thirty (30) days of the conclusion of each test. After reviewing the quality of the pressure buildup data and the adequacy of the geographic distribution of the data, the Director may reduce the number of wells for which pressure build-up testing is required.

IT IS FURTHER ORDERED, that the following Rule 508.j.(3)B. conditions from Order No. 112-157 shall be applied to additional wells where the surface location is proposed to be sited on lands subject to Commission jurisdiction, in addition to any requirements of applicable Commission Rules and Regulations:

Prior to approving any Application for Permit-to-Drill, the Director shall conduct an onsite inspection if the surface well location is proposed to be sited within any subdivision that has been approved by La Plata County. The Director shall conduct an onsite inspection if the surface well location is within two (2) miles of the outcrop contact between the Fruitland and Pictured Cliffs Formations and an onsite inspection is requested by the surface owner, LGD, operator, or Director.

Prior to approving any Application for Permit-to-Drill, the Director shall conduct an onsite inspection if the operator and the surface owner have not entered into a surface use agreement. If the reason the surface use agreement has not been executed is related to surface owner compensation, property value diminution, or any private property contractual issues between the operator and the surface owner, then no onsite inspection shall be required.

The purpose of the onsite inspection shall be to identify any potential public health, safety and welfare or significant adverse environmental impacts within Commission jurisdiction regarding the proposed surface location that may not be adequately addressed by Commission rules or orders. The onsite inspection shall not address matters of surface owner compensation, property value diminution, or any private party contractual issues between the operator and the surface owner.

When the Director conducts onsite inspections under the conditions in 1.) and 2.) above, the Director shall invite the representatives of the surface owner, the operator and LGD to attend. The Director shall attempt to select a mutually acceptable time for the representatives to attend. The inspection shall be conducted within ten (10) days, or as soon as practicable thereafter, of either the date the LGD advises the Director in writing that the proposed surface well site location falls within an approved subdivision or the date the operator advises the Director in writing that a surface use agreement has not been reached with the surface owner. If requested by the operator, the Director may delay the onsite inspection to allow for negotiation between the operator and surface owner or other parties.

Following the onsite inspection, the Director shall apply appropriate site specific drilling permit conditions if necessary to prevent or mitigate public health, safety and welfare or significant adverse environmental impacts taking into consideration cost-effectiveness and technical feasibility and relevant geologic and petroleum engineering conditions as well as prevention of waste, protection of correlative rights, and promotion of development.

Examples of the types of impacts and conditions that might be applied if determined necessary by the Director in 5.) above include (this list is not prescriptive or all inclusive):

visual or aesthetic impacts - moving the proposed surface well site location or access road to take advantage of natural features for screening; installing low profile artificial lift methods; constructing artificial features for screening

surface impacts – moving or reducing the size, shape, or orientation of the surface well site location or access road to avoid disturbance of natural features or to enhance the success of future reclamation activities; utilizing an existing surface well site location or access road to avoid the impacts of new construction; utilizing a closed drilling fluid system instead of reserve pits to avoid impacts to sensitive areas

noise impacts – installing electric motors where practicable; locating or orienting motors or compressors to reduce noise; installing sound barriers to achieve compliance with Commission rules; confining cavitation completion operations (excluding flaring) to the hours of 7 a.m. to 7 p.m. and notifying all area residents within one-half (½) mile at least seven (7) days before cavitation is commenced

dust impacts – watering roads as necessary to control dust during drilling and completion operations

ground water impacts – collecting and analyzing water and gas samples from existing water wells or springs; installing monitoring wells, collecting samples, and reporting water, gas and pressure data

safety impacts – soil gas sampling and analysis; residential crawl space gas sampling and analysis; installing security fencing around wellheads and production equipment

outcrop impacts – performing outcrop gas seep surveys; performing produced water quality analysis; periodic pressure transient testing of high water/gas ratio wells; limiting water production in wells with anomalously high water rates and water/gas ratios; funding investigative reservoir modeling under the Director's supervision

wildlife impacts – limiting drilling and completion operations during certain seasonal time periods when specific site conditions warrant

If the operator objects to any of the conditions of approval applied under 6.) above, the Director shall stay the issuance of the drilling permit and properly notice and set the matter for the next regularly scheduled Commission hearing at which time the Commission may determine conditions of drilling permit approval.

If the Director has reasonable cause to believe that any existing or proposed oil and gas operations are causing, or are likely to cause, public health, safety and welfare or significant adverse environmental impacts within Commission jurisdiction that may not be adequately addressed by Commission rules or orders, the Director may properly notice and set the matter for the next regularly scheduled Commission hearing to order appropriate investigative or remedial action. Reasonable cause may include, but is not limited to, information from the 3M Mapping, Modeling and Monitoring Project.

IT IS FURTHER ORDERED, that the provisions contained in the above order shall become effective forthwith.

IT IS FURTHER ORDERED, that the Commission expressly reserves its right, after notice and hearing, to alter, amend or repeal any and/or all of the above orders.

IT IS FURTHER ORDERED, that under the State Administrative Procedure Act the Commission considers this order to be final agency action for purposes of judicial review within thirty



(30) days after the date this order is mailed by the Commission.

IT IS FURTHER ORDERED, that an application for reconsideration by the Commission of this order is not required prior to the filing for judicial review.

ENTERED this \_\_\_\_\_ day of August, 2006, as of July 10, 2006.

OIL AND GAS  
CONSERVATION  
COMMISSION

OF THE  
STATE OF  
COLORADO

By \_\_\_\_\_

Patricia C. Beaver, Secretary

Dated at Suite 801

1120 Lincoln Street

Denver, Colorado 80203

August 7, 2006

## MEMORANDUM OF UNDERSTANDING

THIS AGREEMENT is made and entered into this 2<sup>nd</sup> day of August, 2006, by and between the BOARD OF COUNTY COMMISSIONERS OF LA PLATA COUNTY, COLORADO, 1060 E. 2<sup>nd</sup> Avenue, Durango, Colorado 81301 and BP AMERICA PRODUCTION COMPANY, a Delaware corporation, 380 Airport Road, Durango, Colorado 81303.

### DEFINITIONS

*Abandonment or abandoned* means the permanent abandonment of a well based on the operator's filing with the COGCC.

