

March 18, 2019

Federal Energy Regulatory Commission 888 First Street, N.E. Washington, D.C. 20426

Attention: Ms. Kimberly D. Bose, Secretary

Re: Colorado Interstate Gas Company, L.L.C.:

Docket No. CP19-56-000;

<u>Supplemental Environmental Information</u>

Dear Ms. Bose:

On February 21, 2019, Colorado Interstate Gas Company, L.L.C. ("CIG") received an informal request for additional information from the Office of Energy Projects ("OEP") related to its proposed CIG High Plains Kiowa Lateral Expansion Project. Accordingly, CIG is herein filing with the Federal Energy Regulatory Commission ("Commission") in Docket No. CP19-56-000, responses associated with that request.

# **Description of Proceeding**

On January 24, 2019, CIG filed a prior notice request to Sections 157.205(b), 157.208(b), and 157.210 of the Commission's Regulations under the Natural Gas Act for authorization to construct and operate two laterals and metering facilities located in Weld County, Colorado. The project is referred to as the "CIG High Plains Kiowa Lateral Expansion Project".

### **Description of Information Being Filed**

CIG is hereby submitting responses to the February 21, 2019 informal request. CIG is in the process of finalizing responses to the remaining informational requests and will file them accordingly.

# **Filing Information**

CIG is e-Filing this letter and attachment with the Commission's Secretary in accordance with the Commission's Order No. 703, *Filing Via the Internet*, guidelines issued on November 15, 2007 in Docket No. RM07-16-000.

Respectfully submitted, COLORADO INTERSTATE GAS COMPANY L.L.C.

By /s/
Francisco Tarin
Director, Regulatory

Enclosures

### General

3. Colorado Interstate Gas provided site-specific geotechnical investigation reports for the proposed horizontal directional drill (HDD) crossings of I-76 and CR 49. File site-specific geotechnical investigations for the proposed crossing of CR 59, and the potential HDD crossings of Streams 1 and 3 and Wetlands 1, 2, and 5. If Colorado Interstate Gas does not intend to complete site-specific geotechnical investigations at these locations, provide justification for how design and feasibility would be determined.

### Response:

CIG has determined that conducting HDD crossings of Streams 1 and 3 and Wetlands 1, 2, and 5 and County Road 59 are no longer necessary. All wetlands will be crossed using the open cut method, therefore no geotechnical evaluation would be required. In addition, CIG has determined that County Road 59 would be crossed utilizing a standard jack and bore method. Based on the revised crossing methods, CIG does not anticipate the need for additional geotechnical evaluations related to the project.

Response prepared by or under the supervision of:

### General

10. Colorado Interstate Gas's Hydrostatic Test Plan states "any contaminants in the discharge water will likely be below the required minimums. To ensure this, water will be collected and tested at a certified water testing laboratory." Provide a revised Hydrostatic Test Plan that incorporates how Colorado Interstate Gas would dispose of hydrostatic test water if testing indicates parameters are not below required minimums.

### Response:

CIG would conduct analytical testing of the hydrostatic test source waters at a certified water testing laboratory prior to placement in the pipe, to ensure the source water meets discharge requirements. Upon completion of the test, CIG would again test the discharge water, per the permit stipulations, prior to discharge. If the test results exceed the parameters identified in permit, CIG would consult with Colorado Department of Public Health and Environmental to develop a plan to dispose of the water. It has been CIG's experience that water used to hydrostatic test new pipe meets the permit parameters. Please see attachment 1 behind this response for the revised Hydrostatic Test Plan.

