

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

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-110-2010-0082-EA

CASEFILE/PROJECT NUMBER: Amend COC67991

PROJECT NAME: Ryan Gulch Plant Expansion

LEGAL DESCRIPTION: Sixth Principal Meridian, Colorado
T. 2 S., R. 97 W.,
sec. 7, lot 8.

T. 2 S., R. 98 W.,
sec. 1, lot 36;
sec. 12, lot 11.

APPLICANT: Bargath, Inc.

ISSUES AND CONCERNS: BLM Road 1019

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: On October 14, 2009, Bargath, Inc. (hereafter Bargath) was issued an amendment to right-of-way (ROW) COC67991 to expand the Ryan Gulch Gas Plant site from 3 acres to 10 acres. Bureau of Land Management (BLM) Road 1019, which would be located within the site after the expansion, would remain open and allow uninterrupted public access through the site. The BLM road through the site effectively splits the acreage, rendering the granted acreage unusable for Bargath's proposed use. Environmental assessment (EA) CO-110-2004-180-EA analyzed the original gas plant and NEPA document DOI-BLM-CO-110-2009-0075-DNA authorized the gas plant expansion and was signed 09/21/2009.

Proposed Action: Bargath proposes to abandon the approximately 3 acres to the west of BLM Road 1019 that were authorized for the gas plant expansion. In order to fully expand compression, treating, and transportation capacity to necessary levels at the site, Bargath requests that the site be expanded to the adjacent land to the north, south, and east of the existing disturbed area, encompassing approximately 12.28 acres.

Bargath would need to haul dirt fill stored at the Williams' Willow Creek Plant (on private surface) onto the site during two phase construction. The first phase would require approximately 2,000 tons of fill in order to grade the ±6 acres previously authorized for the expansion. The second phase would require an additional 2,600 tons of fill in order to grade the facility to the fully proposed 12.28 acres.

Access to the compressor site is via Rio Blanco County (RBC) Road 24. Traffic would increase slightly during the equipment replacement and during the hauling of the fill material. After the equipment is set, traffic would return to the current usage.

Geotechnical Engineering Group prepared a report dated May 20, 2010, providing a description of the conditions, a summary of recommendations regarding the intermittent drainage located west of the gas plant expansion site and BLM Road 1019, and a site specific erosion control plan. This report is contained in the case file located at White River Field Office (WRFO). Bargath is willing to take mitigation efforts to satisfy the potential hazard the incised channel immediately west of BLM Road 1019 presents; however Bargath will not be responsible for long term maintenance and oversight of the drainage after stabilization is completed.

No Action Alternative: The application would be denied and the Ryan Gulch Gas Plant would remain as previously granted.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD: None

NEED FOR THE ACTION: The purpose of the proposed action is to manage multiple uses on Public Lands in a manner that avoids, minimizes, reduces, or mitigates potential impacts to other resource values.

The purpose of the action is to provide the opportunity expand the compressor site on BLM surface. The need for the action is established under the authority of Federal Land Policy and Management Act of 1976 (FLPMA) to respond to a right-of-way request across BLM surface.

Decision to be made: The BLM will decide whether or not to approve the compressor site expansion, and if so, under what conditions.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

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

Date Approved: July 1, 1997

Decision Number/Page: 2-49 thru 2-52

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

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

INTERDISCIPLINARY TEAM ANALYSIS RECORD CHECKLIST

DETERMINATION OF STAFF:		
Determination	Resource	Rationale for Determination*
Natural, Biological and Cultural Resources		
NI	Air Quality	The expansion of the Gas Plant will not result in a change of emissions. Dust generation due to construction and operation is likely to be similar to the 10 acre site.
PI	Soils	See impacts described below.
NI	Wastes (hazardous or solid)	The expansion of the Gas Plant will not result in a change in waste generated during construction or operation of the plant.
PI	Water Quality (Surface/Ground)	See impacts described below.
NP	Wetlands/Riparian Zones	See Aquatic Wildlife section.
PI	Vegetation	See below for analysis.
PI	Invasive, Non-native Species	See below for analysis.
PI	Threatened, Endangered, and Sensitive Plant Species	See below for analysis.
NP	Threatened, Endangered, and Sensitive Animal Species	There are no listed, proposed, or candidate animals that inhabit or derive important benefit from the project locale. See Migratory Bird and Aquatic Wildlife sections for brief discussions of BLM sensitive animals that would be affected by this proposal.
NI	Migratory Birds	Migratory bird issues were addressed in EA 04-180. In contrast to former analysis, the amended project would occupy an additional 2 acres of surrounding land (total of 12 acres of bottomland sagebrush/greasewood). Nesting of migratory birds may be disrupted and nests could be lost should construction activities occur during the months of May through July. In this case, and acknowledging that recent studies suggest that nest density tends to

