

**U.S. Department of the Interior
Bureau of Land Management**

Environmental Assessment

**DOI-BLM-UT-G010-2015-0042-EA
RIGHTS-OF-WAY UTU-90608 and UTU-90609**

PREPARING OFFICE

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Environmental Assessment
DOI-BLM-UT-G010–2015–0042-EA
RIGHTS-OF-WAY UTU-90608 and UTU-90609

Prepared by
U.S. Department of the Interior
Bureau of Land Management
Green River District — Vernal Field Office

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Finding of No Significant Impact

DOI-BLM-UT-G010-2015-0042-EA

Based on the analysis of potential environmental impacts (per Environmental Assessment DOI-BLM-UT-G010-2015-0042-EA, I have determined that the proposed action as described in the in the proposed action alternative of the environmental assessment will not have any significant impacts on the environment and an environmental impact statement is not required.

Signature:

Approved by:

Jerry Kenczka

2/9/2015

Jerry Kenczka

Date

Assistant Field Manager,
Lands and Minerals

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DECISION RECORD

Decision

It is my decision to approve and authorize QEP Field Services application for Rights-of-Way UTU-90608 and UTU-90609 to install the Pendragon Compressor site along with its associated facilities as proposed and as set out in the Proposed Action of the Environmental Assessment (DOI-BLM-UT-G010-2015-0042-EA) subject to the plan of development and any stipulations, compliance and monitoring. This alternative is hereafter called the Selected Alternative. This decision applies to BLM-administered lands only.

I have determined that authorizing this selected alternative is in the public interest, and will minimize impacts so that no undue disturbance will occur.

The Pendragon Compressor pad, access road and suction/discharge pipelines will be constructed on Public Lands within the following legal description: SLM, UT T.10 S., R. 18 E., Sec. 20, SESW. For a map of the project area refer to Appendix B.

The Pendragon compressor pad area is a polygon with measurements of 140' x 150' x 163' x 56' x 290', which encompasses 0.80 acres. The compressor pad will consist of 2 natural gas compressors, a 12 inch barreled pig receiver, two 500 barrel tanks, separators and a suction and discharge pipelines. The access road is 26 feet in length and 20 feet in width, encompassing 0.01 acres. The approximate length of the buried 16 inch discharge pipeline is 173 feet long by 50 feet wide, encompassing approximately 0.20 acres. The buried 16 inch suction pipeline is 269 feet long by 50 feet wide, encompassing approximately 0.30 acres. Total acres for this action is 1.31 acres, more or less.

Compliance, Monitoring, Stipulations

- Compliance and monitoring checks will be conducted in accordance with BLM Regulations and the following stipulations.
- All internal combustion equipment would be kept in good working order.
- Water or other approved dust suppressants would be used at construction sites and along roads, as determined appropriate by the Authorized Officer.
- Open burning of garbage or refuse would not occur at well sites or other facilities.
- All new and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 grams of NO_x per horsepower-hour.

As discussed in the EA, concerns are sometimes raised as to BLM's ability to ensure that terms and conditions of the grant are satisfactorily completed. A reclamation bond will be required for this grant in the amount of \$95,000.00 in a form acceptable to BLM. This amount was determined by estimating the costs to BLM to carry out the terms and conditions in the event that the holder, for whatever reason, did not. The documentation used to estimate the bond amount was provided by QEP Field Services and is contained in the right-of-way casefile. The bond will be reviewed periodically to ensure it is adequate. If it is inadequate, the holder will be required to provide a new bond in the required amount. The bond shall be furnished prior to authorizing the grant.

Plan Conformance and Consistency

The proposed action and alternatives have been reviewed and found to be in conformance with one or more of the following BLM Land Use Plan and the associated decision(s):

The selected alternative has been reviewed, and found to be in conformance with the Vernal Field Office RMP/ROD (October 31, 2008). The RMP/ROD decision allows for processing applications, permits, operating plans, mineral exchanges, leases on public lands in accordance with policy and guidance and allows for management of public lands to support goals and objectives of other resources programs, respond to public requests for land use authorizations, and acquire administrative and public access where necessary (RMP/ROD p. 86).

It has been determined that the proposed action and alternative(s) would not conflict with other decisions throughout the plan.

The selected alternative is also consistent with the Uintah County General Use Plan 2012, as amended. The Uintah County General Plan contains specific policy statement addressing public and multiple-use resources use and development, access and wildlife management. In general, the Plan indicates support for development proposals through its emphasis on multiple-uses public land management practices and responsible use and optimum utilization of public land resources. The County, through the Plan, supports the development of natural resources as they become available as new technology allows.

Compliance with NEPA:

This EA was prepared by the BLM in accordance with the National Environmental Policy Act (NEPA) of 1969 and in compliance with all applicable regulations and laws passed subsequently, including the President's Council on Environmental Quality regulations, and the U.S. Department of Interior requirements and guidelines listed in the BLM Manual Handbook H-1790-1. This EA assesses the environmental effects of the Proposed Action and the No Action Alternative.

Rationale / Authorities / Public Involvement

The decision to authorize the Pendragon Compressor site, access road, along with the suction and discharge pipelines, have been made in consideration of the environmental impacts of the proposed action. This decision has been made after considering impacts to resources within the Vernal Field Office while accommodating QEP Filed Services desire to construct the Pendragon Compressor site.

Identification of issue(s) for this assessment was accomplished by considering any resources that could be affected by implementation of one of the alternatives.

Issues identified by BLM Specialists are documented in Appendix A Interdisciplinary Team Checklist.

Alternatives Considered

Alternative A Proposed Action: QEP Field Services proposes to construct a Compressor Site, known as the Pendragon Compressor site, along with an access road, and a 16 inch buried suction

and discharge pipelines as described in their proposed action. This is the selected alternative, as modified by the Stipulations.

Alternative B No Action: Under the No Action alternative, BLM would not approve the ROW grant. QEP Field Services would not be allowed to construct the Pendragon Compressor site on public land. The no action alternative effectively constitutes denial of the Proposed Action. This alternative was not selected because it would not respond to the applicant's need to install the compressor site.

The authority for this decision is pursuant to Section 28 of the Mineral Leasing Act of 1920, as amended (30 U.S.C. 195).

The proposed action was posted to the public BLM E-Planning website with its assigned NEPA number on November 25, 2014. To date, no questions or comments have been received.

As discussed in the EA, concerns are sometimes raised as to BLM's ability to ensure that terms and conditions of the grant are satisfactorily completed. A reclamation bond will be required for this grant in the amount of \$95,000.00 in a form acceptable to BLM. This amount was determined by estimating the costs to BLM to carry out the terms and conditions in the event that the holder, for whatever reason, did not. The documentation used to estimate the bond amount was provided by QEP Field Services and is contained in the case file. The bond will be reviewed periodically to ensure it is adequate. If it is inadequate, the holder will be required to provide a new bond in the required amount. The holder will not be allowed to conduct any surface disturbing actions until the performance bond is accepted and approved by the BLM. The bond shall be furnished prior to authorizing the grant.

Authorizing Official:

Jerry Kenczka
Jerry Kenczka
Assistant Field Manager, Lands and Minerals

2/9/2015
Date

Appeal or Protest Opportunities:

Protest/Appeal Language: This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4 and the enclosed Form 1842-1. If an appeal is taken, your notice of appeal must be filed in this office (at the above address) within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition (request) pursuant to regulation 43 CFR 2801.10 or 43 CFR 2881.10 for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below.

Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

- (1) The relative harm to the parties if the stay is granted or denied, (2) The likelihood of the appellant's success on the merits,
- (3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) Whether the public interest favors granting the stay.

Chapter 1. Environmental Assessment

Introduction

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This Environmental Assessment has been prepared to analyze the potential impacts of QEP Field Services proposed Pendragon Compressor Site along with two, buried, 16 inch suction and discharge natural gas pipelines.