*Best Management Practices* means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices intended to prevent or reduce the pollution of waters of the State of Colorado as described in the regulations of the Colorado Department of Public Health and Environment, as amended from time to time.

*BLM* means the Bureau of Land Management.

*BP* means BP America Production Company.

*COGCC* means the Colorado Oil and Gas Conservation Commission of the State of Colorado.

*Conventional gas well* means a well producing from a non-coalbed methane formation found in the San Juan Basin, such as the Mesa Verde or Dakota Sandstone formations.

*County* means the Board of County Commissioners of La Plata County.

*County approved subdivision* means any subdivision created pursuant to state law, which has received subdivision approval by the Board of County Commissioners since September 1, 1972.

*Easement* means express or implied authorization by a property owner for the use of a designated portion of his property by another, for a specified purpose.

The *Environmental Response Fund* or ERF is "an emergency reserve" of unobligated funds to be maintained by the COGCC in the amount of \$1,000,000 and used in accordance with Colorado's Oil and Gas Act and Rule 701 of the COGCC's Rules. As described in Rule 701, the ERF fund is a mechanism to plug and abandon orphan wells, perform orphaned site reclamation and remediation and to conduct other authorized environmental activities.

*Fruitland Coal Well* means a gas well drilled for the purpose of producing gas from the Fruitland coal seams underlying the lands described in the Infill Application.

*Gas well* means a well having a pressure and volume of natural gas; specifically, producing methane, often in combination with a variety of other substances such as butane, propane and carbon dioxide.

*Green completion* means a technique whereby gas is recovered for sale or use instead of being vented or flared during initial completion flow back operations.

*Heavy equipment* means individual truck/trailer combination vehicles with a gross vehicle weight exceeding 5 tons.

*Infill Application* means the application filed by BP with the COGCC on or about May 22, 2006 requesting an increase of the density (to one well per 80 acres) of Fruitland Coal Wells in portions of La Plata County, Colorado.

*Infill Application Area* means the area within La Plata County described in the Infill Application.

*Infill County Permit* means any permit the county issues pursuant to LPLUC for minor oil and gas facilities and major oil and gas facilities related to the Infill Application.

*Infill Wells* means those wells contemplated to be drilled by virtue of the Infill Application.

*LPLUC* means the La Plata County Land Use Code as of July 11, 2005.

*Low bleed* means pneumatic controllers installed on field equipment to replace high bleed devices that vent small amounts of methane continuously.

*Major oil and gas facilities* shall have the meaning set forth in Section 90-19 of LPLUC.

*Minor oil and gas facilities* shall have the meaning set forth in Section 90-19 of LPLUC.

*Permanent operations* means operations for an Infill Well after initial drilling, completion and interim reclamation and before abandonment.

*Reasonable efforts* means diligent and good faith efforts to accomplish a given objective.

*Right-of-way* means a tract or strip of land, separate and distinct from the underlying property, owned, occupied or intended to be occupied by an oil, gas and/or water pipeline.

*Road Impact Fees* means the County road impact fees described in Article 3 below.

*Water quality testing wells* means domestic water wells within the vicinity of gas wells tested for water quality.

*Well Pad* means the flat graveled portion of the pad area in which permanent operations for the gas well take place and shall always, include, at a minimum, that portion of the pad area occupied within the drilling rig anchors.

### RECITALS

A. La Plata County is a political subdivision of the State of Colorado authorized to act through its Board of Commissioners.

B. BP is a gas producing operator which has filed the Infill Application with the COGCC requesting an increase in the density of Fruitland Coal Wells in parts of La Plata County, Colorado. The Infill Application requests authority for new BP 80 acre Infill Fruitland Coal Wells within the Infill Application Area.

C. The parties to this Agreement have differing legal positions regarding the degree and extent of the County's authority to regulate certain aspects of oil and gas operations. The parties prefer, if possible, to avoid expending their resources in advancing their legal positions. Notwithstanding these differences and in their desire to avoid protracted formal hearings, the County and BP are willing to agree to the terms contained herein.

D. The provisions of Chapter 90 of LPLUC require BP to obtain a county permit for the construction, installation and operation of oil and gas facilities within the unincorporated areas of the county except with respect to those lands where the County's jurisdiction is preempted by federal or state law, or by Southern Ute Indian Tribal jurisdiction.

E. The County seeks to facilitate the development of oil and gas resources within the above-described areas of the county while mitigating potential impacts from such development.

F. The County has determined that potential impacts attendant to future gas development would be best mitigated for the county as a whole if future Fruitland Coal Wells are drilled on existing well pads where practical and as prescribed in LPLUC despite the fact that, in some instances, the use of existing well pads may further affect certain property owners and neighboring properties.

G. C.R.S. § 43-2-147 allows the County to, and describes the manner in which, the County shall regulate vehicular access to and from any public highway under its jurisdiction and from or to property adjoining a public highway in order to protect the public health, safety and welfare, to maintain smooth traffic flow, to maintain highway right-of-way drainage and to protect the functional level of public highways.

H. The County, as a matter of right, may intervene in the adjudicatory proceedings before the COGCC related to the Infill Application to raise environmental or public health, safety and welfare concerns. In exchange for the agreements contained herein, the County will not protest BP's Infill Application, nor, if it intervenes in the adjudicatory proceedings related to the Infill Application, will it advocate any position inconsistent with any term contained in this Agreement.

I. BP and the County wish to have certain issues amicably resolved prior to the COGCC's adjudicatory proceedings on the Infill Application and they agree that certain provisions of this Agreement should be included (subject to COGCC approval) in the requested Infill order.

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## **AGREEMENT**

In consideration of the mutual obligations and benefits set forth in this Agreement and for other good and valuable consideration, the receipt of which is acknowledged, BP and the County agree as follows:

### **ARTICLE I APPLICATION**

This Agreement shall apply to lands presently within the unincorporated portions of the Infill Application Area within the County with the exception of those lands where the County's jurisdiction is preempted by federal or state law, or by Southern Ute Indian tribal jurisdiction.

