



February 18, 2013

Margaret Ash
State of Colorado
Oil and Gas Conservation Commission
1120 Lincoln St., Suite 801
Denver, CO 80203

Re: Kinder Morgan Response to NOAV #200374896, Pit Permit #428410

This letter provides Kinder Morgan CO₂ Company, L.P.'s (Kinder Morgan's) initial response to the above mentioned NOAV related to well YG-1. As a result of this and other COGCC inspections and prior to receipt of the NOAV, Kinder Morgan has undertaken significant steps to improve its stormwater program. On October 19, 2012, after receiving inspection reports from COGCC including 9/20/2012 Document No. 669400122 YG-1 API No. 083-06697 for YG-1, Kinder Morgan and COGCC personnel met to discuss the alleged issues contained in the reports and the appropriate corrective actions. As discussed in more detail below, Kinder Morgan has taken several steps to address the issues identified by the COGCC. As you are likely aware, on January 24, 2013, a COGCC inspector re-inspected the YG-1 well site and found it to be in "satisfactory" condition. See attached Field Inspection Form, Document No. 669400424. Additionally, to improve its overall stormwater program, Kinder Morgan has hired an additional stormwater inspector for future drill sites. Moreover, on January 30, 2013 Kinder Morgan hosted an additional stormwater training class for Kinder Morgan employees and contractors which was also attended by COGCC representatives.

We have worked to address each alleged issue in the NOAV. Below, Kinder Morgan has restated the allegation in the NOAV followed by our response. All but one of the requested corrective action items (which is not due until March 25, 2013) have already been completed.

1. Allegation: Kinder Morgan did not provide 48 hour notice, using Form 42, of pit construction as required.

Kinder Morgan Response: In September 2012, KM called the COGCC to notify the agency prior to initiating pit construction. Kinder Morgan was not aware that it must submit a form 42 and that verbal notification is not sufficient. However, now that Kinder Morgan is aware of COGCC's preference for a Form 42 and the Form 42 for YG-1 is attached. It should also be noted that KM will utilize closed loop drilling on all future wells and will no longer require reserve pits.

2. Allegation: Kinder Morgan did not provide 48 hour notice, using Form 42, for pit liner installation as required.

Kinder Morgan Response: As noted above, Kinder Morgan provided verbal notification to the COGCC and attached is the Form 42 for the YG-1 pit liner. As mentioned above, KM will be utilizing closed loop drilling and will no longer be installing pit liners.

3. Allegation: Kinder Morgan did not place and or keep drill cuttings in a lined pit, container or on a lined/bermed portion of the well pad prior to disposal, or maintain de minimis moisture content of the cuttings as required.

Kinder Morgan Response: This issue is relevant to several of the COGCC findings and so a complete response is provided here although I note that much of this information was the subject to our email correspondence over the weekend. At the time of the inspection, Kinder Morgan was working to implement its closed loop system and was using a semi-closed loop system. Cuttings from the fluid drilled hole section were dried and collected and stockpiled on location on a lined area covered with 6" of soil. The soil protected the liner while trucks placed the stockpiles of cutting for temporary storage. The lined storage area was surrounded by a berm and connected to the lined pit, which was constructed/graded to allow run-off to drain to the pit. Unfortunately, the containment berm was damaged by heavy equipment and rain water that had come into contact with the drill cuttings flowed outside the liner protected area for a short period of time before the berm was repaired. After the inspector verbally noted issues to Kinder Morgan site personnel on September 20, 2012, the rig was shut down for 12 hours to address the issues. The berm was repaired and the remediation of the stained soil was performed within 2 hours of when the COGCC inspector left the site. A form 27 is attached. In an abundance of caution, Kinder Morgan removed contaminated soil to a depth of 7 inches. This contaminated material was placed within the lined containment area until it was transported to the Montezuma County Solid Waste Facility with the remaining cuttings and cement.