The EA is a site-specific analysis of potential impacts that could result with the implementation of a proposed action or alternatives to the proposed action. An EA assists the BLM in project planning and ensuring compliance with the National Environmental Policy Act (NEPA), and in making a determination as to whether any “significant” impacts could result from the analyzed actions. “Significance” is defined by NEPA and is found in regulation 40 CFR 1508.27. An EA provides evidence for determining whether to prepare an Environmental Impact Statement (EIS) or a statement of “Finding of No Significant Impact” (FONSI). A FONSI is a document that briefly presents the reasons why implementation of the selected alternative would not result in “significant” environmental impacts (effects) beyond those already addressed in the Vernal Field Office Resource Management Plan (VFORMP), October 2008. If the decision maker determines that this project has “significant” impacts following the analysis in the EA, then an EIS would be prepared for the project. If not, a Decision Record may be signed for the EA approving the alternative selected.

1.1. Identifying Information:

1.1.1. Title, EA number, and type of project:

Rights-of-Way UTU-90608 (Pendragon Compressor site) and UTU-90609 (suction and discharge pipelines) to install the Pendragon Compressor site and associated facilities DOI-BLM-UT-G010-2015-0042-EA

1.1.2. Location of Proposed Action:

Utah: Salt Lake Meridian: T. 10 S., R. 18 E., Section 20

For a map of the project area refer to Appendix B.

1.2. Purpose and Need for Action:

The BLM’s need is to consider approval of the QEP Field Services application to construct the Pendragon Compressor site and suction/discharge pipelines, in accordance with Section 28 of the Mineral Leasing Act of 1920, as amended (30 U.S.C. 195). BLM’s purpose is to avoid or reduce impacts on sensitive resource values associated with the project area and prevent unnecessary or undue degradation of the public lands.

1.3. Scoping, Public Involvement and Issues:

During preparation of the EA, public involvement consisted of posting the proposal on the eplanning NEPA website. Right-of-way holders located in the project area were also mailed notice letters notifying them of the proposed action. *No public comment or inquiries were received.* The proposed action was reviewed by an interdisciplinary team of BLM resource specialists. For a list of all resources considered, refer to Appendix A.

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Chapter 2. Proposed Action and Alternatives

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This EA focuses on the Proposed Action, as well as, the No Action Alternative. No unresolved conflicts were identified that required the consideration of another alternative.

2.1. Description of the Proposed Action:

PROPOSED ACTION

QEP Field Services Company (QEPFS) requests approval to build the Pendragon Compressor Site and access road located in SW¼ of Section 20 in Township 10 South, Range 18 East S.L.B.&M., Uintah County, Utah as shown on attached plans. The proposed site would be a polygon with measurements of 140'x150'x163'x56'x290' which would house two (2) natural gas compressors. Phase I of the project will consist of setting one (1) CAT 3606, Ariel JGD-4 four throw (or similar), two-stage compressor with 1,775 horsepower at sea level. The unit will be housed inside an insulated metal building for a total diameter of approximately 30'x70'. Phase II of the project will be a duplicate of Phase I to be installed in approximately 10-12 months from the approval date. This site will gather and compress natural gas from producing wells in the area. The site will also consist of a 12" barreled pig receiver, one 500-bbl tank, separators, dehy filters and other associated equipment. Two 16" or smaller buried pipelines will be required: a suction line of 269' in a 50' wide permanent right-of-way; and a discharge line of 173' in a 50' wide permanent right-of-way.

Facility	Length (feet)	Short-Term		Long-Term	
		Disturbance Width (feet)	Acres	Disturbance Width (feet)	Acres
Pendragon					
Compressor site	290	140	0.80	140	0.80
Access Road 1	26	20	0.01	20	0.01
suction line	269	100	0.61	50	0.30
discharge line	173	100	0.39	50	0.20
TOTAL	1.81			1.31	

The suction and discharge lines would transport natural gas from existing and future producing gas wells in the Pendragon area. Projected throughput in the gathering lines would be approximately 5 MMSCFD. These pipelines would be buried and would be a maximum of 16" or smaller in size for gas gathering. The pipeline **footage total on BLM surface land is 442 feet**. These pipelines cross BLM surface lands in Section 20 of Township 10 South, Range 18 East. The MAOP for both lines is 1,400 PSIG.

QEPFS is proposing a 50' permanent pipeline right-of-way for each line totaling approximately 0.50 acres.

The facility and pipelines would operate year round and the right-of-way is requested for a term of 30 years with options to renew for as long as needed. Upon receipt of all necessary approvals, Pendragon construction dirt work would commence in the summer months of 2014 and piping and facilities construction would start September 2014 and would take approximately 18 weeks. Pipeline construction is scheduled to start summer of 2014 with continued construction as needed.

All permanent, above-ground facilities, valves and metering, not subject to safety requirements, would be painted a flat non-contrasting color which is harmonious with the surrounding landscape as specified by the BLM.

Facility Purpose and Need

Producers in the vicinity have recently started a program to drill and complete wells in the Pendragon field. The development would include well pads throughout their acreage that would increase the volume of natural gas needing to be transported from the field. The majority of the gas would flow from west to east; however, some of the gas can flow from east to west.

In order to keep the gas gathering lines low pressure, compression must be installed to draw down the gathering system line pressure as well as compress the gas for further processing.

Ancillary Right-Of-Way and Permits

The pipelines and facility would be installed parallel to multiple approved Right-of-Ways, including but not limited to BLM grant UTU-85533, and would have an offset of 20' from any existing pipelines.

Access into the proposed pipeline and facility projects would be from existing highways and roads. All construction and vehicular traffic would be confined to the right-of-way corridor or designated county and/or BLM roads unless otherwise authorized and approved by the regulating agency or landowner. A new access road would be constructed for the project approximately 20 ft. in width and 26 ft. in length.

QEPFS would submit to Uintah County a Right-of-Way Encroachment Application along with the pipeline crossing plan and profile for every county road crossing and would pay the appropriate permit fee for each.

Any associated building, zoning, and utility crossing permits would be secured from the appropriate regulatory agency prior to pipeline construction.

Engineering Surveys

All alignment maps and site specific details associated with the above-mentioned project are available for review at QEPFS' Vernal office located at 11002 East 17500 South, Vernal, Utah upon request.

QEPFS will protect all survey monuments, witness corners, reference monuments, and bearing trees within the right-of-way against disturbance during construction, operations, maintenance, and rehabilitation. If any monument, corner or accessory is destroyed, obliterated, or damaged during construction, operation, or maintenance, QEPFS would have a registered surveyor restore the disturbed monument, corner or accessory using surveying procedures found in the "Manual of Surveying Instruction for the Survey of Public Lands of the United States" 1973 edition. QEPFS would record such survey in the appropriate county and send a copy to the appropriate BLM office.

Design and Engineering:

The design and engineering would be completed by QEPFS personnel or an Engineering Contractor supervised by QEPFS engineering staff.

Inspection:

QEPFS would be employing experienced and qualified pipeline inspectors to monitor and ensure the quality of the pipeline installation. Status reports would be available upon request by the authorized officer. QEPFS would also be using a pipeline contractor with experienced personnel and specialized equipment making this project as cost effective and as non-intrusive as possible.

Pipeline Specifications:

16” gas suction and discharge pipelines

1. A 100’ wide construction phase right-of-way would be necessary
2. Design Codes
 - a. Pipeline is designed in accordance with ASME B31.8
 - b. Pipe purchased would be PSL2 pipe manufactured in accordance to API 5L—“Specification for Line Pipe”
3. Mainline Pipe Specifications (depending on location):
 - a. 16”O.D. (or smaller), wall thickness and grade as required per Code
 - b. Pipe would have a minimum of 14-16 mils Fusion Bond Epoxy (FBE) coating
4. Road crossing pipe (unimproved public roads and/or roads, highways, or public streets with hard surfaces):
 - a. **NON**-cased crossings
 - b. 16” O.D. (or smaller), wall thickness and grade as required per Code
 - c. Trenched in pipe would have a minimum of 14-16 mils Fusion Bond Epoxy (FBE) coating, Slick bored pipe would have a minimum of 30 mils ARO coating
5. Block Valves
 - a. Mainline Block Valves would be installed at the ends of each pipeline.
6. Buried Depths:
 - a. Mainline pipe would have a minimum of 36” of cover
 - b. River/Road/Railroad crossings would have a minimum of 48” of cover under the ditch and 72” of cover under the road/river/railroad
 - c. Any above ground facilities near any established right-of-way would have permanent barricade guards placed around, especially equipment around or near roads, to prevent any damage from vehicle accidents. The guards would be structurally sound, with a minimum 6-inch diameter pipe, cement filled and anchored. Above ground facilities would not be placed or built under any existing power line utilities.