### **ARTICLE II DENSITY AND USE OF EXISTING WELL PADS AND FACILITIES**

2.1 *Density.* BP agrees that, except as provided in Article 2.2 herein or as may be otherwise permitted in the COGCC order approving BP's Infill Application, the density of Fruitland Coal Well Pads within the Infill Application Area shall not exceed four (4) within any single 640-acre governmental section of real property. Notwithstanding the foregoing, nothing contained in this Article II shall be construed so as to require the closure or abandonment of any existing gas well.

2.2 *Well Location; Exceptions.* The County believes that the potential impacts attendant to future gas development would be best mitigated for the County as a whole if future Fruitland Coal Wells are drilled on existing well pads ("Pad Drilling"). In support of this policy, in situations where reasonable efforts fail to produce a Surface Use Agreement concerning Pad Drilling between BP and the Surface Owner, the County, in its discretion, may approve the Infill County Permit for Pad Drilling. Special exceptions to Article 2.1 may be requested by BP in its applications for Infill County Permits. The County will grant special exceptions when the County finds that one or more of the following factors apply in a manner such that use of an existing Well Pad is rendered impractical:

- a. topographic characteristics of the site;
- b. natural resource constraints (e.g., wetlands);
- c. the location of utilities or similar services;
- d. geologic factors or where issues concerning distances between wells are present;
- e. other site conditions beyond the control of BP; or
- f. safety concerns.

In rare circumstances, the County may also, in its discretion, grant a special exception to Article 2.1 at the request of the Surface Owner and BP based upon other impacts that may arise from Pad Drilling. Nothing herein shall be construed or applied so as to result

in the complete preclusion of an Infill Well authorized by the COGCC. The limitation contained in Section 2.1 shall not apply in any instance in which the County denies a permit application to drill a well from an existing Well Pad or to expand an existing Well Pad.

2.3 *Use of Existing Infrastructure.* BP agrees, except as provided in Article 2.2, to use existing infrastructure, including but not limited to the use of existing roads, pipeline routes and Well Pads within the existing drilling windows in the Infill Application Area. Nothing contained in this Article 2.3 shall preclude BP from installing additional facilities within the existing roads, pipeline routes and Well Pads if reasonably required to produce and operate the Infill Wells. The County recognizes that some minor reconfiguration of the existing infrastructure or additional easements may be necessary due to the placement of multiple wells on existing Well Pads. With the exception of such circumstances and other operational requirements or limitations imposed by existing contractual agreements or government regulations (*e.g.*, CDOT access permits), with the installation of each Infill Well BP shall use existing roads, easements, and pipeline routes.

2.4 *Legal Non-Conforming Uses and Setbacks.* Section 90-122(b) of LPLUC establishes certain setback requirements. In some instances, existing minor oil and gas facilities which initially met such requirements would not meet the requirements if a current application were filed due to (i) the encroachment of other development into the setback area, (ii) because the regulation was not in effect when the original installation occurred or (iii) because a waiver previously was obtained. Because the County believes that the policy of utilizing existing well pads is critical to the mitigation of the overall impact of the Infill Wells on the county as a whole, the County agrees that in those instances where the setback requirements of Sections 90-122 (b)(1) and (2) cannot be met currently, the County will consider the use of the existing Well Pad site a legal nonconforming use not subject to the requirements of Sections 90-122 (b)(1) and (2), provided that the degree of the nonconformity is not in any way increased by the placement of the Infill Well on the existing Well Pad site. The degree of existing nonconformity shall be measured from the edge of the existing Well Pad to the nearest residential structure and/or county approved subdivision as applicable. The degree of nonconformity for the new proposed Infill Well shall be measured from the edge of the new proposed Well Pad to the nearest residential structure and/or county approved subdivision as applicable. The increase, if any, in degree of nonconformity shall be the net difference between the two above measured values.

2.5 *Expansion of Existing Well Pads.* In those instances where an existing Well Pad is used for an Infill Well, BP agrees to use reasonable efforts to minimize the expansion of the area of the existing Well Pad. The reasonableness of the expansion under the circumstances shall be demonstrated by BP to the County with its Infill County Permit application. BP agrees to exercise reasonable efforts to expand existing well pads away from nearby existing impacted residential structures.

### ARTICLE III PRIVATE ROADS AND ROAD IMPACT FEES

3.1 *Road Impact Fees.* County and BP have determined that specific land use activities by BP within the Infill Application Area may create impacts on County roads and, therefore, mitigation in the form of negotiated road impact fees is proper and necessary. The parties recognize that impact fees are not always a reliable or sufficient source of funds and that the County's ability to actually perform such work may be limited or hampered by reasons beyond its control. However, the County agrees to exercise good faith in its efforts to carry out the intent of this Agreement and to perform such work to the extent that monies are available and appropriated. The County shall control the sequencing and timing of such work and BP hereby waives its rights, if any, to insist upon completion of the work or to dictate the manner, sequencing and timing of the same. The County recognizes and acknowledges that the monies collected hereunder must be collected and spent in a manner consistent with the accounting practices set forth in C.R.S. § 29-1-801 *et seq.* and that such monies may only be spent on facilities that are directly and reasonably related to the mitigation of impacts related to the activities described in the Infill Application.

3.2. *Road Impact Fees Calculation and Payment.* Based upon certain agreed upon assumptions, BP and the County have agreed to estimated Road Impact Fees for minor oil and gas facilities and major oil and gas facilities with respect to the Infill Application as follows:

(a) Tier 1 facilities are those with respect to which BP will transport produced water by pipe during normal production operations (not including emergency situations and periods in which drilling, completion or well servicing operations are being conducted) and the Road Impact Fee for Tier 1 facilities shall be in the amount of \$4,116.00 per facility;

(b) Tier 2 facilities are those with respect to which BP will haul the above described produced water for temporary periods not to exceed two (2) years from the date the facility is placed in service, and the Road Impact Fee for Tier 2 facilities shall be \$5,261.00 per facility; and

(c) Tier 3 facilities are those with respect to which BP likely will haul such produced water for the long-term, and the Road Impact Fee for Tier 3 facilities shall be \$7,501.00 per facility.

BP shall pay the County the Road Impact Fee due and owing for the prescribed activity prior to the County's final approval of the Infill County Permit.