As noted by the inspector, a small swale formed that was approximately 1 foot wide by 50 feet long ending in a 6 foot by 6 foot shallow pool. Based on generally accepted engineering calculations using the geometry of the stained area, Kinder Morgan calculated the total amount of runoff to be approximately 0.76 bbls, based on a conservative assumption that the fluid penetrated 3" into the soil in the swale and 6" in the pool. This calculation shows that the amount of the runoff is well below the reportable 5 bbls amount requiring a Form 19. Following our email correspondence, a Form 19 was submitted on February 15, 2013. Please see the attached spread sheet that illustrates the formula and methodology utilized to determine the volume of runoff as well as photos illustrating the area.

4. Allegation: Kinder Morgan did not provide a net for the pit as required.

Kinder Morgan Response: In the past, KM utilized colorful flagging that criss-crossed reserve pits to deter birds, which was acceptable to COGCC and the BLM for many years. KM was

unaware that the flagging may no longer be deemed as an adequate deterrent. As has been previously discussed KM will no longer utilize reserve pits because of the transition to safer closed loop drilling. Therefore, bird netting will not be necessary on future KM well locations.

Location Permit #428397

1. Allegation: The location was permitted as a 2.53 acre site. Data collected during the September 20, 2012 site inspection and a subsequent review on September 28, 2012 indicates that the location as constructed covers 4.05 acres.

Kinder Morgan Response: The Form 2A included the dimensions of the perimeter berm, but did not account for the soil stockpiles. We will insure future Form 2As accurately represent the size of the disturbance footprint.

2. Allegation: Kinder Morgan did not provide 110% secondary containment for all fluids contained at the well-site during drilling operations. Containment was to include but not limited to berms, diversion/collection trenches, or other comparable measures.

Kinder Morgan Response: As discussed throughout this response, Kinder Morgan has undertaken significant revisions of its procedures to improve its secondary containment for all fluids. Kinder Morgan would like to discuss the requirements for secondary containment with COGCC staff to better understand this allegation and to insure our current procedures for secondary containment meet the COGCC requirements.

3. Allegation: Kinder Morgan did not maintain de minimis moisture content of drill cuttings to extent practicable. Fluids leached from drill cuttings north onto the location for approximately 50 feet.

Kinder Morgan Response: The drill cuttings had recently been rained on and were not ready for disposal during the site inspection. With regard to the second sentence regarding allegedly leached fluids, please see the response above to the first #3.

4. Allegation: Kinder Morgan did not install a wattle along the entire western periphery of the well pad as required.

Kinder Morgan Response: Stormwater BMPs were installed along the western periphery of the well pad, but pipeline construction crews removed the BMPs during flowline installation. Upon learning of the removal, Kinder Morgan re-installed new wattles and stormwater BMPs along the periphery of the well pad.

E & P Waste Management

Pit General (Rule 902) and Pit Lining (Rule 904)

Allegation: During inspection of the lined drilling pit it was observed that fence posts had been driven through the liner and large folds/wrinkles were observed in the liner. Rule 902 requires that pits be constructed and operated to protect of public health, safety, welfare, and the environment including wildlife resources. Putting holes into and installing the liner with large folds is not protective of public health, safety, welfare or the environment. COGCC Rule 904 requires that pit lining systems be designed, constructed, installed and maintained in accordance with manufacturer's specifications and good engineering practices. Driving fence post through and installing liners with large folds are not recommended manufacturer specifications and or good engineering practices.

Kinder Morgan Response: Kinder Morgan installed t-posts into the liner to secure fencing and to prevent bird deterrent flagging from contacting drilling fluids in the pits. It should be noted that the t-posts were installed on the top of the berms, which are well above the drilling fluids. In addition, t-posts were well above the two foot free board required by COGCC. As stated above, KM has switched to closed loop drilling operations and will no longer require pit liners or bird flagging.