Flood Plain Specifications:

One unnamed ephemeral drainage was documented during field investigations for the proposed compressor site and pipelines. QEPFS would not be directly impacting said unnamed drainage.

Archaeological Specifications:

Two independent archeological studies has been completed by Montgomery Archeological Consultants. The recommendations and determinations can be found in reports U-06-MQ-0944

and U-10-MQ-0255bs. It was determined that as currently planned, the proposed compressor site and the associated pipelines will impact no known cultural resource sites. It will not be necessary to relocate the proposed compressor site or the associated pipelines to avoid cultural resources. No further research or mitigation is recommended for this project.

Paleontological Specifications:

An independent paleontological reconnaissance survey was completed by Outlaw Engineering Inc. The recommendations and determinations can be found in their final report, dated March 26, 2014. No fossils were found during the field survey and there are no previous reports of fossils within the Project Area or in the immediate vicinity. In absence of significant fossils, no paleontological monitoring is recommended. QEPFS will comply with all recommendations.

Wildlife Specifications:

A Bio (T&E) survey was completed by Outlaw Engineering Inc. The recommendations and determinations dated March 28, 2014 can be found in their reports. No recommendations for avoidance or timing limitations were recommended based on survey results. QEPFS will comply with all recommendations.

Fencing

The integrity of existing fences would be maintained at all times. Any existing fence to be crossed by the pipeline would be braced and tied off before cutting the wire. At any temporary fence crossing, a wire gate would be placed at the opening during the construction phase. At any permanent fence crossings, a cattle-guard would be installed on concrete bases and a 16-foot steel powder-river type gate would be placed next to the fence brace post adjacent to the cattle-guard. The fencing, braces, gate, cattle-guard and bases would be installed in accordance with instructions from the BLM.

Construction of the R/W Facility:

Flagging and Staking the ROW:

Centerline and exterior staking would be used along the pipeline route as stated in 43CFR. Location stakes would be used for construction of the facility and for the re-routing of all existing roads and pipelines.

Clearing/Grading of ROW and Construction Procedures for pipelines:

Any clearing or grading will be done as follows.

1. Utilizing industry available mechanical equipment, the contractor shall build a suitable ROW necessary for safe pipeline construction activities. The contractor would use all reasonable means to limit the amount of disturbed acreage from the grading activities. The area of spoil pile storage from trenching, including the trench area and pipeline stringing paths, would be graded to provide for a safe working platform/environment throughout the length of the pipeline. Areas beyond that stated above would be graded as needed when a safe working platform/environment needs to be established. Excess grading for the purpose of vehicle and equipment travel along easily navigable terrain would be prohibited.
2. 6" of topsoil would be removed and stockpiled on edge of ROW where required to complete the work safely.

3. Subsoil would be removed and stockpiled next to topsoil to accommodate any leveling needed.
4. Trenching of 6' deep and 48" wide would commence utilizing industry available mechanical equipment for excavation/backfilling operations. Should contractor and company representative determine explosives are needed to excavate rock ditch areas, contractor will take every precaution to protect the public, wildlife and its personnel from any injury or harm which might arise from the use of such explosives. Contractor shall exercise extreme care and shall use methods satisfactory to Company Representative and the authorized officer that would not cause damage to persons or property. Blasting mats or other effective means would be used to prevent rock from being scattered over the ROW and adjacent property. The handling, transporting, storage and use of explosives would comply with all applicable laws, regulations and order of proper authorities.
5. A track hoe with a sucker attachment would be used for pipe stringing on the working side.
6. Once the pipe has been strung and lined up, the welding operation would commence.
7. All welding would be conducted in compliance with the American Petroleum Institute (API) Standards 1104, "Welding of Pipelines and Related Facilities."
8. Following welding operations, the pre-coated or wrapped pipe would be lowered into the ditch.
9. After lowering the pipe into the trench, a shaker bucket would be used for padding the pipeline and backfilling. No material/borrow sites are anticipated for the construction of the pipeline.
10. Subsoil and topsoil would be replaced back to original contour.
11. The pipeline would be hydrostatically tested per code or as required per final engineering design. Fresh water for hydro testing would be provided from Myton City, Utah. Water would be pigged directly into a truck and hauled to an approved disposal site.
12. Reseeding and any erosion barriers needed would be installed after pipeline is tested.
13. Equipment proposed on the pipeline project is as follows:
 - a. 4 each Welding Trucks
 - b. 4 each Tractor Trailer
 - c. 6 each Two-Ton Trucks
 - d. 10 each Pickup Trucks
 - e. 1 each Seed Driller and Tractor
 - f. 2 each Backhoes and/or Track hoes
 - g. 2 each Side Boom
 - h. 1 Water Truck
 - i. 1 each Blade

- j. 2 each Dozer Caterpillar

Clearing/Grading of ROW and Construction Procedures for facility:

All clearing and grading will be done as follows.

1. Utilizing industry available mechanical equipment, contractor shall build a suitable location necessary for construction of the compressor and liquids handling facilities.
2. 6" of topsoil would be removed and stockpiled on edge of location where designated on the plat.
3. Subsoil would be removed and re-distributed to accommodate any leveling needed.
4. All foundations and structural steel would be constructed followed by piping in the racks and setting large equipment. Buildings would be constructed around facilities where necessary. Where possible buildings would be constructed prior to setting equipment. (See attached map)
5. All piping and buildings would then be heat traced and insulated.
6. Equipment proposed on the facility project is as follows:
 - a. 4 each Welding Trucks
 - b. 2 each Tractor Trailer
 - c. 1 each Two-Ton Trucks
 - d. 6 each Pickup Trucks
 - e. 1 each 50/100 ton crane
 - f. 2 each Backhoes and/or Track hoes
 - g. 1 each graders
 - h. 1 each Dozer Caterpillar
 - i. 1 water trucks
 - j. 4 cement trucks

Structure Installation:

On the facility location there would be one engineered steel buildings. The compressors would be located in a 30'X 70' insulated building. Other miscellaneous buildings would be located on the facility for pumps. All liquid lines would be surface lines that are heat traced and insulated. They would be installed on a rack system that would keep the piping off the ground.

Stabilization, Rehabilitation, and Vegetation:

QEPFS reclamation plan attached

Operation and Maintenance of the Facility:

*Chapter 2 Proposed Action and Alternatives
Description of the Proposed Action:*

Some operational opening and closing of valves and blowing down of laterals would be required. Annual leak surveys, valve greasing and inspections would be performed in the spring/summer/fall months.

QEPFS would work with the BLM to remediate any problems that might arise from the construction of this new pipeline.

Termination and Abandonment:

QEPFS does not foresee any reason to terminate or abandon this pipeline before its term would expire. QEPFS has proven its ability to terminate and successfully reclaim its pipelines and ROWs in the past and continues to be able do so.

Miscellaneous Information Needs:

Waste Disposal

1. Garbage and other refuse materials would be placed in a trash cage, the contents of which would be disposed of in the nearest legal landfill.
2. Portable toilets would be furnished by contractors and all waste would be hauled to and disposed of in an approved treatment facility.

Traffic Control Plan:

Not applicable in this remote area

Safety Plan for Employees, Contractors, and General Public:

QEPFS' Employee Safety Plan would be adhered to by all associated with this project. (Available upon request).

Fire Prevention Plan:

QEPFS' Fire Prevention Plans would be adhered to by all associated with this project. (Available upon request)

During construction QEPFS would utilize precautionary measures to minimize the risk of any fires.