DETERMINATION OF STAFF:		
Determination	Resource	Rationale for Determination*
		be reduced in close proximity of roads, about 6 nest may be directly involved, 3 of those may be birds of higher conservation interest, namely BLM sensitive Brewer's sparrow. Although the proposed action would represent an incremental and long-term reduction in the availability of basin big sagebrush habitat, implementation of the proposed action would have no measurable influence on the abundance or distribution of breeding migratory birds at any landscape scale.
NP	Wildlife, Aquatic	Aquatic habitat nearest the project area is associated with private lands along Piceance Creek, about 2.7 miles ephemeral channel miles downstream of the project site. Piceance Creek's aquatic habitat conditions are strongly influenced by seasonal irrigation and livestock grazing, and although degraded to some degree, it continues to support a nongame fishery comprised of speckled dace, and BLM-sensitive flannelmouth and mountain sucker. Shifting the plant site's acreage to the east side of the road is of no consequence to downstream habitat. Stabilizing the actively eroding drainage channel paralleling that road would result in a net decrease in sediments eventually transported into Piceance Creek's aquatic system.
NI	Wildlife, Terrestrial	The project lies within big game severe winter range, as addressed in EA 04-180, and as such was subject to timing limitations designed to limit disturbance during the period of occupation. Since that time, the Colorado Division of Wildlife (CDOW), Williams, and BLM have entered into an agreement that supports CDOW research designed to better define deer response to applied BMPs and intense, but spatially confined natural gas development. To provide the necessary contrast in experimental design, projects within a pre-defined area have been excepted from big game winter timing limitations. This project is within that exception area. There is no suitable woodland raptor habitat within 400 meters of the project site and activity here poses no threat to nesting raptors.
NP	Wild Horses	The proposed action is not located within a designated wild horse management area.
PI	Cultural Resources	See below for analysis.
PI	Paleontology	See below for analysis.

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 impact analyzed in detail in the EA

NATURAL, BIOLOGICAL, AND CULTURAL RESOURCES

SOILS (includes a finding on Standard 1)

Affected Environment: Soil types that will be impacted by the proposed action are Glendive fine sandy loams which are deep, well-drained soils with slow runoff and low potential for water erosion. Since these soils have formed in the alluvium of Ryan Gulch they are subject to periodic flooding during severe storm events.

Environmental Consequences of the Proposed Action: The construction of the plant expansion will disturb vegetation and require the grading of the site to prepare it for use. Once the construction is completed, the plant grounds will not have vegetation and will likely be graveled. Impacts to soils from this expansion include mixing and compaction of soils during construction and operation of the gas plant. Stormwater features are planned for the site to route stormwater around the facility. These features include channel modifications on the south side of the plant and the installation of drainage ditches on the north and east side of the facility. The project will remove topsoil from the plant expansion and will also require importing 2,600 tons of fill material to achieve the desired grade and elevation for the site. This fill material would be left in place and graded at the end of the use of this facility (see the mitigation below). This facility is expected to be used for 30-50 years as the natural gas in the area is developed.

Environmental Consequences of the No Action Alternative: Impacts from the current plant would continue however there would be no new impacts to the expansion area.

Mitigation: 1. Remove all topsoil to a depth of at least 6 inches for the newly disturbed areas as part of the expansion and place the topsoil on areas that have the surface roughening BMP applied and other areas proposed for stabilization using vegetation.

2. For the final reclamation at the time of the abandonment of the facility, leave the imported fill in place and re-grade the site to as close as possible to the original contours. Stabilize the fill outside of the floodplain to keep it from being mobilized during storm events.

Finding on the Public Land Health Standard for upland soils: This project will reduce soil productivity in the location of the plant expansion due to the length of use (30-50 years), however the use of this one location is unlikely to result in a decrease in soil productivity on a regional scale.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: The plant expansion is in an ephemeral drainage that is tributary to Ryan Gulch. Ryan Gulch has no defined surface channel in this location. The watershed area above this location in Ryan Gulch is large and storms with a frequency of 25 to 50 years would likely result in surface flows within the floodplains in both Ryan Gulch and its tributary. The currently approved plant is within the 100 year floodplain for Ryan Gulch and constrains the 100 year flood plain for the tributary to Ryan Gulch.