Response prepared by or under the supervision of:

Mike Bonar Environmental Project Manager 719-520-4817

# **Hydrostatic Test Plan**

CIG High Plains Kiowa Lateral Expansion Project Weld County, Colorado



Two North Nevada Avenue Colorado Springs, CO 80903

#### INTRODUCTION

Colorado Interstate Gas Company (CIG) is proposing to construct two pipeline laterals, two meter stations, and several tie-in locations, to be referred to as the High Plains Kiowa Lateral Expansion Project (Project). Once constructed, in order to assure compliance with U.S. Department of Transportation regulations, CIG must pressure test this line in accordance with CFR Part 192 requirements. For this Project, CIG plans to hydrostatically test the completed pipeline laterals using water pressured to the appropriate level.

#### WATER SOURCES

CIG proposes to obtain all water for hydrostatic testing from local or municipal sources. Approximately 1,226,805 gallons (3.76 acre-feet) of water will be required for hydrostatic testing of the pipelines and for HDD operations. Discharges are expected to be complete by June 1, 2019.

#### **TESTING**

Water will be used for no more than thirty days. Discharges will occur at the locations described below. Prior to testing, pipe has been inspected and welds have been x-rayed. In the unlikely event that there should be an accidental release due to pipe or valve failure, the location of the release will be contained as quickly as practicable and, once the facility has been repaired and retested, the damaged area will be recontoured and reclaimed in compliance with the Reclamation Plan.

### **DISCHARGE**

Once the pipe has been tested and the water is no longer needed, the water will be discharged over open ground within a well-vegetated upland area. Discharge locations and details are shown on Table 1.

**Table 1. Proposed Discharge locations** 

Facility	Mile Post	Expected Discharge Volume (gallons)	Expected Discharge Volume (acre-feet)	Water Source	Water Disposal Site	
Kiowa Lateral	0.0	1,127,226	3.46		Open Ground	
High Five Lateral	0.7	89,729	0.27	Municipal Source or	Open Ground	
Prairie Hound Meter Station	0.0	3,800	0.01	Existing Local Water Well	Open Ground	
High Five Meter Station	0.7	6,050	0.02		Open Ground	
Overall Total		1,226,805	3.76			

High Plains Kiowa Lateral Expansion Project

Hydrostatic Test Plan

The pipe for the Project will be new. Typically, hydrostatic test water will pick up some iron oxide (rust) from new pipe, depending on the total duration the water remains in the pipe. The quantity is likely to be fairly small and may give the discharge water a slight red color. The water may also pick up some sand or dirt left over from the installation. While night caps are always installed after a day's work, dirt may still find its way into the pipe. Hydrostatic test water released on open ground will be discharged through a certified weed-free hay or straw bale dissipation device to slow down the velocity and to help pick up solids (Procedures, Appendix B in Environmental Report).

Any contaminants in the discharge water will likely be below the required minimums. To ensure this, CIG will conduct analytical testing of the hydrostatic test source waters at a certified water testing laboratory prior to placement in the pipe, to ensure the source water meets discharge requirements. Upon completion of the test, CIG would again test the discharge water as per the permit stipulations prior to discharge. If the test results exceed the parameters identified in permit, CIG would work with Colorado Department of Public Health and Environmental to develop a plan to discharge the water. It has been CIG's experience that water used to hydrostatic test new pipe meets the permit parameters. The hydrostatic test discharge permit in Colorado will require analysis of TSS, total iron, pH, and a visual for oil and grease. If a sheen is observed, an oil and grease sample will be collected, if a sheen is not observed, it will be documented in field notes/reports. Therefore, there is no plan to use any chemical treatment of the hydrostatic test water. The only physical treatment for the water will be the certified weed-free hay of straw bale dissipation device.

Upon completion of the test, CIG will test the discharge water in accordance with state permitting requirements and submit the results to the Colorado Department of Public Health and Environmental as stipulated in the permit. It has been CIG's experience that water used to hydrostatic test new pipe meets the permit parameters.

The discharge locations will be into nearly level or gently rolling, vegetated upland areas to help avoid erosion issues. Hydrostatic test water will not be discharged into areas with highly saline or seleniferous soils. Sites with restrictive drainage features (e.g., shallow depth to clay or bedrock) will be avoided.