Spill Prevention Plan:

QEPFS' Spill Prevention Plans would be adhered to by all associated with this project. (Available upon request)

Temporary Use Permit: (TUP)

Additional temporary construction areas of 50' for the suction and discharge pipelines of (20' spoil – 30' working side) are requested for a total of 100' temporary right-of-way for construction totaling approximately 0.78 acres.

Measures Common to All Alternatives:

Concerns are occasionally raised as to how BLM would ensure that mitigation measures would be satisfactorily completed in the event that the applicant were issued a ROW grant and for whatever reason either did not comply with the terms and conditions of the grant, or was unable to rehabilitate the ROW area upon termination of the grant. To respond to these concerns, BLM would require a performance/reclamation bond prior to allowing any surface disturbing actions. National BLM direction to require ROW bonds is contained in draft BLM Manual 2805.12(d). The performance bond would be sufficient amount to ensure that mitigation and rehabilitation measures were effectively and satisfactorily completed by BLM in the event of default by the holder. The performance bond would be periodically reviewed to ensure sufficiency. This measure would be common to all alternatives that involve issuance of a ROW grant.

Measures Common to All Alternatives

Concerns are occasionally raised as to how BLM would ensure that mitigation measures would be satisfactorily completed in the event that the applicant were issued a ROW grant and for whatever reason either did not comply with the terms and conditions of the grant, or was unable to rehabilitate the ROW area upon termination of the grant. To respond to these concerns, BLM would require a reclamation bond prior to allowing any surface disturbing actions. National BLM direction to require ROW bonds is contained in draft BLM Manual 2805.12(d). The performance bond would be of sufficient amount to ensure that mitigation and rehabilitation measures were effectively and satisfactorily completed by BLM in the event of default by the holder. The performance bond would be periodically reviewed to ensure sufficiency. This measure would be common to all alternative that involve issuance of a ROW grant.

2.2. No Action Alternative

Under this action, BLM would not approve the application as proposed and the applicant would not be allowed to transport natural gas from existing and future producing gas wells in the Pendragon Area.

2.3. Alternatives Considered but not Analyzed in Detail

There were no other alternatives identified aside from the Proposed Action and No Action alternatives that would meet the purpose and need of this project.

2.4. Conformance With BLM Land Use Plan

The proposed action would be in conformance with the Vernal Field Office RMP/ROD (October 2008). The RMP/ROD decision allows ROWs on public lands in accordance with the Realty Decisions (pg 86). It has been determined that the proposed action and alternative(s) would not conflict with any decisions throughout the plan..

2.5. Relationships To Statutes, Regulations, and Other Plans

This EA was prepared by the BLM in accordance with NEPA of 1969 and in compliance with all applicable regulations and laws passed subsequently, including the President's Council on Environmental Quality regulations, and U.S. Department of Interior requirements and guidelines, as listed in the BLM NEPA Handbook H-1790-1.

The proposed project is consistent with the Uintah County General Plan 2011-as amended. The Uintah County General Plan contains specific policy statements addressing public land, multiple-use, resource use and development, access, and wildlife management. In general, the plan indicates support for development proposals such as the proposed action through the plan's emphasis on multiple-use public land management practices, responsible use and optimum utilization of public lands resources. The County, through the Plan, supports the development of natural resources as they become available, as new technology allows.

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Chapter 3. Affected Environment:

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This chapter presents the potentially affected existing environment (i.e., the physical, biological, social, and economic values and resources) of the impact area as identified in the Interdisciplinary Team Checklist found in Appendix A. This chapter provides the baseline for comparison of impacts/consequences described in Chapter 4.

3.1. Air Quality & Greenhouse Gas Emissions

3.1.1. Air Quality

The Project Area is located in the Uinta Basin, a semiarid, mid-continental climate regime typified by dry, windy conditions, limited precipitation and wide seasonal temperature variations subject to abundant sunshine and rapid nighttime cooling. The Uinta Basin is designated as unclassified by the EPA under the Clean Air Act. This classification indicates that adequate air monitoring is not available to determine attainment.

NAAQS are standards that have been set for the purpose of protecting human health and welfare with an adequate margin of safety. Pollutants for which standards have been set include ground level ozone, (O₃), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), and carbon monoxide (CO), and particulate matter less than 10 microns in diameter (PM₁₀) or 2.5 microns in diameter (PM_{2.5}). Airborne particulate matter consists of tiny coarse-mode (PM₁₀) or fine-mode (PM_{2.5}) particles or aerosols combined with dust, dirt, smoke, and liquid droplets. PM_{2.5} is derived primarily from the incomplete combustion of fuel sources and secondarily formed aerosols, whereas PM₁₀ is primarily from crushing, grinding, or abrasion of surfaces. Table 3.1, “Ambient Air Quality Background Values” (p. 17) lists ambient air quality background values for the Uinta Basin and NAAQS standards.

Table 3.1. Ambient Air Quality Background Values

Pollutant	Averaging Period(s)	Uinta Basin Background Concentration (µg/m ³)	NAAQS (µg/m ³)
SO ₂	Annual	0.8 ²	-- ¹
	24-hour	3.9 ²	-- ¹
	3-hour	10.1 ²	1,300
	1-hour	19.0 ²	197
NO ₂	Annual	8.1 ³	100
	1-hour	60.2 ³	188
PM ₁₀	Annual	7.0 ⁴	-- ⁶
	24-hour	16.0 ⁴	150
PM _{2.5}	Annual	9.4 ³	15
	24-hour	17.8 ³	35
CO	8-hour	3,450 ⁴	10,000
CO	1-hour	6,325 ⁴	40,000

Pollutant	Averaging Period(s)	Uinta Basin Background Concentration ($\mu\text{g}/\text{m}^3$)	NAAQS ($\mu\text{g}/\text{m}^3$)
O ₃	8-hour	100.0 ^{3,5}	75
¹ – The 24-hour and annual SO ₂ NAAQS have been revoked by USEPA ² – Based on 2009 data from Wamsutter Monitoring Station Data (USEPA AQS Database) ³ – Based on 2010/2011 data from Redwash Monitoring Station (USEPA AQS Database) ⁴ – Based on 2006 data disclosed in the Greater Natural Buttes FEIS. (BLM, 2012) ⁵ – Ozone is measured in parts per billion (ppb) ⁶ – The annual PM ₁₀ NAAQS has been revoked by USEPA			

Existing point and area sources of air pollution within the Uinta Basin include the following:

- Exhaust emissions (primarily CO, NO_x, PM_{2.5}, and HAPs) from existing natural gas fired compressor engines used in transportation of natural gas in pipelines;
- Natural gas dehydrator still-vent emissions of CO, NO_x, PM_{2.5}, and HAPs;
- Gasoline and diesel-fueled vehicle tailpipe emissions of VOCs, NO_x, CO, SO₂, PM₁₀, and PM_{2.5};
- Oxides of sulfur (SO_x), NO_x, fugitive dust emissions from coal-fired power plants, and coal mining/ processing;
- Fugitive dust (in the form of PM₁₀ and PM_{2.5}) from vehicle traffic on unpaved roads, wind erosion in areas of soil disturbance, and road sanding during winter months; and,
- Long-range transport of pollutants from distant sources.

Two year-round air quality monitoring sites were established in summer 2009 near Red Wash (southeast of Vernal, Utah) and Ouray (southwest of Vernal). These monitors were certified as Federal Reference Monitors in fall of 2011, which means they can be used to make a NAAQS compliance determination. The complete EPA Ouray and Redwash monitoring data can be found at: <http://www.epa.gov/airexplorer/index.htm>

Both monitoring sites have recorded numerous exceedences of the 8-hour ozone standard during the winter months (January through March 2010, 2011, 2013, and 2014). It is thought that high concentrations of ozone are being formed under a “cold pool” process. This process occurs when stagnate air conditions form with very low mixing heights under clear skies, with snow-covered ground, and abundant sunlight. These conditions, combined with area precursor emissions (NO_x and VOCs), can create intense episodes of ozone. The high numbers did not occur in January through March 2012 due to a lack of snow cover. This phenomenon has also been observed in similar locations in Wyoming. Winter ozone formation is a newly recognized issue, and the methods of analyzing and managing this problem are still being developed. Existing photochemical models are currently unable to reliably replicate winter ozone formation. This is due to the very low mixing heights associated with unique meteorology of the ambient conditions. Further research is needed to definitively identify ozone precursor sources that contribute to observed ozone concentrations.