Streamflow data near this location indicate the magnitude of surface flows that are likely to occur in this drainage during its lifetime. Willow Creek was monitored for peak flows for 9 years (1974-1983); the highest event measured was 89 cfs, where the average daily flows for Willow Creek were 2-4 cfs. The watershed area of Willow Creek is 48 mi² and for Ryan Gulch it is 18 mi². Runoff events of up to 5-30 cfs would not be unlikely in Ryan Gulch during severe storms. The operator has not provided any flood-flow modeling of potential events in Ryan Gulch or its tributary where the plant and the plant expansion are located. An engineering report

provide by the project proponent does not address flood flows or provide for any modeling to anticipate the impact of flood flows on the plant expansion (reference Geotechnical Consultation).

There is a spring located to the north of the plant expansion in a small drainage. This spring was visited in August of 1992 and was not located; it was assumed to be seasonal at the time. There is no evidence of annual surface flows in the drainage where the spring is located; however the drainage has a defined channel that ends at the alluvium fan at the mouth of the drainage. It is likely that the water goes subsurface, since these soils are deep and sandy loams; it is likely the transmissivity of the subsoils is good.

Environmental Consequences of the Proposed Action: Executive order 11988 requires federal agencies, to the maximum extent possible, to avoid the direct or indirect support of floodplain development wherever there is a practicable alternative. As described in the affected environment, the existing plant impacts the 100 year floodplain for Ryan Gulch and the tributary to Ryan Gulch where the plant is located. The proposed plant expansion does not improve this situation although it does provide for some additional design and armoring on the upstream and downstream portion of the tributary along the southern edge of the plant. This will include reducing slopes to 3h:1v in the location of the channel initiation on the southern edge of the plant expansion including “surface armor in conformance with BLM standards”. This treatment was recommended by the Geotechnical report for the first 50 feet nearest the south end of the drainage channel and would be intended to reduce migration, movement, and erosion of the channel end. Specifications for BLM standards for this surface armor are given in the mitigation section.

During a severe storm event, it is possible that the tributary to Ryan Gulch would flood the plant location, and it is possible that the west end of the plant could get flooded from Ryan Gulch during an extreme storm event. These flood flows, should they occur, are likely to be sediment laden and could result in extensive damage to plant infrastructure. The expansion of the plant makes impacts more likely due to reducing the area available for inundation by water and debris during storm events. During a flood event, the plant and the expansion would constrict the active floodplain and may increase the velocity of the flood flows and decrease infiltration of flood waters. It is possible that the access road to the site and BLM road 1019 would be compromised during a flood event.

Environmental Consequences of the No Action Alternative: Impacts from the current plant would continue however there would be no new impacts to the expansion area.

Mitigation: The following mitigations shall be added as stipulations to the grant:

1. Leave the disturbed area outside the working areas of the plant in a condition that provides for adequate drainage with no additional maintenance.
2. If erosion features such as riling, gulying, piping and mass wasting occur within the disturbed area or are exasperated by the plant site these erosion features will be addressed

immediately after observation by submitting a reclamation plan with BMPs to address the erosion problems.

3. Surface armoring in the drainage feature along the southern edge of the plant, both in the upstream and downstream sections (50 feet upper end, and approximately 100 feet of the RC-12 section on the lower end) will include the installation of construction fabric and angular rock with an average diameter of 6 inches.
4. In addition to armoring the beginning and end of the channel, one rock structures will be installed every 20 feet perpendicular to flow in at least four rows of 6-inch average diameter rock all the way across the reconstructed channel and the side slopes (i.e. from the ground level to the ground level). Rock should be handplaced to maximize the interlocking of the rock.
5. All areas that are not part of the working surface in the plant (including the stormwater features) will be vegetated with the BLM approved seed mix (Seed Mix #2) for the site this fall.

Finding on the Public Land Health Standard for water quality: Flows during flood events in Ryan Gulch are likely to be constrained in the location of the plant and may result in more damage and erosion depending on the type of storm that occurs.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The proposed expansion site occurs in basin big sagebrush (*Artemisia tridentata ssp tridentata*) with a mixed perennial grass/cheatgrass understory.

Environmental Consequences of the Proposed Action: Because plant sites such as these tend to be managed to be vegetation free due to fire /safety considerations, there will be a long term vegetation loss of close to seven acres at the site.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: Promptly recontour and revegetate all areas of earthen disturbance (those areas not necessary for the vegetation free area of the plant site) with Native Seed mix #2 (modified) in pounds of Pure Live Seed per acre (lbs/pls/ac).

Native Seed mix #2 Modified	
Western wheatgrass (Rosanna)	2
Indian ricegrass (Rimrock)	2
Bluebunch wheatgrass (Whitmar)	2
Thickspike wheatgrass (Critana)	1
Magnar Basin wildrye	1
Scarlet Globemallow	1

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Most of the public land plant communities within the area of the proposed action have an appropriate age structure and diversity of species which meet the criteria established in the standard for vegetation. With successful reclamation of the disturbed areas, the proposed action would not change this status.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The proposed plant expansion site has no known noxious weeds present. There is about ¼ acre of Canada thistle located in the flood plain of Ryan Gulch about 400 feet north of the plant site. The invasive annual cheatgrass is located at the site, primarily associated with areas of past, unvegetated earthen disturbance.