### **Resource Report 1**

3. Section 1.4 states that "Colorado Interstate Gas is justifying its use for a wider workspace based on anticipated construction through rough terrain, side slope, and the need for additional topsoil segregation." However, Colorado Interstate Gas indicates in section 7 that it is anticipated that there is less than 12 inches of topsoil for the majority of the right-of-way (and that ditch line only topsoil segregation would be conducted), and that "a majority of the Project is located in an area with little topography." Therefore, provide additional justification.

### Response:

CIG is requesting the use of a wider workspace due to a number of site constraints that will be encountered during construction. Below is a table of the constraints that CIG has identified which will require additional workspace to safely construct the pipeline.

ROW Workspace Constraints							
Constraint	Kiowa Lateral 9.2 mile length	High Five Lateral 0.7 mile length					
Sandy Surface Soils (RR7)	7.5 miles	0.6 mile					
Prime Farmland (RR7)	0.3 mile	Not Applicable					
Farmland of Statewide Importance (RR7)	3.4 miles	<0.1 mile					
Number of Foreign Pipeline or Utility Crossings or Adjacent to the ROW (RR8)	approximately 30 crossings	approximately 8 crossing					
Road Crossings (public, farm, oil field)	15 crossings	4 crossings					

The majority of the pipeline construction will occur on sandy soils that likely will require trenches with angled side slopes due to the unstable nature of sandy soils, and, as such, will require additional ROW width for spoil storage. Further, working around foreign pipelines and utility lines, some of which parallel the proposed ROWs for some length, will require additional workspace for soils, materials, and equipment storage to ensure protection of these foreign facilities. Lastly, the ROWs cross a number of public roads, farm paths and oil field roads, all of which will require additional workspace for soil, material, and equipment storage in order to maintain access along these roads as necessary. Due to the numerous foreign line crossings associated with both the High

Five and Kiowa Laterals, CIG will utilize the additional ROW to allow for any additional excavation that may be required to safely cross these facilities.

CIG's request for a wider construction workspace is not inconsistent with past requests and Commission approval for additional workspace in past proceedings. For example, in Docket No. CP12-496-000, (construction of CIG's High Plains Expansion including the Lancaster Lateral), CIG requested and obtained an 85-foot wide pipeline construction ROW. Similarly, in Docket No CP07-207-000 (High Plains Project), CIG requested and obtained a 100-foot pipeline construction ROW.

Response prepared by or under the supervision of:

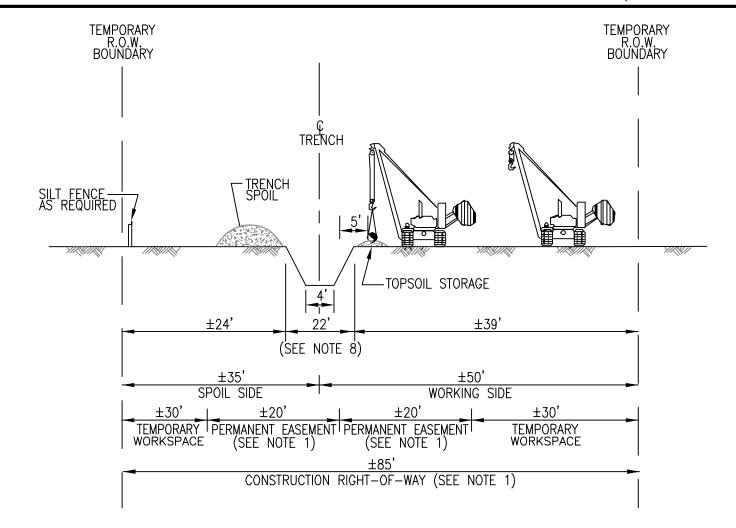
# **Resource Report 1**

4. Provide construction methods and construction typical diagrams for side slope and "rough terrain" construction.

### Response:

CIG has attached typical diagrams for side slope and "rough terrain" construction. Please see attachment 2 behind this response.