The UDAQ conducted limited monitoring of PM_{2.5} in Vernal, Utah in December 2006. During the 2006-2007 winter seasons, PM_{2.5} levels were higher than the PM_{2.5} health standards that became effective in December 2006. The PM_{2.5} levels recorded in Vernal were similar to other areas in northern Utah that experience wintertime inversions. The most likely causes of elevated PM_{2.5} at the Vernal monitoring station are those common to other areas of the western U.S. (combustion and dust) plus nitrates and organics from oil and gas activities in the Basin. PM_{2.5} monitoring that has been conducted in the vicinity of oil and gas operations in the Uinta Basin by the Red Wash and Ouray monitors beginning in summer 2009 have not recorded any exceedences of either the 24 hour or annual NAAQS.

HAPs are pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental impacts. The EPA has classified 187 air pollutants as HAPs. Examples of listed HAPs associated with the oil and gas industry include formaldehyde, benzene, toluene, ethylbenzene, isomers of xylene (BTEX) compounds, and normal-hexane (n-hexane). There are no applicable Federal or State of Utah ambient air quality standards for assessing potential HAP impacts to human health.

3.1.2. Greenhouse Gases

Greenhouse gases keep the planet's surface warmer than it otherwise would be. However, as concentrations of these gases increase the Earth's temperature is climbing above past levels. According to NOAA and NASA data, the Earth's average surface temperature has increased by about 1.2 to 1.4° F in the last 100 years. The eight warmest years on record (since 1850) have all occurred since 1998, with the warmest year being 1998. However, according to the British Meteorological Office's Hadley Centre (BMO 2009), the United Kingdom's foremost climate change research center, the mean global temperature has been relatively constant for the past nine years after the warming trend from 1950 through 2000. Predictions of the ultimate outcome of global warming remain to be seen.

The analysis of the Regional Climate Impacts prepared by the U.S. Global Change Research Program (USGCRP) in 2009 suggests that recent warming in the region (including the project area) was nationally among the most rapid. Past records and future projections predict an overall increase in regional temperatures, largely in the form of warmer nights and effectively higher average daily minimum temperatures. They conclude that this warming is causing a decline in spring snowpack and reduced flows in the Colorado River. The USGCRP projects a region-wide decrease in precipitation, although with substantial variability in interannual conditions. For eastern Utah, the projections range from an approximate 5 percent decrease in annual precipitation to decreases as high as 40 percent of annual precipitation.

3.2. Soils & Vegetation

The soils in the area are typically mixed with a high content of clay and sandy loams, often with rocky or cobbly substrate on the surface. Elevation in the Project Area is approximately 5,400 feet, and the terrain is relatively flat. The surface layer (topsoil) tends to be very thin, approximately 3 inches, and generally less than 6 inches. A soil survey has not been completed in the Project Area.

The Project Area is located in a mixed desert shrub community. Dominant species that occur in the Project Area include Indian ricegrass (*Achnatherum hymenoides*), fringed sage (*Artemisia frigida*), milkvetch sp. (*Astragalus sp.*), shadscale (*Atriplex confertifolia*), Gardner saltbush

(*Atriplex gardneri*), green molly (*Bassia americana*), blue grama (*Bouteloua gracilis*), rubber rabbitbrush (*Chrysothamnus nauseosus*), purple springparsley (*Cymopterus purpureus*), bottlebrush squirreltail (*Elymus elymoides*), desert trumpet (*Eriogonum inflatum*), Mormon tea (*Ephedra viridis*), spiny hopsage (*Grayia spinosa*), broom snakeweed (*Gutierrezia sarothrae*), plains pricklypear (*Opuntia polyacantha*), budsage (*Picrothamnus desertorum*), galleta grass (*Pleuraphis jamesii*), black greasewood (*Sarcobatus vermiculatus*), scarlet globemallow (*Sphaeralcea coccinea*), and spineless horsebrush (*Tetradymia canescens*).

Chapter 4. Environmental Effects:

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This chapter describes the direct and indirect impacts that would be expected to occur upon the implementation of the considered alternative. It also discloses the expected cumulative impacts, which are those impacts resulting from the incremental impact of an action when added to other past, present, or reasonably foreseeable actions regardless of what agency or person undertakes such other actions.

4.1. Proposed Action

4.1.1. Air Quality

4.1.1.1. Air Quality

This Proposed Action is considered to be a minor air pollution source under the Clean Air Act and is not controlled by regulatory agencies. The Proposed Action would result in emission sources associated with construction and with compression of well production. Annual estimated emissions from the Proposed Action are summarized in Table 4.1, “Proposed Action Annual Emissions (tons/year)¹” (p. 23).

Table 4.1. Proposed Action Annual Emissions (tons/year)¹

Pollutant	Construction	Operation	Total
NO _x	0.7	12.1	12.8
CO	0.4	12.2	12.6
VOC	0.2	14.4	14.6
SO ₂	0.0	0.0	0.0
PM ₁₀	2.5	0.0	2.5
PM _{2.5}	0.0	0.0	0.0
Benzene	1.4	0.1	1.5
Toluene	1.0	0.1	1.1
Ethylbenzene	0.0	0.0	0.0
Xylene	0.6	0.1	0.7
n-Hexane	0.0	0.9	0.9
Formaldehyde	0.0	1.1	1.1

¹Emissions include one compressor station (zero new production wells) and associated operations traffic during the year in which the project is developed.

Project development includes NO_x, VOC, and CO tailpipe emissions from earth-moving equipment and vehicle traffic. During the operation phase, continuous NO_x, VOC, and CO emissions would result from the compressor engine, and daily tailpipe emissions. During all phases, road dust (PM₁₀ and PM_{2.5}) would be produced by vehicles and machinery operating in the project area or servicing the compressor station. Small amounts of HAPs are also emitted by construction equipment and the compressor engines. These emissions are estimated to be minor.

Under the proposed action, emissions of NO_x and VOC, ozone precursors, are 12.8 tons/yr for NO_x, and 14.6 tons/yr of VOC. Emissions would be dispersed and/ or diluted to the extent where any local ozone impacts from the Proposed Action would be indistinguishable from background conditions.

4.1.1.2. Greenhouse Gases

The assessment of greenhouse gas emissions and climate change remains in its earliest stages of formulation. Applicable EPA rules do not require any controls and have yet to establish any emission limits related to GHG emissions or impacts. The lack of scientific models that predict climate change on regional or local level prohibits the quantification of potential future impacts of decisions made at the local level, particularly for small scale projects such as the Proposed Action. Drilling and development activities from the Proposed Action are anticipated to release a negligible amount of greenhouse gases into the local air-shed.

4.1.1.3. Mitigation

- All internal combustion equipment would be kept in good working order.
- Water or other approved dust suppressants would be used at construction sites and along roads, as determined appropriate by the Authorized Officer.
- Open burning of garbage or refuse would not occur at well sites or other facilities.
- All new and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 grams of NO_x per horsepower-hour.

4.1.2. Soils and Vegetation

The Proposed Action would disturb approximately 1.81 acres of soils and vegetation. All disturbed areas that do not need to remain cleared for maintenance or safety purposes would be subject to interim reclamation following completion of construction/installation. Impacts to soils and vegetation would be partially mitigated by reclamation of disturbed areas with desired native vegetation and the control of noxious and invasive weeds by mechanical and chemical treatment. If interim reclamation is successful, direct long-term impacts to soils and vegetation would occur only in those areas that remain clear throughout the life of the project. If interim reclamation is not successful, up to the entire 1.81 acres could remain disturbed for the long term.