Environmental Consequences of the Proposed Action: The earthen disturbance created by the proposed action has the potential to create safe sites for the establishment and proliferation of noxious weeds and cheatgrass. Without weed control measures either to maintain a vegetation free area or to control noxious weeds/cheatgrass on revegetating areas, noxious weeds/cheatgrass could invade and dominate the site, to the detriment of surrounding rangelands.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: The operator will be required to monitor disturbed areas for any Canada thistle or other noxious/invasive species for the life of the project.

All noxious and invasive species which occur on the site will be eradicated using materials and methods approved in advance by the Authorized Officer.

THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES & AREAS OF CRITICAL ENVIRONMENTAL CONCERN: (includes a finding on Standard 4)

Affected Environment: The proposed action lies slightly greater than one mile west of the Ryan Gulch Area of Critical Environmental Concern (ACEC). Access to the site, however, occurs via the paved Rio Blanco County Road #24, which lies within 2 meters of Dudley Bluffs twinpod (*Physaria obcordata*) individuals. The pad itself lies at a distance greater than the current (600 meter) direct or indirect effects buffer and survey distance recommended by the United States Fish and Wildlife Service (USFWS) for the federally threatened Dudley Bluffs twinpod and bladderpod species found in the ACEC. During a fall 2009 on-site, attended by the BLM botanist and hydrologist, no suitable or potential habitats for the twinpod or bladderpod species were seen or expected, as a visible fault line exists in the geology separating the site from the Green River shales habitats found further west in the ACEC. On May 13, 2010, the USFWS (C. Ewing, Biologist) and the BLM did a reconnaissance of the access road through the Ryan Gulch ACEC. The USFWS directed the BLM to prepare a separate programmatic biological

assessment for the Ryan Gulch area and the traffic passing through the ACEC to other projects, such as this one, that will provide guidance for future proposed actions by all operators west of the area. Therefore, it was decided that this project would not merit direct consultation with the USFWS at this time. The cumulative impacts to the threatened plants and the Ryan Gulch ACEC from the use of this road will be analyzed in a separate Ryan Gulch Programmatic Biological Assessment

Environmental Consequences of the Proposed Action: A very slight increase in vehicle traffic (few truck trips per day) is expected through the Ryan Gulch ACEC during plant expansion. Although the road is paved, very slight pollinator losses and fugitive dust could be expected, indirect effects during the short term. Dust could be generated from trucks transporting loads of fill soil for the plant expansion. Dust generation from site expansion is expected to disperse to the northeast toward the ACEC, however the distance from the site to the nearest occupied habitats is greater than 1 mile (1,609 meters) and accumulations would not be expected to exceed ambient levels.

Environmental Consequences of the No Action Alternative: The proposed action would not occur and low levels of fugitive dust and pollinator indirect impacts along Rio Blanco County Road #24 would not occur.

Mitigation: Trucks transporting fill material to/from the site via Rio Blanco County Road #24 should be covered.

Finding on the Public Land Health Standard for Threatened & Endangered species: The proposed and no-action alternatives should have no influence on populations or habitats of plants associated with the Endangered Species Act or BLM sensitive species, as mitigated, and should have no influence on the status of applicable Land Health Standards.

CULTURAL RESOURCES

Affected Environment: The proposed project area and its environs have been inventoried at the Class III (100% pedestrian) level, with most portions having been redundantly inventoried. No cultural resources have been identified within 600 meters of the project area (Berg, Retter, and Phillips 2008; Conner et al. 2004; Schwendler et al. 2008; Winters 1993). Additionally, recent large-scale block inventories of the region, including that reported in Schwendler et al. 2008, have provided data confirming suspicions that archaeological sites in the region are likely to be encountered on east- or south-facing slopes. The north-facing slopes surrounding the project area, consequently, are unlikely to contain previously undetected subsurface cultural deposits.

Environmental Consequences of the Proposed Action: As no cultural resources have been identified in or near the project area, and as the proposed project is situated in an area unlikely to contain cultural resources, the proposed action will have no effect on historic properties or cultural resources potentially Eligible for NRHP listing.

Environmental Consequences of the No Action Alternative: The No Action Alternative would have no potential to affect historic properties.

Mitigation: None required, excepting standard stipulations.