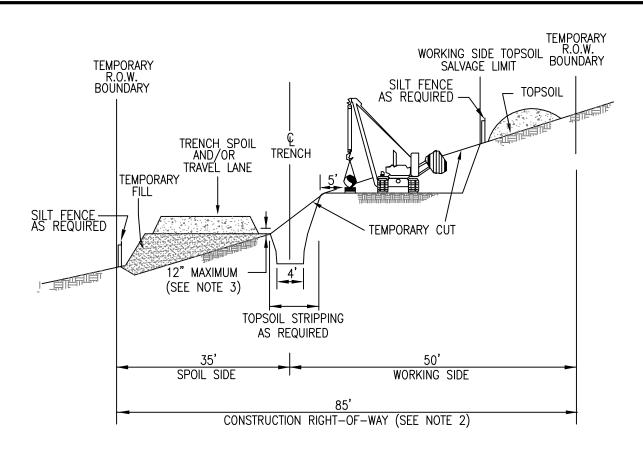
Response prepared by or under the supervision of:



#### NOTES:

- 1. CONSTRUCTION RIGHT-OF-WAY WILL TYPICALLY BE 85 FEET WIDE CONSISTING OF 40 FEET OF PERMANENT EASEMENT AND 45 FEET OF TEMPORARY WORKSPACE. EXTRA TEMPORARY WORK SPACE WILL BE NECESSARY AT MAJOR ROAD, RAIL AND RIVER CROSSINGS AND OTHER SPECIAL CIRCUMSTANCES, AS REQUIRED. CERTAIN SITUATIONS MAY REQUIRE A NARROWER WIDTH.
- 2. UTILIZE THE "TRENCH ONLY" TOPSOIL SALVAGE METHOD.
- 3. STOCKPILE TOPSOIL AS SHOWN OR IN ANY CONFIGURATION APPROVED BY THE COMPANY'S INSPECTOR. KEEP TOPSOIL CLEAN OF ALL CONSTRUCTION DEBRIS. MAINTAIN SEPARATION BETWEEN TOPSOIL AND SUBSOIL PILES.
- 4. LEAVE GAPS IN TOPSOIL AND SPOIL PILES AT OBVIOUS DRAINAGES. DO NOT PUSH TOPSOIL INTO CREEKS OR WETLANDS. DO NOT USE TOPSOIL FOR PADDING.
- 5. TEMPORARILY SUSPEND TOPSOIL HANDLING DURING INORDINATELY WINDY CONDITIONS UNTIL MITIGATIVE MEASURES TO MINIMIZE WIND EROSION CAN BE IMPLEMENTED.
- 6. AVOID SCALPING VEGETATED GROUND SURFACE WHEN BACKFILLING SPOIL AND TOPSOIL PILES.
- 7. SOIL IN THIS LOCATION HAS BEEN IDENTIFIED AS OSHA TYPE C SOIL, AS A RESULT THE LAYBACK OF THE TRENCH WALL MUST HAVE A H1.5:V1 SLOPE.

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		KIOWA AND HIGH FIVE LATERAL	Status:				
KINDER#MORGAN	TOPSOIL SEPARATION BLADE WIDTH		State:	COLORADO	PIN No:		
/		TYPE C SOIL	County:	WELD	Scale:	N.T.S.	
	THE C SOIL		Category: PIPELINE				
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COLORADO INTERSTATION GAS COMPANY, LLC		·	Drawing No				Rev
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# **PROFILE**