Direct impacts to soils include mixing of soil horizons, soil compaction, short-term loss of topsoil and site productivity, and loss of soil/topsoil through wind and water erosion. The project would contribute an estimated additional 3.0 tons of soil per acre per year above the current natural erosion rate for the first year of development. After the first year, the soil erosion attributed to the project would reduce to 1.5 tons per acre per year until the Project Area is fully reclaimed. Erosion rates are higher during the first year due to disturbance during construction. Loss of soil/topsoil in disturbed areas would reduce the revegetation success of seeded native species due to increased competition by annual weed species. Annual weed species are adapted to disturbed conditions, and have less stringent moisture and soil nutrient requirements than do perennial native species.

Direct impacts to vegetation are primarily associated with clearing of vegetation during construction. Indirect impacts to vegetation resources include the invasion and establishment of introduced, undesired plant species. The severity of these invasions would depend on the success of reclamation and revegetation, and the degree and success of noxious weed control efforts.

4.2. No Action

4.2.1. Air Quality

Under the no action alternative the proposed compressor station would not be approved. Therefore, emissions associated with the project would not occur. However, the wells that would be serviced by the compressor station would continue to exist and be proposed and would continue to produce although with reduced efficiency due to overpressuring of the existing pipelines..

4.2.2. Soils and Vegetation

Under the No Action Alternative, there would be no direct disturbance or indirect effects to soils and vegetation from surface-disturbing activities associated with the Proposed Action. Current land use trends in the area would continue, including increased industrial development, increased off-highway vehicles (OHV) traffic, and increased recreation use for hunting, bird watching, and sightseeing.

4.3. Cumulative Effects

4.3.1. Air Quality

It is anticipated that the impact to ambient air quality and air quality related values associated with the Proposed Action would be indistinguishable from and dwarfed by the model and emission inventory scope and margin of error. The No Action alternative would not result in an accumulation of impacts.

4.3.1.1. Air Quality

The cumulative impact area for air quality is the Uinta Basin, plus all regional Class I areas and other environmentally sensitive areas (e.g., national parks and monuments, wilderness areas, etc.) near the Uinta Basin. The Air Resource Management Strategy (ARMS) Modeling Project is a cumulative assessment of potential future air quality impacts associated with predicted oil and gas activity in the Uinta Basin. Consequently, past, present and reasonably foreseeable wells in the Uinta Basin are a part of the cumulative actions considered in this analysis. The ARMS is incorporated by reference and summarized below.

The ARMS Modeling Project predicted the following impacts to air quality and air quality related values for the 2010 typical year and four 2021 future year scenarios: 2021 on-the-books (OTB); 2021 Scenario 1 (NO_x controls); 2021 Scenario 2 (VOC controls); and 2021 Scenario 3 (NO_x and VOC controls).

- Ozone
 - The highest modeled ozone occurs in the Uinta Basin study area regardless of model scenario, and all scenarios predict exceedences of the ozone NAAQS and state AAQS in the Uinta Basin.

- In the Uinta Basin, the ozone concentrations are highest during the winter period. In Class I and Class II areas outside the Uinta Basin study area, ozone concentrations are highest during the summer period.
- During non-winter months in the Uinta Basin the model predicts that ozone may exceed the NAAQS and State AAQS (Ambient Air Quality Standards); however, model-adjusted results from the MATS tool (which accounts for model performance biases) indicate that non-winter ozone concentrations are below the NAAQS and State AAQS for all monitors and areas analyzed. Also, the 2021 scenarios have minimal effect on model-predicted ozone concentrations during non-winter months.
- 2021 Scenario 2 tends to have the lowest 8-hour ozone concentration relative to all other 2021 scenarios (4th highest daily maximum is 3 ppb lower compared to the 2021 OTB Scenario). When comparing Scenario 2 to the OTB Scenario, a potential reduction in ozone concentrations occurs in the vicinity of the Ouray site (where the concentrations are already largest). There is no predicted ozone disbenefit associated with Scenario 2 mitigation measures (i.e., there is no area with predicted ozone increases relative to the OTB Scenario). This supports the assessment that peak ozone impacts are in VOC-limited areas.
- 2021 Scenarios 1 and 3 are predicted to have higher ozone impacts than either the 2010 Typical year and the 2021 OTB Scenario. Both scenarios predict a relatively large increase in ozone concentrations within the vicinity of Ouray indicating potential ozone disbenefits associated with NO_x control mitigation measures.
- NO₂, CO, SO₂, PM_{2.5}, and PM₁₀
 - There are seven monitoring stations within the 4- km domain with daily PM_{2.5} concentrations that exceed the NAAQS and state AAQS in the baseline emissions inventory.
 - All modeled NO₂, CO, SO₂, PM_{2.5}, and PM₁₀ values are well below the NAAQS and state AAQS in the Uinta Basin.
 - The model-predicted PM_{2.5} and PM₁₀ concentrations may underestimate future impacts due to a negative model bias throughout the year in the 4-km domain with the largest bias occurring in summer (AECOM and STI 2014).
 - Results from the MATS tool (which accounts for model performance biases) indicate that PM_{2.5} concentrations may exceed the NAAQS and state AAQS for select monitors and assessment areas in the 2010 Typical year. All 2021 scenarios predict that only one of these monitoring station would continue to exceed the NAAQS and state AAQS.
 - No monitoring stations within the 4-km domain exceed the annual PM_{2.5} NAAQS and State AAQS during the 2010 typical or 2021 Scenarios.
 - Two unmonitored areas within the Uinta Basin exceed the annual PM_{2.5} NAAQS and State AAQS during the 2010 typical year, and impacts in these areas tend to increase under 2021 Scenarios 1 and 2. Under 2021 Scenario 3, the annual PM_{2.5} impacts decrease in the Uinta Basin due to a combustion control measures.
 - The 2021 scenarios generally have lower NO₂, CO, SO₂, PM_{2.5}, and PM₁₀ concentrations than the 2010 Typical Year scenario, except for certain areas within the Uinta Basin.

- Under the 2021 scenarios, all assessment areas are within the PSD (Prevention of Significant Deterioration) increments for annual NO₂, 3-hour SO₂, annual SO₂, and annual PM₁₀.
- Under the 2021 scenarios, most assessment areas exceed the 24-hour PM_{2.5} PSD increment.
- Visibility
 - Visibility conditions in Class I and sensitive Class II areas generally show improvement in the 2021 Scenarios relative to the 2010 Typical Year.
 - There also are no substantial differences in the 20th percentile best and worst visibility days between the 2021 Scenarios.
- Deposition and Acid Neutralizing Capacity
 - Results generally show a decrease in deposition for the 2021 Scenarios relative to the 2010 Typical Year.
 - The differences in estimated deposition between the 2021 Scenarios are generally very small.
 - Acid Neutralizing Capacity change at all seven sensitive lakes exceeds the 10 percent limit of acceptable change for all model scenarios.

4.3.1.2. Greenhouse Gases

Inconsistent results based on scientific models used to predict global climate change prohibit the BLM from quantifying cumulative impacts. Drilling and development activities from the Proposed Action are anticipated to release a negligible amount of greenhouse gases, into the local airshed, resulting in a negligible cumulative impact. The No Action Alternative would not result in an accumulation of impacts.

4.3.2. Soils and Vegetation

The cumulative impacts analysis area (CIAA) will be defined as the boundary of the Gasco Energy Inc. (Gasco) Uinta Basin Natural Gas Development Project EIS (BLM 2012) project area which is located south of Myton, Utah.

The CIAA is located in Uintah and Duchesne Counties in Utah, and encompasses approximately 236,165 acres west of the Green River and north of the Duchesne/Uintah and Carbon County line. It is located primarily on BLM administered lands, but includes private and State of Utah-administered lands. The current past, present, and foreseeable activity for the CIAA is 1,491 oil and gas wells, and approximately 3,604 acres of surface disturbance.