PALEONTOLOGY

Affected Environment: The general area of the proposed project has been broadly analyzed in two paleontological reports for seismic survey projects (Winterfeld 2008; Daitch, Browne, and Murphey 2009). These investigations neither located significant fossil resources near the project area nor intensively surveyed the project area. Tweto's 1979 geological map of Colorado has identified a portion of the project area as the Uinta Formation, a PFYC 5 formation known to produce significant fossils of Eocene mammals (titanotheres, uintatheres, miacid carnivores, possibly others), reptiles (turtles and crocodylians), fish (vertebrae, spines, and scales, likely including *Lepisosteidae*), gastropods (high-spined and turitellid snails), insect larvae, and plants (leaves, wood, algae, etc.). Specifically, the project impacts an area mapped as the Group B tongues of the Uinta and Green River Formations, generally known to produce significant plant and vertebrate fossils (Winterfeld 2008).

Environmental Consequences of the Proposed Action: Expansion of the gas plant site, especially to the south and east, may impact sensitive Uinta Formation rock if excavations are required to level the site, establish foundations, etc. A moderate potential exists for damage to or the destruction of scientifically-significant fossil resources.

Environmental Consequences of the No Action Alternative: The No Action Alternative has no potential to affect paleontological resources.

Mitigation: An approved paleontologist must be present before the start of any excavation that may impact the underlying formation (native sedimentary rock) to monitor this excavation for fossil resources. Unless native rock is encountered, monitoring will not be required for excavations a) within the area of existing surface disturbance or b) for the portion of the proposed expansion immediately northwest of existing surface disturbance and between the existing site and RBC Road 24. Monitoring will likely be required in areas to the east and south, adjacent to surrounding hills. Additionally, standard stipulations regarding the discovery of fossils, etc. will be applied.

ELEMENTS NOT PRESENT OR NOT AFFECTED:

No flood plains, prime and unique farmlands, exist within the area affected by the proposed action. There are also no Native American religious or environmental justice concerns associated with the proposed action.

OTHER ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Other Element	NA or Not Present	Applicable or Present, Not Brought Forward for Analysis	Applicable & Present and Brought Forward for Analysis
Visual Resources			X
Fire Management		X	
Forest Management	X		
Hydrology/Water Rights		X	
Rangeland Management			X
Wild Horse Management	X		
Realty Authorizations			X
Recreation		X	
Access and Transportation			X
Geology and Minerals	X		
Areas of Critical Environmental Concern	<i>See the T&E plant section above</i>		X
Wilderness	X		
Wild and Scenic Rivers	X		
Cadastral	X		
Socio-Economics	X		
Law Enforcement	X		

VISUAL RESOURCES

Affected Environment: The proposed actions are located in areas with a VRM III classification. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Environmental Consequences of the Proposed Action: The proposed action for expansion would be adjacent to RBC 24 along BLM road 1019 in a sagebrush/greasewood flat below at the toe of slopes scattered with pinion/juniper. A casual observer traveling along RBC 24 (paved road) would be able to view the proposed action. Travel in the area is composed primarily of energy related activity, a few ranchers, and hunters during the fall big game seasons. By painting all above ground facilities Carlsbad Canyon to mimic the surrounding vegetation and hillsides, the proposed action would not dominate the view of the casual observer. The level of change to the characteristic landscape would be moderate and the objectives of the VRM III classification would be retained.

Environmental Consequences of the No Action Alternative: There would be no additional environmental impacts.

Mitigation: Mitigation: Paint and maintain paint on all facilities approved with the proposed action to Carlsbad Canyon (Munsell Soil Color Chart of Standard Environmental Colors). Initial painting will occur within 6 months of installation.

RANGELAND MANAGEMENT

Affected Environment: The project is within the Square S Grazing Allotment (06027). The allotment has two grazing permit holders, Mantle Ranch and LOV Ranch. Both permit holders run cattle on the allotment from May through January. The area of the proposed action is used primarily during May and early June on alternate years with some late fall use other years. The project lies within two pastures of the allotment Ryan and South Ryan which are used in a multi pasture deferred rotation grazing system.

Environmental Consequences of the Proposed Action: The proposed action will require relocation of the Ryan/South Ryan pasture fence. This proposed action could interfere with proper functioning of the pasture fence which bisects the proposed plant expansion. This fence is necessary for control of cattle to achieve grazing objectives on the Square S allotment and to keep cattle from straying into the wrong grazing use area. Damage to fences or gates left open interfere with control of cattle and ultimately with proper utilization of the rangeland resource.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: The proposed plant expansion will necessitate relocation of the Ryan pasture fence. Prior to any construction, Bargath will arrange a field meeting with Mark Hafkenschiel, Rangeland Management Specialist to determine siting of the fence relocation. All fence construction will be completed to BLM fence specifications. Bargath will also install a 16 foot minimum width cattleguard and bases where the BLM road (heading south towards the Ryan/Black Sulphur divide) crosses the relocated fence on the south side of the plant.