3.3 *Adoption of Road Impact Fee Program.* The County is presently undertaking a feasibility study for the imposition of a county-wide impact fee program. To the extent legally permissible, the County shall use reasonable efforts to adopt a road impact fee program applicable to those eligible properties and uses upon which the

County can legally impose an impact fee pursuant to constitutional and statutory parameters. If such a program is adopted by the County and, as adopted applies to minor oil and gas facilities and major oil and gas facilities, BP's obligation to pay the fees described in Article 3.2, other than those already paid, shall terminate.

3.4 *Submission of Information.* The County seeks to efficiently and effectively schedule maintenance and improvement projects on its county roads. The use of such roads by heavy equipment related to construction or production activities in the Infill Application Area could have an effect on such projects. The County seeks and BP agrees to provide the County, on a quarterly basis, a forecasted activity plan setting forth the expected location and duration of minor oil and gas facilities and major oil and gas facilities operations within the county for the upcoming quarter as well as the county roads to be accessed and general proposed travel or haul routes. The disclosure of such plans and routes is for informational purposes only and shall not be construed as creating any obligation on the part of BP, including, without limitation, to conduct such operations, to limit the location and duration of such operations or to follow such routes. The first submission of such information shall occur within thirty (30) days after the COGCC order approving the Infill Application. The County agrees to reciprocate and provide notice to BP of its intended projects and its expected schedule for same.

3.5 *Use of Subdivision Roads.* BP agrees that in those instances where it accesses Infill Wells in the Infill Application Area through a road or roads within a county-approved subdivision and a governing entity exists (e.g., homeowners' association) with legal authority to bind the entity and its members, and with the authority to grant access rights over such roads and/or negotiate agreements with respect to their use, BP will use reasonable efforts to negotiate a fair and reasonable road maintenance or road improvement agreement with such entity for the purpose of paying or making in-kind contributions for its pro rata share of the cost of maintaining or improving the affected road(s). Such agreements or a memorandum thereof shall be recorded with the Clerk and Recorder of La Plata County. The existence, or lack thereof, of such executed and recorded agreements shall be noted in the Infill County Permit application for informational purposes only.

3.6 *Use of Equipment.* BP agrees that:

- a. it will remove or require the removal of chains from its heavy equipment before entering a county road;
- b. all new roads associated with the Infill Wells within the Infill Application Area shall have gravel access and Well Pads with a minimum of four inches (4") of Class 6 Aggregate Base Course as defined by the Colorado Department of Transportation Standard Specifications for Road and Bridge Construction over a stabilized base, both of which shall be maintained throughout permanent operations of the Well Pad; and
- c. if mud and/or debris is tracked onto the county road by BP's equipment, BP shall remove same and restore the condition of the road as promptly as is reasonable under the circumstances.

3.7 *Produced Water Hauling.* Except in emergency situations of which the County shall be provided notice, and except during drilling, completion and well servicing operations, BP shall transport produced water by pipe except within Tier 2 or 3 facilities areas. In those instances where a water hauling truck is utilized, BP agrees to strictly comply with the weight restrictions set forth in Chapter 42, Article V of the LPLUC.

#### ARTICLE IV AIR QUALITY

4.1 *Electrification.* BP agrees that with respect to Infill Wells within the Infill Application Area requiring long-term artificial lift, it shall utilize electric motors for all artificial lift installations provided the Well Pad is within 1320 feet of distribution voltage and the ability to do so is not cost prohibitive due to the demands of property owners from whom easements are required, topography or other physical features (e.g., the presence of a river). BP agrees that if distribution voltage is not currently within 1320 feet of the proposed Well Pad, it will contact and provide the surface owner an opportunity at the surface owner's cost to extend distribution voltage to within 1320 feet of the proposed Well Pad. It is understood that gas powered artificial lift equipment may be used prior to the time that La Plata Electric Association brings power to the site. BP agrees to request that La Plata Electric Association place the power lines underground except in areas where the topography or subsurface conditions render it infeasible or in situations in which the landowner requests overhead lines.

4.2 *Greenhouse Gas Reduction.* BP agrees to utilize reasonable efforts to minimize methane emissions by using "green completion" techniques, and the installation of "low bleed" pneumatic instrumentation, when feasible.

4.3 *Emission Control Equipment.* BP will comply with existing EPA rules and any future regulations validly adopted by an authority with appropriate jurisdiction, including regulations that may be adopted by the Southern Ute Indian Tribe.

#### ARTICLE V WATER QUALITY

5.1 *Storm Water Management and Spill Prevention Containment and Control.* Even if not required to do so by any applicable regulation or law, BP agrees to utilize Best Management Practices for all pad expansions and new pads and for road and pipeline development or improvements.

5.2 *Water Well Monitoring.* If a conventional gas well exists within one quarter (1/4) mile of the bottom hole location of a proposed Infill Well, then the two (2) closest water wells within a one-half (1/2) mile radius of the conventional gas well shall be sampled by BP as water quality testing wells. If possible, the water wells selected shall be on opposite sides of the existing conventional gas well not exceeding one-half

(1/2) mile radius. If water wells on opposite sides of the conventional gas well cannot be identified, then the two (2) closest wells within one-half (1/2) mile radius shall be sampled. If two (2) or more conventional gas wells are located within one quarter (1/4) mile of the bottom hole location of the proposed Infill Well, then the conventional gas well closest to a proposed Infill Well shall be used for selecting wells for sampling.

If no conventional gas wells are located within one quarter (1/4) mile radius of the bottom hole location of the proposed Infill Well, then the selected water wells shall be within one quarter (1/4) mile of the bottom hole location of the proposed Infill Well. In areas where two (2) or more water wells exist within one quarter (1/4) mile of the bottom hole location of the proposed Infill Well, then the two (2) closest water wells shall be sampled by BP. Ideally, if possible, the water wells selected should be on opposite sides of the bottom hole location of the proposed Infill Well. If water wells on opposite sides of the bottom hole location of the proposed Infill Well cannot be identified, then the two (2) closest wells within one quarter (1/4) mile radius shall be sampled by BP. If two (2) water wells do not exist within one quarter (1/4) mile radius, then the closest two water wells within a one-half (1/2) mile radius shall be selected.