Soil erosion would be increased due to the disturbance associated with oil and gas activities in the area. Each acre of disturbance adds to a cumulative effect by increasing erosion and destroying native vegetation, and through the invasion of undesired plant species. In general, soils in the Uinta Basin are very thin, slow to develop, and difficult to reclaim because of the arid climate and lack of organic material. Direct surface disturbances to vegetation indicated by past, present, and reasonably foreseeable developments are primarily attributable to oil and gas development and vegetation management by various federal agencies. Oil and gas development, however, would continue to degrade local habitat by direct disturbance and slow reclamation of disturbed

areas. Surface disturbance within the CIAA would be approximately 3,604 acres. The Proposed Action would add approximately 1.81 acres of surface disturbance. The No Action alternative would not result in an accumulation of impacts.

Chapter 5. Tribes, Individuals, Organizations, or Agencies Consulted

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Table 5.1. List of Persons, Agencies and Organizations Consulted

Name	Purpose & Authorities for Consultation or Coordination	Findings & Conclusions
Utah State Historic Preservation Office (SHPO)	Consultation for undertakings, as required by the National Historic Preservation Act (NHPA) (16 USC 470) 36 CFR 800.4(d)(1)	The Utah State Historic Preservation Office concurred with the determination of No Historic Properties Affected. Letters of concurrence to our determination received December 16, 2009 and August 24, 2010.
Native American Religious Concerns	Consultation as required by the American Indian Religious Freedom Act.	Tribal consultation was conducted under Gasco EIS in 2012. No Traditional Cultural Properties (TCPs) are identified within the APEs. The proposed projects will not hinder access to or use of Native American religious sites.

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Chapter 6. List of Preparers

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Table 6.1. List of Preparers

Name	Title	Responsible for the Following Section(s) of this Document
Stephanie Howard	NEPA Coordinator	Air Quality & Greenhouse Gas Emissions
Christine Cimiluca	Natural Resource Specialist/Acting Botanist	Soils and Vegetation

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Chapter 7. References and Acronyms

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7.1. References

British Meteorological Office (BMO). 2009. British Meteorological Office's Hadley Centre, 2009. Accessed January 2009 at <http://www.metoffice.gov.uk/climatechange/science/monitoring/>.

Bureau of Land Management (BLM). 2014 http://www.blm.gov/ut/st/en/prog/more/air_quality/airprojs.html

BLM. 2012. Gasco Energy Inc. Uinta Basin Natural Gas Development Project Environmental Impact Statement and Record of Decision, Gasco Energy Inc. U.S. Department of the Interior, Bureau of Land Management, Vernal District Office.

BLM. 2011 http://www.blm.gov/style/medialib/blm/ut/natural_resources/airQuality.Par.48166.File.dat/BLMUtahA_RMS.pdf

7.2. Acronyms

AO Authorized Officer

BLM Bureau of Land Management

DR Decision Record

EA Environmental Assessment

EIS Environmental Impact Statement

ENBB Environmental Notification Bulletin Board

FLPMA Federal Land Policy and Management Act of 1976

FONSI Finding of No Significant Impact

ID Interdisciplinary

NEPA National Environmental Policy Act

RFA Reasonably Foreseeable Action

RMP Resource Management Plan

ROD Record of Decision

ROW Right-of-Way

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Appendix A. Interdisciplinary Checklist

Project Title QEP Field Services Pendragon Compressor station, access road and two, buried, 16–inch, suction and discharge natural gas pipelines:

NEPA Log Number: DOI—BLM—UT—G010—2015—0042—EA

File/Serial Number: UTU-90608 (compressor site) and UTU-90609 (pipelines)

Project Leader: Cindy Bowen

DETERMINATION OF STAFF: (Choose one of the following abbreviated options for the left column)

NP = not present in the area impacted by the proposed or alternative actions

NI = present, but not affected to a degree that detailed analysis is required

PI = present with potential for relevant impact that need to be analyzed in detail in the EA

NC = (DNAs only) actions and impacts not changed from those disclosed in the existing NEPA documents cited in Section D of the DNA form. The Rationale column may include NI and NP discussions.

Determina-tion	Resource/Issue	Rationale for Determination	Signature	Date
RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)				
PI	Air Quality & Greenhouse Gas Emissions	Emissions from construction, drilling, and production equipment could adversely affect air quality. No standards have been set by EPA or other regulatory agencies for greenhouse gases. In addition, the assessment of greenhouse gas emissions and climate change is still in its earliest stages of formulation. Global scientific models are inconsistent, and regional or local scientific models are lacking so that it is not technically feasible to determine the net impacts to climate due to greenhouse gas emissions. It is anticipated that greenhouse gas emissions associated with this action and its alternative(s) would be negligible. Emissions are anticipated from construction of the proposed compressor.	Stephanie Howard	12/23/2014
NP	BLM Natural Areas	The proposed project does not fall within the boundaries of a BLM Natural Area as per the Green River District, Vernal Field Office RMP/ROD (2008) and the GIS layers database.	Cindy Bowen	11–24–2014

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NP	Cultural: Archaeological Resources	Pursuant to 36 CFR 800.16(y) this project is considered to be an undertaking. The area of potential effect (APE) is defined as the polygon presented in the right-of-way application. Montgomery Archeological Consultants conducted two Class III 100% pedestrian inventories over the project area. No cultural material was identified within the project area. A consultation letter was sent to the State Historic Preservation Officer (SHPO) on 11/15/2008 and 8/5/2010 recommending a "no historic properties affected" determination. We received their concurrence to our determination on 12/16/2008 and 8/24/2010.	Erin Goslin	12/2/2014
NP	Cultural: Native American Religious Concerns	Tribal consultation was conducted under Gasco EIS in 2012. No Traditional Cultural Properties (TCPs) are identified within the APEs. The proposed projects will not hinder access to or use of Native American religious sites.	Erin Goslin	12/2/2014
NP	Designated Areas: Areas of Critical Environmental Concern	The proposed project does not fall within the boundaries of an ACEC per the Green River District, Vernal Field Office RMP/ROD (2008) and the GIS data base layers.	Cindy Bowen	11-24-2014
NP	Designated Areas: Wild and Scenic Rivers	The proposed project is not in a Wild and Scenic Rivers area per the Green River District, Vernal Field Office RMP/ROD (2008) and GIS Database layers.	Cindy Bowen	11-24-2014
NP	Designated Areas: Wilderness Study Areas	No Wilderness areas have been designated by the U.S. Congress on BLM lands in the VFO. The proposed project is not in a Wilderness/WSA area per the Green River District, Vernal Field Office RMP/ROD (2008) and GIS Database layers.	Cindy Bowen	11-24-2014
NI	Environmental Justice	No minority or economically disadvantaged communities or populations would be disproportionately adversely affected by the proposed action or alternatives because there are no such communities or populations located in the project area.	Cindy Bowen	11-24-2014
NI	Farmlands (prime/unique)	All prime farmlands in Uintah County are irrigated. No irrigated lands are located in the project area; therefore this resource will not be carried forward for analysis.	Cindy Bowen	11-24-2014
NI	Fuels/Fire Management	No fuels/fire management projects or needs present per VFO GIS data base.	Cindy Bowen	11-24-2014

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NI	Geology/Minerals/ Energy Production	Geology, minerals, and energy production will not be adversely impacted by this proposed action.	Richard Goshen	12-3-2014
IP/NW: NI S+V: PI	Invasive Plants/ Noxious Weeds, Soils & Vegetation	<p>IP/NW: No noxious weeds were documented in the Project Area during a survey in March 2014.</p> <p>However, three invasive, non-native plant species were noted. These included cheatgrass (<i>Bromus tectorum</i>), halogeton (<i>Halogeton glomeratus</i>), and Russian thistle (<i>Salsola tragus</i>).</p> <p>The applicant would be responsible for implementing a weed control/management plan in the Project Area, which would include provisions for mechanical/chemical treatment and removal of weeds. If the plan is successfully implemented, the Proposed Action should not result in the introduction or spread of weeds in the Project Area.</p> <p>S+V: The Proposed Action would result in approximately 1.81 acres of new surface disturbance and the destruction/removal of up to 1.81 acres of native vegetation in the Project Area.</p>	Christine Cimiluca	12/8/2014
NI	Lands/Access	The proposed area is located within the Vernal Field Office Resource Management/ROD area, which allows for oil and gas development with associated road, pipeline and power line rights-of-way. Current land uses, within the area identified in the proposed action and adjacent lands, consist of existing oil and gas development, wildlife habitat, recreational use, and sheep and cattle ranching. No existing land uses would be changed or modified by the implementation of the proposed action. There are no existing ROW holders within the proposed project Area per the MTPs. Access to the proposed compressor station and pipelines are via a Uintah County Class D road.	Cindy Bowen	11-24-2014
NI	Lands with Wilderness Characteristics (LWC)	The project takes place in inventoried areas not in wilderness or wilderness study areas that have been determined not to meet the size, naturalness, and the outstanding solitude and/or the primitive and unconfined recreation criteria.	Bill Civish	12/09/2015