Spills and Releases (Rule 906)

Allegation: COGCC Rule 906 which requires that spills/releases of E&P waste be controlled and contained immediately upon discovery, investigated and cleaned up as soon as practicable. Rule 906 also requires that releases be reported to the COGCC. Wet drill cuttings had been placed on the surface between the lined drilling pit and the stock-piled soils. Brine drilling fluids were observed draining from the drill cuttings. Drainage of this fluid extended along the berm around the drilling pit north 50 feet to the northeastern most corner of the pit. No attempt to contain or control these fluids was observed. A Kinder Morgan representative indicated that a liner was in place to protect the location's surface from degradation but the liner had been damaged by heavy equipment. Additionally, no berms/dikes or other means of containment were observed. Kinder Morgan did not submit a Form 19 or otherwise report this release of E&P waste to the COGCC.

Kinder Morgan Response: See response to the first #3 above.

Management of E&P Waste (Rule 907)

Allegation: COGCC Rule 907 requires that E&P waste be managed in a manner that prevents threatened or actual adverse environmental impacts to air, water, soil or biological resources to extent necessary to ensure compliance with Table 910-1 standards. During inspection drill cuttings were observed to have been dumped on the eastside of the stock-piles soil, to have been blown onto the soil stock-pile from the air drilling operation, and dried cuttings had been dumped and or blown onto various places on the Location including around the containment vessel that was supposed to capture drill cuttings.

Excessive cement had been disposed of in a area adjacent to the lined drilling pit and soil stockpile. COGCC Rule 907 requires operators ensure that E&P waste meet Table 910-1 standards prior to onsite disposal. No analytical data has been submitted by Kinder Morgan for disposal of this material. Additionally, it is unclear whether the cement would meet the definition of E&P waste. COGCC Rule 907A requires that Non E&P waste be handled in compliance with 6 CCR 1007-2 and 1007-3.

At the time of inspection pipeline construction operations were being performed adjacent to the location. Crews were exposing buried underground lines using a "Hydrovac" unit. A Hydrovac removes soil from around existing buried lines by jetting it away with water then vacuuming the slurry into the unit. It was observed that the accumulated slurry was then being disposed of on the pipeline right of way. The material is a Non E& P waste and shall be handled according to state solid and hazardous waste regulations. Dumping the material on a lease road is not an acceptable disposal option without approval of local, and or state solid waste agencies, and the surface owner.

Kinder Morgan Response: After the COGCC field inspection on September 20, 2012, rig operations were shut down for approximately 12 hours to address fluids coming off the drill cuttings and cement, dried cuttings from air drilling and mud overspray were relocated and stockpiled within lined containment awaiting results of analytical samples. After the lab results confirmed that the materials were non-hazardous, on December 12, 2012 the cuttings and cement were transported and disposed of at the Montezuma County Solid Waste Facility.

The hydrovac was utilized to safely expose existing CO2 gathering pipeline in order to tie-in the new flowline from the YG-1 into the existing collection system. Hydrovac is less invasive and safer than traditional excavation with heavy equipment near active pipelines. The slurry generated by the hydrovac consists of soil and clean water and was temporarily stockpiled along the existing pipeline ROW, and then utilized to backfill the connection between the YG-1 flowline and existing gathering line. Kinder Morgan can provide additional information on the hydrovac process when we meet with COGCC.

Site Preparation and Stabilization (Rule 1002)

Site Preparation

Allegation: COGCC Rule 1002.b requires soils removed for site construction is segregated into layers and that each layer be marked or identified. Soils excavated during construction of the location were placed in stock-piles along eastern edge of the location; however, soil segregation was not conducted. Kinder Morgan also failed to implement Best Management Practices (BMP) to protect the stockpiled soils from degradation due to contamination, compaction and wind or water erosion as required under COGCC Rule 1002.c.

Kinder Morgan Response: Kinder Morgan's revised stormwater management plan requires soil stockpiles to be clearly marked and segregated. Kinder Morgan is utilizing soil tackifier to prevent wind and water erosion (degradation) to stockpiled soils. Additionally, Kinder Morgan

utilizes a combination of wattles, tackifier, and eyebrow ditches to control run-on and runoff from our new locations. Please see attached Stormwater Management plan for additional details.