ACCESS AND TRANSPORTATION

Affected Environment: The proposed action is located adjacent to BLM road 1019. BLM 1019 is a natural surface road that is used by both energy workers and the public to access Hog Lot and Wagonroad Ridge on the ridge to the south.

Environmental Consequences of the Proposed Action: The proposed action is adjacent to the BLM 1019 road. Construction in this area will require that the facility has proper drainage away from the site and also reinforced protection from the drainage to the southwest. The reinforcements to ensure that water from this drainage does not impact the facility will cause a reroute of the drainage to be adjacent to BLM road 1019. Water activities adjacent to BLM 1019 will cause erosion of the banks and eventually the road surface unless there is adequate armoring of the banks. Construction activities may impact the flow of travel along the route especially for traffic coming from the south off of the ridge. Turnaround points are few and once off of the top

of the ridge along BLM 1019 the road narrows and the only place to exit the road is at the intersection with the facilities and RBC 24.

Environmental Consequences of the No Action Alternative: There would be no additional environmental impacts.

Mitigation: Informative signs must be posted along BLM 1019 to the south of the proposed location so that north bound traffic understands that there may be some construction at the proposed site. Armoring of the drainage adjacent to BLM 1019 will be in a manner to hold the banks and comply with BLM Manual 9113.

REALTY AUTHORIZATIONS

Affected Environment: The proposed action will require an amendment to right-of-way COC67991.

Environmental Consequences of the Proposed Action: Approximately three acres previously granted for the compressor site will be relinquished west of BLM Road 1019 and approximately 5.28 acres will be added to the compressor site for a total of 12.28 acres. BLM Road 1019 will remain open and the site will expand to the north, east, and south of the existing fenced area.

Environmental Consequences of the No Action Alternative: None

Mitigation: All activities would be required to comply with all applicable local, state, and federal laws, statutes, regulations, standards, and implementation plans. This would include acquiring all required State and Rio Blanco County permits, effectively coordinating with existing facility ROW holders, and implementing all applicable mitigation measures required by each permit.

The applicant shall provide the BLM AO with data in a format compatible with the WRFO's ESRI ArcGIS Geographic Information System (GIS) to accurately locate and identify the right-of-way and all constructed infrastructure, (as-built maps) within 60 days of construction completion. Acceptable data formats are: (1) corrected global positioning system (GPS) files with sub-meter accuracy or better; (2) ESRI shapefiles or geodatabases; or at last resort, (3) AutoCAD .dwg or .dxf files. Option 2 is highly preferred. In ALL cases the data must be submitted in UTM Zone 13N, NAD 83, in units of meters. Data may be submitted as: (1) an email attachment; or (2) on a standard compact disk (CD) in compressed (WinZip only) or uncompressed format. All data shall include metadata, for each submitted layer, that conforms to the Content Standards for Digital Geospatial Metadata from the Federal Geographic Data Committee standards. Questions should be directed to WRFO BLM GIS staff at (970) 878-3800.

CUMULATIVE IMPACTS SUMMARY: This action is consistent with the scope of impacts addressed in the White River ROD/RMP. The cumulative impacts of energy-related development

are addressed in the White River ROD/RMP for each resource value that would be affected by the proposed action.

REFERENCES CITED:

Armstrong, Harley J. and David G. Wolny

1989 *Paleontological Resources of Northwest Colorado: A Regional Analysis*. Museum of Western Colorado, Grand Junction, Colorado.

Berg, Caryn M., Michael J. Retter, and Scott C. Phillips

2008 *Class III Cultural Resource Inventory of the Proposed Duke Energy Land Acquisition, Williams Ryan Gulch Project, Rio Blanco County, Colorado*. SWCA Environmental Consultants, Broomfield, Colorado. [WRFO #08-127-04]

Conner, Carl E., Curtis Martin, Barbara Davenport, Nicole Darnell, and Jim Conner

2004 *A Class III Cultural Resource Inventory for the Proposed Ryan Gulch Gathering System and Compressor Station in Rio Blanco County, Colorado for Williams Production RMT Company*. Grand River Institute, Grand Junction, Colorado. [WRFO #04-11-24]

Daitch, David J., Lori S. Browne, and Paul C. Murphey

2009 *Paleontological Technical Report: Williams Ryan Gulch 3-D Geophysical Investigation, Rio Blanco County, Colorado*. SWCA Environmental Consultants, Broomfield, Colorado. [WRFO #09-127-04]