If no water well is located within a one quarter (1/4) mile radius area or if access is denied, a water well within one-half (1/2) mile of the bottom hole location of the Infill Well shall be selected. If there are no water quality testing wells meeting the foregoing criteria, then sampling shall not be required. If the BLM or the COGCC have already acquired data on a water well within one quarter (1/4) mile of the conventional gas well, but it is not the closest water well, it shall be given preference in selecting a water quality testing well. The "initial baseline testing" described in this paragraph shall include all major cations and anions, TDS, iron and manganese, nutrients (nitrates, nitrites, selenium), dissolved methane, pH, presence of bacteria and specific conductance and field hydrogen sulfide.

If free gas or a methane concentration level greater than 2 mg/L is detected in a water quality testing well, compositional analysis and carbon isotopic analyses of methane carbon shall be performed to determine gas type (thermogenic, biogenic or an intermediate mix of both). If the testing results reveal biogenic gas, no further isotopic testing shall be done. If the carbon isotope test results in a thermogenic or intermediate mix signature, annual testing shall be performed thereafter and an action plan shall be drafted by BP to determine the source of the gas. If the methane concentration level increases by more than 5 mg/L between sampling periods, or increase to more than 10 mg/L, an action plan shall be drafted to determine the source of the gas.

The initial baseline testing shall occur prior to the drilling of the proposed Infill Well. Within one (1) year after completion of the proposed Infill Well, a "post completion" test shall be performed for the same parameters above and repeated three (3) and six (6) years thereafter. If no significant changes from the baseline have been identified after the third test (the six year test), no further testing shall be required. The testing schedule will restart after the drilling of a new Infill Well on an existing Well Pad if the wells to be tested include those tested for the 160 acre infill program. Additional "post completion" test(s) may be required if changes in water quality are identified during



follow-up testing. The Director of the COGCC may require further water well sampling at any time in response to complaints from water well owners.

Within three (3) months of collecting the samples used for the test, copies of all test results described above shall be provided to the COGCC and the County and the landowner where the water quality testing well is located.

#### **ARTICLE VI PLUGGED AND ABANDONED WELLS/SOIL GAS VAPOR SURVEY**

A soil gas vapor-monitoring program is designed to determine a possible lack of zonal isolation along wellbores of plugged and abandoned wells. BP will attempt to identify any plugged and abandoned wells located within 0.25 miles of the bottom hole location of any Infill Well. Any plugged and abandoned well within 0.25 miles of the bottom hole of an Infill Well will be assessed for risk, taking into account cementing practices reported in the plugged and abandoned reports. BP shall notify the COGCC of all results of all risk assessments of plugging procedures. The COGCC may appropriate funds under Rule 701 (the Environmental Response Fund) to conduct soil gas monitoring tests to further define the risks. If the monitoring reveals a possible lack of zonal isolation, the COGCC may then conduct or order any necessary remediation or other authorized activities.

#### **ARTICLE VII INCLUSION INTO COGCC ORDER**

BP and the County agree to jointly request that certain conditions, as set forth in attached Exhibit A, be incorporated into the COGCC order approving the Infill Application.

#### **ARTICLE VIII SITE SPECIFIC DEVELOPMENT PLAN AND FUTURE REGULATIONS**

This Agreement shall not grant or create any common law or statutory vested development rights or exempt BP from any applicable County development review regulations or processes. The County reserves the right in the future to enact and apply prospectively oil and gas regulations that are general in nature and are applicable to all similarly situated oil and gas activities subject to land use regulation by the County, even though such regulations may be more or less stringent than the standards applicable to the Infill Wells by virtue of this Agreement.

#### **ARTICLE IX PRESERVATION OF RIGHTS**

The parties acknowledge, understand and agree that this Agreement shall not operate as a bar, constitute a waiver of any rights of the parties, or in any respect affect the ability of any party to this Agreement to assert its claims concerning the validity of

the County's land use jurisdiction. Nothing in this Agreement shall be construed as an admission regarding the existence of proper jurisdictional authority or waiver by either party of any legal right or obligation, nor shall anything be construed as a bar to either party to seek any legal remedy available to it.

## **ARTICLE X GENERAL PROVISIONS**

The following general provisions shall govern the relationship between the parties with respect to Infill Fruitland Coal Wells within the Infill Application Area.

10.1 *Effective Date and Term.* This Agreement shall be effective upon entry of the COGCC's order approving the Infill Application.

10.2 *Entire Agreement.* Except as otherwise expressly set forth herein, this Agreement embodies the complete agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes and preempts any prior understandings, agreements or representations by or between the parties, written or oral, which may have related to the subject matter hereof in any way.

10.3 *Successors and Assigns.* Except as otherwise provided herein, BP shall have the absolute right to transfer or sell any or part of its interest in the Infill Wells; provided, however, that in the event of transfer, BP's transferees, sublessees, successors and assigns shall be bound to comply with all terms hereof.

10.4 *Counterparts.* This Agreement may be executed in one or more counterparts, each of which shall be deemed an original but all of which when taken together shall constitute a single agreement.

10.5 *Amendment.* All covenants, representations and warranties herein and all other obligations, responsibilities and terms hereof shall continue to be fully binding and enforceable on the parties until expressly superseded by written agreement of the parties. No amendment to this Agreement shall be effective unless in writing, signed by all parties who are then subject to this Agreement.

10.6 *Waiver.* No failure on the part of any party hereto to exercise and no delay in exercising any right hereunder shall operate as a waiver of such right. The remedies provided herein are cumulative and not exclusive of any remedies provided by law. No waiver of, or failure to exercise any right hereunder shall operate to prevent future enforcement of such right.

10.7 *Notices.* Notices hereunder may be given by certified mail, return receipt requested, or by facsimile or electronic mail transmission. Notices shall be effective on receipt, provided, however, that confirmation of receipt shall be required in all instances. Notice to the respective parties shall be given to:

To the County at:

Nancy Lauro, Director  
Community Development Services  
La Plata County  
1060 E. 2<sup>nd</sup> Avenue  
Durango, Colorado 81301

With copies to:

Goldman, Robbins & Rogers, P.C.  
P.O. Box 2270  
Durango, Colorado 81301

To BP at:

Chad Tidwell  
BP America Production Company  
380 Airport Road  
Durango, Colorado 81303

With copies to:

Thomas Dugan  
900 Main Avenue, Suite A  
Durango, Colorado 81301

or to any other addresses as either party hereto may, from time to time, designate in writing and deliver in a like manner.