### NOTES:

- 1. SIDE HILL CONSTRUCTION CUT AND FILL SHALL BE ALLOWED WHENEVER, IN THE OPINION OF THE CONTRACTOR, STEEP SIDE HILL CONSTRUCTION IS WARRANTED FOR PERSONNEL AND/OR EQUIPMENT SAFETY CONSIDERATIONS.
- 2. CONSTRUCTION RIGHT-OF-WAY WILL TYPICALLY BE 85 FEET WIDE CONSISTING OF 40 FEET OF PERMANENT EASEMENT AND 45 FEET OF TEMPORARY WORKSPACE. EXTRA TEMPORARY WORK SPACE WILL BE NECESSARY AT MAJOR ROAD, RAIL AND RIVER CROSSINGS AND OTHER SPECIAL CIRCUMSTANCES, AS REQUIRED. CERTAIN SITUATIONS MAY REQUIRE A NARROWER WIDTH.
- 3. THIS DRAWING REFLECTS "TRENCH, SPOIL, STORE TOPSOIL" TOPSOIL STRIPPING PROCEDURE AS NEEDED FOR HILL SIDE LEVELING. AT LOCATIONS IDENTIFIED ON THE CONSTRUCTION ALIGNMENT SHEETS OR AS DIRECTED BY THE COMPANY'S INSPECTOR.
- 4. STOCKPILE TOPSOIL AS SHOWN OR IN ANY CONFIGURATION APPROVED BY THE COMPANY'S REPRESENTATIVE. KEEP TOPSOIL CLEAN OF ALL CONSTRUCTION DEBRIS.
- 5. LEAVE GAPS IN TOPSOIL AND SPOIL PILES AT OBVIOUS DRAINAGES. DO NOT PUSH TOPSOIL INTO CREEKS OR WETLANDS. DO NOT USE TOPSOIL FOR PADDING. AVOID SCALPING VEGETATED GROUND SURFACE WHEN BACKFILLING TOPSOIL PILE.
- 6. TEMPORARILY SUSPEND TOPSOIL HANDLING OPERATIONS DURING INORDINATELY WINDY CONDITIONS UNTIL MITIGATIVE MEASURES TO MINIMIZE WIND EROSION CAN BE IMPLEMENTED.
- 7. FOR STORM WATER RUNOFF CONTROL ON HILL/SLOPE CONSTRUCTION, SEE TEMPORARY EROSION AND SEDIMENTATION CONTROL PROCEDURES IN SECTION C1260 OF THE CONSTRUCTION STANDARDS.
- 8. ALL DIMENSIONS INDICATED SHALL BE DETERMINED BY ACTUAL CONSTRUCTION CONDITIONS.

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KINDER#MORGAN	TOPSOIL SEPARATION	SIDE HILL	State:	COLORADO	PIN No:		
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COLORADO INTERSTATION GAS COMPANY, LLC	·		Drawing No:	PROC	C-7		Rev O

### **Resource Report 2**

2. Colorado Interstate Gas has identified two groundwater monitor wells within 150 feet from the construction workspace (table 2-1). Clarify the location of these wells and describe whether contaminated soil or groundwater may be present in this area, assess impacts on the Project, and describe mitigation measures, if necessary.

### Updated Response:

On March 8, 2019 CIG provided a response to the informal request for information on Resource Report 2 question 2. CIG is supplementing its prior response with the following information regarding the Project.

The two monitoring wells located near the High Five Lateral and High Five Meter Station are groundwater monitoring/sampling wells. One well is adjacent to an apparent oil/gas well pad. The other is within an existing valve station. No other information appears available from the Colorado Division of Water Resources (CDWR) database regarding any potential contamination associated with the wells. CIG has reached out to CDWR for information regarding contamination, if any, associated with the wells and will update the Commission if any additional information is received. The table below provides more detail of the two wells shown the CDWR database, in addition to what is provided in Table 2-1.