Schwendler, Rebecca, Sarah Baer, Karen Reed, Scott Phillips, Scott Slessman, Matthew Bandy, Nicole Kromarek, Scott Bowen, Max Wolk, Caryn M. Berg, Paul Burnett, Tom Witt, Sean Doyle, Michelle Delmas, Michael Cregger, John Kennedy, Judy Cooper, Zonna Barnes, Amanda Cohen, Cynthia Manseau, Michael Retter, Dan Shosky, and Erin Salisbury

2008 *A Class III Cultural Resource Inventory for the Ryan Gulch 3-D Geophysical Exploration Project, Rio Blanco County, Colorado*. SWCA Environmental Consultants, Broomfield, Colorado. [WRFO #09-127-01]

Winterfeld, Gustav F.

2008 *Paleontologic Resources Letter Report: Paleontological evaluation of the proposed Exxon-Mobil Piceance 3-D Seismic project*. Erathem-Vanir Geological, Pocatello, Idaho. [WRFO #09-140-01]

Winters, Ron and Paul Lucero

1993 *Proposed Ryan Gulch Revegetation Project*. Bureau of Land Management – White River Field Office, Meeker, Colorado. [WRFO #93-10-36]

Tweto, Ogden

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

PERSONS / AGENCIES CONSULTED: Rio Blanco County, Colorado Division of Wildlife

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility	Date Signed
Bob Lange	Hydrologist	Air Quality, Wastes (Hazardous or Solids), Water Quality (Surface and Ground), Hydrology and Water Rights, and Soils	5/28/2010
Maggie Marston	Botanist	Areas of Critical Environmental Concern, Threatened and Endangered Plant Species	5/06/2010
Geoffrey Haymes	Archeologist	Cultural Resources, Paleontological Resources	2/19/2010
Mark Hafkenschiel	Rangeland Management Specialist	Invasive, Non-Native Species, Vegetation , Rangeland Management	
Ed Hollowed	Wildlife Biologist	Migratory Birds, Threatened, Endangered and Sensitive Animal Species, Terrestrial and Aquatic Wildlife, Wetlands and Riparian Zones	
Jim Michels	Outdoor Recreation Planner	Wilderness, Access and Transportation, Recreation,	06/07/2010
Jim Michels	Forester /Fire / Fuels Technician	Fire Management, Forest Management	06/07/2010
Paul Daggett	Mining Engineer	Geology and Minerals	03/16/2010
Stacey Burke	Realty Specialist	Realty Authorizations	05/05/2010
Jim Michels	Natural Resource Specialist / Outdoor Recreation Planner	Visual Resources	06/07/2010
Melissa J. Kindall	Range Technician	Wild Horse Management	03/24/2010

FINDING OF NO SIGNIFICANT IMPACT/DECISION RECORD (FONSI/DR)

DOI-BLM-CO-110-2010-0082-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analysis of the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to approve the proposed action with the addition of the mitigation measures listed below.

MITIGATION MEASURES: All applicable terms and conditions of the original grant and any amendments remain in full force and effect.

Preliminary

1. Informative signs must be posted along BLM 1019 to the south of the proposed location so that north bound traffic understands that there may be some construction at the proposed site. Armoring of the drainage adjacent to BLM 1019 will be in a manner to hold the banks and comply with BLM Manual 9113.
2. All activities would be required to comply with all applicable local, state, and federal laws, statutes, regulations, standards, and implementation plans. This would include acquiring all required State and Rio Blanco County permits, effectively coordinating with existing facility ROW holders, and implementing all applicable mitigation measures required by each permit.

Soils

3. Remove all topsoil to a depth of at least 6 inches for the newly disturbed areas as part of the expansion and place the topsoil on areas that have the surface roughening BMP applied and other areas proposed for stabilization using vegetation.
4. For the final reclamation at the time of the abandonment of the facility, leave the imported fill in place and re-grade the site to as close as possible to the original contours. Stabilize the fill outside of the floodplain to keep it from being mobilized during storm events.
5. Leave the disturbed area outside the working areas of the plant in a condition that provides for adequate drainage with no additional maintenance.
6. If erosion features such as riling, gulying, piping, and mass wasting occur within the disturbed area or are exasperated by the plant site, these erosion features will be addressed

immediately after observation by contacting the AO and submitting a reclamation plan with BMPs to address the erosion problems.

7. Surface armoring in the drainage feature along the southern edge of the plant, both in the upstream and downstream sections (50 feet on the upper end, and approximately 100 feet of the RC-12 section on the lower end) will include the installation of construction fabric and angular rock with an average diameter of 6 inches.
8. In addition to armoring the beginning and end of the channel, one rock structure will be installed every 20 feet perpendicular to flow in at least four rows of 6-inch average diameter rock all the way across the reconstructed channel and the side slopes (i.e. from the ground level to the ground level). Rock should be hand placed to maximize the interlocking of the rock.