10.8 *Headings.* The descriptive headings of the sections of this Agreement are inserted for convenience only and shall not control or affect the meaning or construction of any of the provisions hereof.

10.9 *Further Acts.* Each of the parties shall promptly and expeditiously execute and deliver any and all documents and perform any and all acts as reasonably necessary, from time to time, to carry out the matters contemplated by this Agreement.

10.10 *No Partnership; Third Party Beneficiaries.* It is not intended by this Agreement to, and nothing contained in this agreement shall, create any partnership, joint venture or other arrangement between BP and the County. No term or provision of this Agreement is intended to or shall be for the benefit of any person, firm, organization or corporation not a party hereto and no other person, firm, organization or corporation shall have any right or cause of action hereunder.

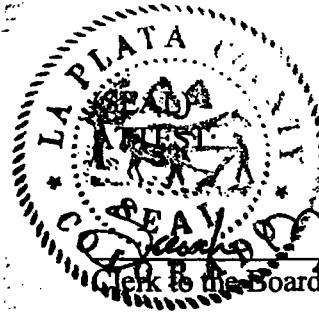
10.11 *Severability.* The provisions of this Agreement are deemed material and nonseverable. If an action is brought that results in any provision of this Agreement being determined or declared by a Court to be illegal, invalid or unenforceable under present or future laws effective during the term of this Agreement, the parties shall negotiate in good faith for an equivalent or substitute provision or other appropriate adjustment to this Agreement. If the parties cannot reach agreement, or if so desired by the parties, then the issues in dispute shall be submitted to a mediator acceptable to both parties for nonbinding mediation. Unless otherwise agreed to by the parties, such mediation shall occur within sixty (60) days of a party's receipt of a notice to mediate from the other party.

BP AMERICA PRODUCTION COMPANY

By: Terry R. Gerhart *can*  
Terry R. Gerhart  
Attorney-In-Fact

BOARD OF COUNTY COMMISSIONERS  
LA PLATA COUNTY, COLORADO

Wallace L. White  
Wallace L. White, Chair



*J. Gordon*

## EXHIBIT A

### PROPOSED CONDITIONS OF APPROVAL

Applicant BP America Production Company ("BP") and Intervenor La Plata County, Colorado ("La Plata County") respectfully request that an Order issued by the Commission in Cause No. 112, Docket No. 0509-AW-16 be made subject to and conditional upon the following:

1. Compliance with all terms, conditions and provisions of prior Commission Orders in Cause No. 112, including without limitation, the specific provisions of Order No. 112-157 including the Rule 508j.(3)B conditions attached thereto.
2. Compliance with the terms and provisions of all of the Commission's health, safety, welfare and environmental rules and regulations now or hereafter in effect.
3. Those certain provisions as set forth in Exhibit A of the Memorandum of Understanding between BP and La Plata County as follows:

- ***Surface Density***

The density of Fruitland Coal Well Pads within the Infill Application Area shall not exceed four (4) within any single 640-acre governmental section of real property. Notwithstanding the foregoing, nothing contained in this provision shall be construed so as to require the closure or abandonment of any existing gas well.

- ***Well Location; Exceptions***

The Commission may grant a special exception allowing for a greater density of Fruitland Coal Well Pads (i.e., more than 4 per 640-acre section), at the request of BP and after consultation with the Local Governmental Designee, based upon a finding by the Commission that one or more of the following factors apply in a manner such that use of an existing Well Pad is rendered impractical:

- a. topographic characteristics of the site;
- b. natural resource constraints (e.g., wetlands);
- c. the location of utilities or similar services;
- d. geologic factors or where issues concerning distances between wells are present;
- e. other site conditions beyond the control of BP; or
- f. safety concerns.

- ***Storm Water Management and Spill Prevention Containment and Control.***

Even if not required to do so by any applicable regulation or law, BP agrees to utilize best management practices for all pad expansions and new pads and for road and pipeline development or improvements.

- ***Water Well Monitoring.***

If a conventional gas well exists within one quarter (1/4) mile of the bottom hole location of a proposed Infill Well, then the two (2) closest water wells within a one-half (1/2) mile radius of the conventional gas well shall be sampled by BP as water quality testing wells. If possible, the water wells selected shall be on opposite sides of the existing conventional gas well not exceeding one-half (1/2) mile radius. If water wells on opposite sides of the conventional gas well cannot be identified, then the two (2) closest wells within one-half (1/2) mile radius shall be sampled. If two (2) or more conventional gas wells are located within one quarter (1/4) mile of the bottom hole location of the proposed Infill Well, then the conventional gas well closest to a proposed Infill Well shall be used for selecting wells for sampling.

If no conventional gas wells are located within one quarter (1/4) mile radius of the bottom hole location of the proposed Infill Well, then the selected water wells shall be within one quarter (1/4) mile of the bottom hole location of the proposed Infill Well. In areas where two (2) or more water wells exist within one quarter (1/4) mile of the bottom hole location of the proposed Infill Well, then the two (2) closest water wells shall be sampled by BP. Ideally, if possible, the water wells selected should be on opposite sides of the bottom hole location of the proposed Infill Well. If water wells on opposite sides of the bottom hole location of the proposed Infill Well cannot be identified, then the two (2) closest wells within one quarter (1/4) mile radius shall be sampled by BP. If two (2) water wells do not exist within one quarter (1/4) mile radius, then the two closest single water wells within either a one quarter (1/4) mile radius or within a one-half (1/2) mile radius shall be selected.

If no water well is located within a one quarter (1/4) mile radius area or if access is denied, a water well within one-half (1/2) mile of the bottom hole location of the Infill Well shall be selected. If there are no water quality testing wells meeting the foregoing criteria, then sampling shall not be required. If the BLM or the COGCC have already acquired data on a water well within one quarter (1/4) mile of the conventional gas well, but it is not the closest water well, it shall be given preference in selecting a water quality testing well. The "initial baseline testing" described in this paragraph shall include all major cations and anions, TDS, iron and manganese, nutrients



(nitrates, nitrites, selenium), dissolved methane, pH, presence of bacteria and specific conductance and field hydrogen sulfide.