PROJECT AREA	More Info	Receipt	Permit	Use1	CurrStatus	LatDecDeg	LongDecDeg	ApplicantN
HIGH FIVE	https://dnrwe b.state.co.us/c dss/WellPermi ts/0042046	42046	42046- MH	Monitoring / Sampling	Well Constructed	40.147104	-104.756249	TRC ENVIRONMENTAL CORP
HIGH FIVE	https://dnrwe b.state.co.us/c dss/WellPermi ts/0534135	534135	26146 8-	Monitoring / Sampling	Well Constructed	40.145732	-104.754997	TRC ENVIRONMENTAL CORP

Response prepared by or under the supervision of:

### **Resource Report 4**

3. The Cultural Resources and Human Remains Discovery Plan is not sufficient. Revise the discovery plan to be a procedural document, preferably stand-alone so that it can be useful to Project personnel. It needs to outline the steps to be taken in the event of an inadvertent discovery and the roles and responsibilities for all involved, particularly if no archaeologist is on the Project site at the time of discovery. Who is ultimately responsible for contacting local law enforcement and the county coroner in the event of a human remains discovery? The discovery plan also needs to have a discussion on consultation with tribes, agencies, and other interested parties as appropriate. File the revised plan.

### Response:

CIG has revised the Cultural Resources and Human Remains Discovery Plan to outline the steps to be taken in the event of an inadvertent discovery. Please see attachment 3 behind this response.

Response prepared by or under the supervision of:

Mike Bonar Environmental Project Manager 719-520-4817



# UNANTICIPATED DISCOVERIES PLAN for the KINDER MORGAN CIG HIGH PLAINS KIOWA LATERAL EXPANSION PROJECT, WELD COUNTY, COLORADO

### Principal Investigator Anne McKibbin

# Prepared for

Golder Associates
44 Union Boulevard, Suite 300
Lakewood, Colorado 80228

Prepared by
Metcalf Archaeological Consultants, Inc.
11495 West 8<sup>th</sup> Ave, Suite 104
Lakewood, Colorado 80215

December 2018, revised March 2019

#### INTRODUCTION

Metcalf Archaeological Consultants, Inc. (Metcalf), as a subcontractor to Golder Associates (Golder), conducted a Class III cultural resource inventory for the Colorado Interstate Gas (CIG) High Plains Kiowa Lateral Expansion Project proposed for construction in Weld County, Colorado (Anderson and Roberts 2018). Kinder Morgan is proposing the CIG High Plains Kiowa Lateral Expansion Project. The project consists of two proposed 24-inch natural gas pipelines and their associated facilities, along with a separate staging area. Specifically, these three separate project components include:

- 1) Kiowa Lateral pipeline,
- 2) High Five Lateral pipeline, and
- 3) Fort Lupton Staging Area.

This plan for *unanticipated* discoveries is taken essentially as is from the Class III inventory report for the project (Anderson and Roberts 2018:52-53) but with the addition of detail regarding the procedures and notifications that apply in the case of discovery of human remains. It is important to note, however, that discovery of human remains on non-federal land in Colorado is strictly and clearly governed by state law, with all decision-making authority resting either with local law enforcement or with the State Archaeologist. For instances where discoveries are made that can be *anticipated*, Metcalf has prepared a stand-alone Treatment Plan document, which includes the text from the Class III inventory report (Anderson and Roberts 2018:46-52) addressing how non-human remains discoveries will be handled, evaluated, and treatment applied, if the discoveries can be recommended to be historic properties. The stand-alone Treatment Plan includes an added section on the details of procedures for notifications, additional consultation, and decision-making, to assist in the proper implementation of further work following a discovery.

#### UNANTICIPATED HISTORIC PROPERTIES

The Treatment Plan prepared for this undertaking should minimize the chance of unanticipated discoveries since areas with potential for buried cultural materials will be inspected during construction and all anticipated historic properties that are discovered will be treated in accordance with the treatment plan for this project. Nevertheless, should any unanticipated historic properties be discovered during construction they will be treated as required by 36 CFR §800.13(b). If any cultural materials are discovered during construction where the monitoring plan is not in effect, these finds will be assessed and treated under the Treatment Plan unless they constitute a resource not anticipated by the treatment plan.