Vegetation and Threatened, Endangered, and Sensitive Plants

9. Promptly recontour and revegetate all areas (including the stormwater features) of earthen disturbance *that are not necessary for the vegetation free area of the plant site* with modified Native Seed mix #2.

Native Seed mix #2 Modified	
Species/Variety	Pounds of Pure Live Seed per acre (lbs/pls/ac)
Western wheatgrass (Rosanna)	2
Indian ricegrass (Rimrock)	2
Bluebunch wheatgrass (Whitmar)	2
Thickspike wheatgrass (Critana)	1
Magnar Basin wildrye	1
Scarlet Globemallow	1

10. The holder shall be required to monitor disturbed areas for any Canada thistle or other noxious/invasive species for the life of the project. All noxious and invasive species which occur on the site will be eradicated using materials and methods approved in advance by the Authorized Officer.
11. Trucks transporting fill material to/from the site via Rio Blanco County Road #24 shall be covered.

Cultural and Paleontological Resources

12. An approved paleontologist must be present before the start of any excavation that may impact the underlying formation (native sedimentary rock) to monitor this excavation for fossil resources. Unless native rock is encountered, monitoring will not be required for excavations a) within the area of existing surface disturbance or b) for the portion of the proposed expansion immediately northwest of existing surface disturbance and between the existing site and RBC Road 24. Monitoring will likely be required in areas to the east and south, adjacent to surrounding hills. Additionally, standard stipulations regarding the discovery of fossils, etc. will be applied.

Visual Resources and Rangeland Management

13. Paint and maintain paint on all facilities approved with the proposed action to Carlsbad Canyon (Munsell Soil Color Chart of Standard Environmental Colors). Initial painting will occur within 6 months of installation.

14. The proposed plant expansion will necessitate relocation of the Ryan pasture fence. Prior to any construction, Bargath will arrange a field meeting with Mark Hafkenschiel, Rangeland Management Specialist to determine siting of the fence relocation. All fence construction will be completed to BLM fence specifications. Bargath will also install a 16 foot minimum width cattle guard and bases where the BLM road (heading south towards the Ryan/Black Sulphur divide) crosses the relocated fence on the south side of the plant.

GIS Reporting

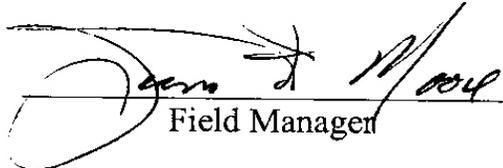
15. The applicant shall provide the BLM AO with data in a format compatible with the WRFO's ESRI ArcGIS Geographic Information System (GIS) to accurately locate and identify the right-of-way and all constructed infrastructure, (as-built maps) within 60 days of construction completion. Acceptable data formats are: (1) corrected global positioning system (GPS) files with sub-meter accuracy or better; (2) ESRI shapefiles or geodatabases; or at last resort, (3) AutoCAD .dwg or .dxf files. Option 2 is highly preferred. In ALL cases the data must be submitted in UTM Zone 13N, NAD 83, in units of meters. Data may be submitted as: (1) an email attachment; or (2) on a standard compact disk (CD) in compressed (WinZip only) or uncompressed format. All data shall include metadata, for each submitted layer, that conforms to the Content Standards for Digital Geospatial Metadata from the Federal Geographic Data Committee standards. Questions should be directed to WRFO BLM GIS staff at (970) 878-3800.

COMPLIANCE/MONITORING: On-going compliance inspections and monitoring will be conducted by the BLM White River Field Office staff during and after construction. Specific mitigation developed in this document will be followed. The holder will be notified of compliance related issues and provided 30 days to resolve such issues.

NAME OF PREPARER: Stacey Burke

NAME OF ENVIRONMENTAL COORDINATOR: Caroline Hollowed

SIGNATURE OF AUTHORIZED OFFICIAL:



Field Manager

DATE SIGNED: 7/22/10

ATTACHMENTS: Map of proposed action

COC67991 Ryan Gulch Gas Plant Expansion

EXHIBIT A



- 2005 Original Gas Plant
- 2009 Gas Plant Expansion
- FieldOffice_Boundary_WRFO



Sources:
BLM, USGS, CDOW, etc.

Disclaimer:
Although the data presented within this map, and the map itself, have been processed successfully on computers of BLM, no warranty, expressed or implied, is made by BLM regarding the use of this map or the data represented, nor does the fact of distribution constitute or imply any such warranty.



Feb 2010