If free gas or a methane concentration level greater than 2 mg/L is detected in a water quality testing well, compositional analysis and carbon isotopic analyses of methane carbon shall be performed to determine gas type (thermogenic, biogenic or an intermediate mix of both). If the testing results reveal biogenic gas, no further isotopic testing shall be done. If the carbon isotope test results in a thermogenic or intermediate mix signature, annual testing shall be performed thereafter and an action plan shall be drafted by BP to determine the source of the gas. If the methane concentration level increases by more than 5 mg/L between sampling periods, or increase to more than 10 mg/L, an action plan shall be drafted to determine the source of the gas.

The initial baseline testing shall occur prior to the drilling of the proposed Infill Well. Within one (1) year after completion of the proposed Infill Well, a "post completion" test shall be performed for the same parameters above and repeated three (3) and six (6) years thereafter. If no significant changes from the baseline have been identified after the third test (the six year test), no further testing shall be required. The testing schedule will restart after the drilling of a new Infill Well on an existing Well Pad if the wells to be tested include those tested for the 160 acre infill program. Additional "post completion" test(s) may be required if changes in water quality are identified during follow-up testing. The Director of the COGCC may require further water well sampling (which may include water quality monitoring) at any time in response to complaints from water well owners.

Within three (3) months of collecting the samples used for the test, copies of all test results described above shall be provided to the COGCC and the County and the landowner where the water quality testing well is located

- ***Plugged and Abandoned Wells/Soil Gas Vapor Survey***

A soil gas vapor-monitoring program is designed to determine a possible lack of zonal isolation along wellbores of plugged and abandoned wells. BP will attempt to identify any plugged and abandoned wells located within 0.25 miles of the bottom hole location of any Infill Well. Any plugged and abandoned well within 0.25 miles of the bottom hole of an Infill Well will be assessed for risk, taking into account cementing practices reported in the plugged and abandoned reports. BP shall notify the COGCC of all results of all risk assessments of plugging procedures. The COGCC may appropriate funds under Rule 701 (the Environmental Response Fund) to conduct soil gas monitoring tests to further define the risks. If the monitoring reveals a possible lack of zonal isolation, the COGCC may then conduct or order any necessary remediation or other authorized activities.

4. Compliance with all applicable regulations of the BLM, BIA and the Southern Ute Indian Tribe when conducting operations on lands subject such agency's jurisdiction.

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## Facsimile Transmission

Addressee's Telecopier Phone

10-05-87

Page of

To: Name R. J. Broussard	Company APC	Location Farmington	Mail Code/Room
From: Name D. G. Wight	Company APC	Location Denver	Mail Code/Room

File: BSM-1028-WF

Well Release Information

The Piccoli Ranches No. 1 is released for staking, permitting, building roads and location. This well should be located in the SE/4 of section 26-T34N-R9W (SUL) of LaPlata County, Colorado. Please contact Kalen Elliot, ranch foreman, at 259-0036 Durango prior to entering the drillsite. The land department is currently negotiating other leases with this surface owner and would appreciate the district's best effort to accommodate the surface owner's wishes in locating the roads and location, within reason. A copy of the title opinion covering the drillsite has been forwarded to your office by our land department.

*D. G. Wight*

DBV/pat

cc: W. R. Halvorson  
J. S. Binegar  
J. M. Alsup  
J. K. Lohrenz

Transmitted To Addressee

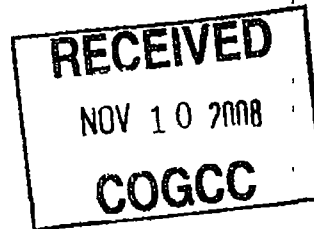
Date

10-5-87

1:40

*[Signature]*

bp



BP America Production Company  
185 Suttle Street  
Durango Colorado 81303

November 4, 2008

Mr David Neslin  
Colorado Oil and Gas Conservation Commission  
1120 Lincoln Street, Suite 801  
Denver, CO 80203

BP Request for Special Exception From Infill Order No. 112-180 *St Paul*  
Federal Land Bank GU B #3, Federal Land Bank GU B #4 and Jefferies GU A #3  
S/2 Section 25, T34N-R9W

Dear Mr Neslin

As you are aware, BP America Production Company is conducting an infill program as authorized by Infill Order No 112-180. The order allows for a total of four (4) wells to be drilled in each 320-acre drilling and spacing unit for the specified lands, utilizing an expanded pad with an existing well so that Fruitland Coal Well Pads within the infill application area will not exceed four (4) within any single 640-acre governmental section of real property unless the use of an existing well pad is rendered impractical. The Commission may grant a special exception allowing for a greater density of Fruitland Coal well pads if the use of an existing well pad is deemed impractical 1) after consultation with the Local Governmental Designee and 2) due to one or more of the following factors:

- a topographic characteristics of the site,
- b natural resource constraints (e.g., wetlands),
- c the location of utilities or similar services,
- d geologic factors or where issues concerning distances between wells are present,
- e other site conditions beyond the control of BP, or
- f safety concerns

BP has encountered a circumstance requiring a special exception to these surface density requirements. A fifth well pad is necessary to develop the Federal Land Bank GU B #3, Federal Land Bank GU B #4 and Jefferies GU A #3 as the Federal Land Bank GU B #1, Federal Land Bank GU B #2 and Jefferies GU A #1 can not be expanded for this purpose. BP is requesting that the fifth well pad be utilized for the Federal Land Bank GU B #3, Federal Land Bank GU B #4 and the Jefferies GU A #3. Drilling the Federal Land Bank GU B #3, Federal Land Bank GU B #4 and Jefferies GU A #3 consecutively on the same well pad allows closer well head placement and ultimately less surface disturbance than expansion of the three existing well pads. This special exception request will demonstrate that consultation with a Local Government Designee has occurred for the three wells and that expansions of the Federal Land Bank GU B #1, Federal Land Bank GU B #2 and Jefferies

GU A #1, initiating the need for an exception, are impractical due to the location of existing pipelines and proximity of residences, business offices and property lines

**Consultation with Local Government Designee**

BP has reviewed the site with the La Plata County Oil and Gas Planner, submitted the appropriate minor facility permit applications and received approval from La Plata County (see attached LPC permits)

**Factors Precluding Well Pad Expansion**

The existing Federal Land Bank GU B #1 is not expandable as it is bounded by an offset operators pipeline and difficult terrain. The existing Federal Land Bank GU B #2 is not expandable due to the proximity of BP offices and pipelines. The existing Jefferies GU A #1 is not expandable due to the proximity of residences and property lines.