### **Contact Procedures**

Metcalf will act as the first point of contact for Kinder Morgan during the construction process. If a project archaeologist is not on-site at the time of the discovery, Kinder Morgan will have contact information for a project archaeologist who will be on-call at all times during construction to respond immediately if any potential discoveries are made. All construction work at the location of the discovery will be stopped and the discovery protected from further disturbance pending examination by the project archaeologist. Once the project archaeologist determines that cultural remains have been discovered and that they are of an unanticipated nature, and thus not appropriate to treat under the project's Treatment Plan, Metcalf will consult directly with SHPO and the FERC on appropriate further work. Further construction activity at the unanticipated discovery location will remain stopped until Kinder Morgan is notified by FERC that work can proceed. Metcalf will communicate with Kinder Morgan regarding landowner issues should additional work be warranted on private land. At all times, Kinder Morgan's Environmental Inspector (KM EI) (or other primary contact as designated by Kinder Morgan) will be kept informed of proceedings so that any construction halts can be managed in the least disruptive fashion possible.

# **Discovery of Human Remains**

Discovery of human remains at any time during the course of this project shall result in the immediate cessation of all activities in that area. Kinder Morgan will insure that those remains are respectfully protected from further disturbance or additional damage as the result of their exposure. Further treatment will be at the direction of the agency with jurisdiction.

The process by which the discovery of human remains is handled is very clearly laid out in the state's Unmarked Human Graves law, CRS §24-80-1301-1305. This legislation applies to the discovery of human remains anywhere in the State of Colorado except on federal land and applies regardless of how or by whom the remains come to be discovered. This statute requires notification of the County Coroner and local law enforcement agency (see Contact Information below). Their responsibility is to determine whether or not the materials constitute a crime scene or are otherwise of forensic interest, such as remains of a missing person, and to decide whether they wish to maintain jurisdiction over the materials. If they do not, the State Archaeologist is notified and further action is at the State Archaeologist's direction.

In any event, discovery of human remains on this project would occur during the course of a federal action because of FERC involvement in the project. The FERC will be notified immediately of any discovery of human remains.

A typical process of notification and investigation upon discovery of human remains is described below, with citations to the pertinent clauses in CRS §24-80-1302. Notifications will be done by phone and/or e-mail.

- Human remains are discovered and all work stops in the immediate vicinity of the find.
- If the project archaeologist is not present, the construction contractor will immediately notify the lead inspector, who will contact the project archaeologist to request a site visit.

- If the project archaeologist is present, they will notify the KM EI.
- The KM EI or lead inspector will contact the County Sheriff's Office to report the discovery and ask the Sheriff's Office to contact the County Coroner and to initiate an investigation [CRS §24-80-1302(1)].
- If the Sheriff and Coroner determine that the find is forensic (i.e. crime-related), they will continue to investigate [CRS §24-80-1302(2)]. Work will not resume in the immediate vicinity of the find until their investigation is complete and the investigating authorities notify Kinder Morgan that construction may resume.
- If the Sheriff and Coroner determine that the find is not forensic, they will contact the State Archaeologist [CRS §24-80-1302(2)], who will then direct further investigations [CRS §24-80-1302(3)] in consultation with the FERC and the Colorado Commission of Indian Affairs, if appropriate [CRS §24-80-1302(4)(a)]. Work will not resume in the immediate vicinity of the find until all investigation and consultation is complete and the State Archaeologist notifies Kinder Morgan that construction may resume.
- Kinder Morgan and Metcalf will not resume or initiate any activities involving discovered human remains until such time as all appropriate agencies have been contacted and agreement has been reached on treatment of the remains.
- Should disinterment of human remains be the chosen course of action [CRS §24-80-1302(4)(b)], it will be conducted in a manner consistent with CRS §24-80-1302(4)(c-e).