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NI	Livestock Grazing & Rangeland Health Standards	The proposed project is located within the Little Desert cattle grazing allotment. The allotment is seasonally permitted from November 5 to April 23 with up to 2564 AUMs. This area has many existing well sites and the newly proposed pipelines will have little effects on the livestock grazing as the area is bisected by numerous roads and other oil and gas projects. Very little disturbance would occur other than increasing the traffic on the already existing road. The proposal is consistent with multiple use of public lands and other oil & gas activities in the area. It is not anticipated that this proposal would negatively impact grazing operations. There are no known range improvements in this allotment that would be impacted by this proposal. This proposal is not expected to affect Rangeland Health Standards in this allotment.	Craig Newman	01/27/2015
NP	Paleontology	No fossils were found (Paleo Mentors 3/26/14)	Elizabeth Gamber	11/28/2014
NI	Plants: BLM Sensitive	<p>Suitable habitat for the following UT BLM Sensitive plant species is present or expected in the same or an adjacent subwatershed as the proposed project: <i>Yucca sterilis</i> and <i>Cryptantha grahamii</i>.</p> <p>Sandy soils in the vicinity of the proposed project may provide suitable habitat for <i>Yucca sterilis</i>. However, no populations are present in the Project Area per BLM GIS data review and none were documented during the 2014 survey of the Project Area. Given the exclusively clonal nature of the species, the potential for future establishment is negligible.</p> <p>Suitable habitat for Graham's catseye (<i>Cryptantha grahamii</i>) is on Green River shales in mixed desert shrub, sagebrush or mountain shrub vegetation elevations from 5,000 -7,400 feet. This habitat (Green River shale) is not present in the Project Area, and no populations or individuals have been documented in the Project Area per BLM GIS review.</p>	Christine Cimiluca	12/8/2014

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NI	Plants: Threatened, Endangered, Proposed, or Candidate	<p>The following Federally listed, proposed, or candidate plant species is present or expected in the same or an adjacent subwatershed as the proposed project: Pariette cactus (<i>Sclerocactus brevispinus</i>) and Uinta Basin hookless cactus (<i>Sclerocactus wetlandicus</i>).</p> <p>The Project Area is located approximately 0.04 mile outside the USFWS 2013 potential habitat polygon for <i>Sclerocactus wetlandicus</i> and <i>S. brevispinus</i> per GIS data review. Suitable habitat for <i>Sclerocactus wetlandicus</i> is present in the Project Area; the nearest documented individual or population of the species is located inside the potential habitat polygon, approximately 0.53 mi from the Project Area. A survey of the Project Area was conducted in March 2014; no cactuses were documented within the survey area (proposed disturbance and a 300 ft. buffer).</p> <p>Because new disturbance would be located outside of designated potential habitat for <i>Sclerocactus sp.</i>, and because no documented cactuses are located within 300 feet of the Project Area, there should be no direct or indirect impacts to cactus as a result of the Proposed Action.</p>	Christine Cimiluca	12/8/2014
NP	Wetland/Riparian	No wetland or riparian areas exist within the proposed project area as per GIS review and on the ground observations.	James Hereford II	12/10/2014
NI	Recreation	There are five wells and associated roads within this project area. There is little recreation use taking place in this project area. Therefore, recreation is not known to be an issue.	Bill Civish	12/09/2015
NI	Socio-Economics	No impact to the social or economic status of the county or nearby communities would occur from this project due to its small size in relation to ongoing development throughout the basin.	Cindy Bowen	11-24-2014
NI	Visual Resources	Proposed project is located within VRM Class IV per VFO GIS data base. <i>The action would be allowed under class IV objectives.</i>	Cindy Bowen	11-24-2014

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NI	Wastes (hazardous/solid)	No chemicals subject to reporting under SARA Title III in amounts greater than 10,000 pounds would be used, produced, stored, transported, or disposed of annually in association with the project. Trash and other waste materials would be cleaned up and removed immediately after completion of operations.	Cindy Bowen	11-24-2014
NI	Water: Floodplains	Proposed project is located within the Four Mile Creek 100 year floodplain. However there is existing infrastructure in the same area as this proposed project. Since the company plans on doing final reclamation on any new disturbance and will institute storm water controls to prevent sediments and /or any contaminates from getting into the system during high precipitation events. If proper mitigation is applied there should be no direct or indirect impacts to floodplains.	James Hereford II	12/10/2014
NI	Water: Groundwater Quality	This project will not impact groundwater. Groundwater is likely present at over 500 ft below ground surface.	Elizabeth Gamber	11/28/2014
NI	Water: Hydrologic Conditions (stormwater)	The current hydrologic conditions that exist on the proposed project area are mainly dry ephemeral washes that flow during high precipitation events that occur in the basin periodically. Since the system has slow infiltration rates on average according to soil data and has shallow bedrock this area can see very fast responses in the flow regimes in these areas. Because new disturbance will undergo reclamation and restoration activities this project they will not alter the current hydrologic conditions to an extent that would require detailed analysis, therefore no direct or indirect impacts to hydrologic conditions would occur from the Proposed Action.	James Hereford II	12/10/2014
NI	Water: Surface Water Quality	Surface waters in four-mile creek can be very periodic depending on the amounts of precipitation received. Since the project is outside the actual channel and will undergo reclamation and restoration activities, no direct or indirect impacts will be seen from the proposed action.	James Hereford II	12/10/2014
NP	Water: Waters of the U.S.	No waters of the U.S. occur within the proposed project area as per GIS review and on the ground observations. The closest water of the U.S. is the Green River approximately 3 miles to the east of the project.	James Hereford II	12/10/2014

Determination	Resource/Issue	Rationale for Determination	Signature	Date
NP	Wild Horses	No herd areas or herd management areas are present within the proposed project area as per the Green River District, Vernal Field Office GIS Database layers.	Dusty Carpenter	12/2/2014
NI	Wildlife: Migratory Birds (including raptors)	In review of district files and a field visit, the proposed project is not anticipated to disturb nesting or nuptial behavior. The surrounding area is highly fragmented with oil and gas infrastructure. There is only 0.3 acre that contains the minimal abundance of vegetation needed for migratory bird nesting activities; however, nesting is unlikely to occur given the amount of existing oil and gas infrastructure within the area. In addition, there are no known raptor nests within 1 mile of the project area.	Brandon McDonald	12/03/2014
NI	Wildlife: Non-USFWS Designated	In review of district files and a field visit the BLM does not identify crucial habitat for any species within or near the project area. Temporary displacement may occur if general wildlife were to occur in the area.	Brandon McDonald	12/03/2014
NP	Wildlife: Threatened, Endangered, Proposed or Candidate	In review of district files and a field visit the BLM does not identify threatened, endangered, proposed or candidate species (including their associated habitats) within or near the project area.	Brandon McDonald	12/03/2014
NP	Woodlands/Forestry	The proposed project is not within a woodlands/forestry area as per the Green River District, Vernal Field Office GIS Database layers.	Cindy Bowen	11-24-2014

FINAL REVIEW:

Reviewer Title	Signature	Date	Comments
Environmental Coordinator	Stephanie Howard	2/3/2015	
Authorized Officer	Jerry Kenzka	2/9/2015	

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Appendix B. Exhibits