Thank you for considering our request for this special exception. Should you have any additional questions, please contact me at 970-828-2503.

Sincerely,



Susan Folk

BP San Juan Major Project FEL Permit Coordinator

cc Mr. Dave Brown - Denver  
Mr. Bill Hawkins - Denver



From: Sackreiter, Don  
Sent: Thursday, March 20, 2008 7:23 AM  
> To: Gierhart, Roger R; Reese, Michael  
Cc: Walcher, Michael J; Ryan, Robert M (SIERRA ENGINEERING, INC);  
Bosmans, Wendy L  
> Subject: RE: BHL plans for Jefferies GU A#3, Fed Land Bank B#3,4

Check over, Mike & Roger. I have the:

> Jefferies #3 going 1500' NW (to shorten this would move to the east)  
> Fed Land Bank B #4 going 550' SW  
> Fed Land Bank B #3 going 1370' SE

> If Mike can live with 1500', this looks doable.

> Don << File: Fed Land Bank B #3 & #4.ppt >>

From: Bosmans, Wendy L  
Sent: Wednesday, March 19, 2008 3:45 PM  
> To: Bosmans, Wendy L; Gierhart, Roger R; Sackreiter, Don  
> Cc: Walcher, Michael J; Ryan, Robert M (SIERRA ENGINEERING, INC);  
Reese, Michael  
> Subject: RE: BHL plans for Jefferies GU A#3, Fed Land Bank B#3,4

> meant to say new "house" being built, not new well.

From: Bosmans, Wendy L  
Sent: Wednesday, March 19, 2008 2:45 PM  
> To: Gierhart, Roger R; Sackreiter, Don  
> Cc: Walcher, Michael J; Ryan, Robert M (SIERRA ENGINEERING, INC);  
Reese, Michael  
> Subject: BHL plans for Jefferies GU A#3, Fed Land Bank B#3,4

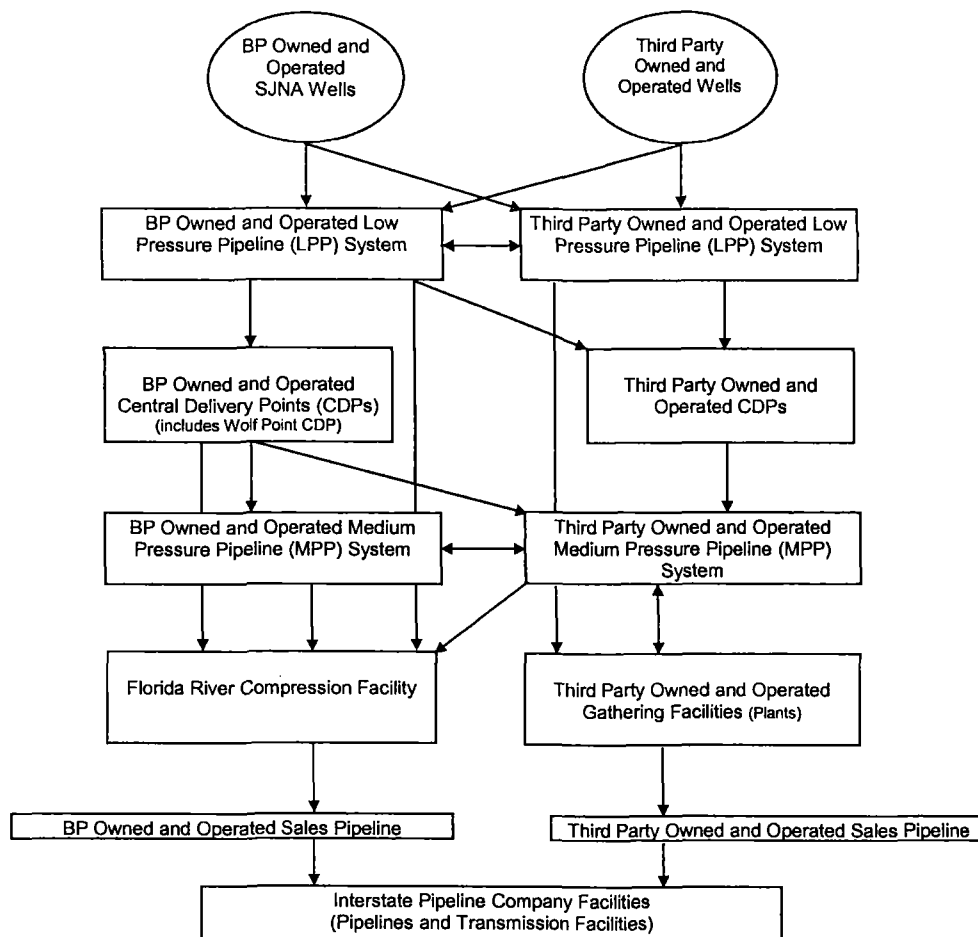
> << File: Jefferies GU A#3, Fed Land Bank B#3,4.jpg >>

> Please note that Robert has been out looking for an exception location  
> for the Fed Land Bank B#3,4 wells (on a bp parcel just north of the  
> florida plant). He found a suitable location that has room for 3  
> wells. He informed me that it will be difficult to expand the  
> Jefferies GU A#1 well pad to the north due to a new well being built  
> in the adjacent parcel to the west, which we'd have to get closer to.

> Roger / Don / Mike, please give me your plan for BHL's assuming the  
> yellow box is the surface location for all three wells. Note that the  
> Jefferies GU A#3 will be a bit of stretch, but probably doable if you  
> aren't too picky with BHL.

> Thanks. Wendy

**BP America Production Company  
Florida River Compression Facility  
Basic System Flow Diagram**



**SUBJECT TO CONFIDENTIALITY  
CLAIM**

**EXHIBIT T**

**BUSINESS AGREEMENT**

**SUBJECT TO CONFIDENTIALITY  
CLAIM**

**EXHIBIT U**

**BUSINESS AGREEMENT**

**SUBJECT TO CONFIDENTIALITY  
CLAIM**

**EXHIBIT V**

**BUSINESS AGREEMENT**



EXHIBIT X