#### **Contact Information**

Kinder Morgan (CIG) Michael Bonar (719) 520-4817 Michael bonar@kindermorgan.com

Federal Energy Regulatory Commission Laurie Boros, Staff Archaeologist 888 First Street NE Washington, DC 20426 Phone: (202) 502-8046 Fey: (202) 208 0353

Fax: (202) 208-0353 Laurie.boros@ferc.gov

Colorado State Archaeologist/Deputy SHPO Holly Norton Office of Archaeology & Historic Preservation 1300 Broadway, Denver, CO 80203 303-866-2736 holly.norton@state.co.us Weld County Sheriff's Office 1950 O Street Greeley, CO 80631 Phone: (970) 356-4015

Fax: (970) 304-6467

Metcalf Archaeological Consultants, Inc. Kimberly Kintz Vice President of Operations 3094 I-70 Business Loop Grand Junction, CO 81504 (970) 434-9080 kkintz@metcalfarchaeology.com

### **Resource Report 6**

- 1. Section 6.1.1 states "there are no other subsurface mineral resources near the Project." Identify current, historic, or proposed surface and subsurface mines or oil and gas exploration within 0.25 mile of the Project area and provide references for the information.
  - a. Provide a discussion of construction methods and hazard mitigation methods that would be employed for oil and gas wells and infrastructure within 100 feet of the Project. Such measures may include strategic placement of balustrades, orange safety fencing, and/or employment of specialized construction methods.

### Updated Response:

On March 8, 2019 CIG provided a response to the informal request for information on Resource Report 6 question 1. CIG is supplementing its prior response with the following information regarding the Project.

Excluding the hydrocarbon fields of the DJ Basin, no other subsurface mineral resources were identified within 0.25-mile of the Project area, including historic or proposed mine sites according to the Colorado Department of Natural Resources (CDNR) Division of Reclamation Mining and Safety Map. Two sites are within 0.25-mile (0.06- and 0.10-mile) of the Kiowa Lateral workspace that required a surface mine permit for borrow material (sand and gravel) for construction uses. Both of these surface mine permits have been terminated according to the CDNR. Therefore, potential impacts to historic, ongoing, and proposed surface and subsurface mine sites from construction of the Project are not anticipated.

Response prepared by or under the supervision of:

Mike Bonar Environmental Project Manager 719-520-4817

### **Resource Report 6**

5. Identify by milepost and describe the geologic hazards and concerns that exist or have the potential to develop in or near the Project area with regard to ground subsidence due to fluid or mineral extraction (water, hydrocarbons, and subsurface mining).

### Response:

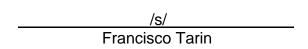
Assessment of the potential for land subsidence due to mining, oil and gas extraction, or natural subsidence was conducted using data available from the Colorado Geological Survey (CGS). According to CGS records, there is no known history of subsidence from sub-surface mineral extraction of any kind in the proposed project area. CIG notes that there is only one producing oil and gas well within 100-feet of the project area that is located near the proposed High Five lateral right-of-way, near milepost 0.7. No other known sub-surface mineral extraction or oil or natural gas explorations is occurring near the Project area. Assessment of the potential for land subsidence due to groundwater pumping was conducted using data available from the USGS. There are no documented cases of subsidence from ground water withdrawal in Colorado. Therefore, the potential for land subsidence is minimal.

Response prepared by or under the supervision of:

# **Certificate of Service**

I hereby certify that I have this day caused a copy of the foregoing documents to be served upon each person designated on the official service list compiled by the Commission's Secretary in this proceeding in accordance with the requirements of Section 385.2010 of the Federal Energy Regulatory Commission's Rules of Practice and Procedure.

Dated at Colorado Springs, Colorado as of this 18<sup>th</sup> day of March 2019.



Two North Nevada Avenue Colorado Springs, Colorado 80903 (719) 667-7517