Construction Stormwater

Allegation: COGCC Rule 1002.f(2) requires operators implement BMPs to control stormwater runoff, to minimize erosion and transport of sediment, and site degradation. Kinder Morgan failed to implement stormwater BMPs for erosion control. Kinder Morgan failed to implement adequate BMPs for bulk materials stored in the northeast corner of the location. Several pallets of bulk liquid materials were stored without being covered, there were no observable materials handling or spill prevention practices, and no observable or detectable self-inspection process. Pallets of dry bulk material were also not provided BMP as required; protective shrink wrap had been removed or damaged in some cases and bags were damaged. Drill cuttings were placed at various locations throughout the site without BMPs in-place to control contact with stormwater runoff and to prevent site degradation.

Kinder Morgan Response: As a result of this inspection, KM now stores dry and liquid bulk materials in modified steel shipping containers, which protect them from adverse weather conditions. The bulk materials are also shrink-wrapped for additional protection.

Abatement or Corrective Action and Corrective Action Dates

1. Install, inspect, and maintain all stormwater BMP's to protect site from degradation due to contamination and stormwater runoff (February 18, 2013).

Kinder Morgan Response: This action item was completed by December 3, 2012 as requested by the COGCC in our meeting October 19, 2012.

2. Submit waste management plan for handling of drill cuttings to Karen Spray COGCC Southwest Environmental Specialist for review and approval (February 18, 2013).

Kinder Morgan Response: The waste management plan is attached to this response.

3. Remove drill cuttings and excessive cement; handle per the approved waste management plan (March 4, 2013).

Kinder Morgan Response: As explained above, the drill cuttings and cement were analyzed and disposed of at the Montezuma County Solid Waste Facility pursuant to the proposed waste management plan which is attached hereto. Hauling was completed in December 2012.

4. Collect representative samples at all impacted areas including but not limited to areas under drill cutting waste piles, along the drainage path of the leached drilling fluids, and under the areas where excessive cement was dumped. Analyze for Table 910-1 constituents. Provide

sample results to COGCC for review. Analytical data report due to environmental department by March 25, 2013.

Kinder Morgan Response: The samples will be collected and a report will be submitted to COGCC by the March 25, 2013 deadline.

5. The cement shall be removed from the location following applicable waste management regulations (March 25, 2013).

Kinder Morgan Response: As explained above, the drill cuttings and cement were analyzed and disposed of at the Montezuma County Solid Waste Facility.

6. Submit Form 19 to document releases of E&P waste (February 15, 2013).

Kinder Morgan Response: A Form 19 was submitted on February 15, 2013 and a copy is attached hereto.

7. Provide report to COGCC that explains why Kinder Morgan failed to comply with permit conditions, failed to conduct waste management per COGCC rules, failed to comply with site preparation and stabilization rules. The report shall include process changes made within Kinder Morgan CO2 CO LP that shall ensure that operations are conducted in compliance with the Oil and Gas Conservation Act and COGCC rules (March 25, 2013).

Kinder Morgan Response: Kinder Morgan has taken many steps and implemented process changes to improve its programs including those discussed above and:

- Animas Environmental Services are performing three inspections per week to insure our locations have the necessary Stormwater BMPs and rig operations follow COGCC regulations.
- Ecosphere Environmental Services conducts three stormwater management inspections each week, in addition to the 14 and 30 day CDPHE inspections to insure stormwater BMPs are in place to manage run-on/runoff from KM well locations.
- KM is segregating and labeling top soil and subsoil piles. In addition, KM is using a combination of wattles and tackifier to reduce the potential for wind and water erosion of the soil stockpiles.
- The revised stormwater management plan is attached.
- KM is using steel bins to contain drill cuttings.
- KM is renting portable secondary spill containment, which has been installed on our locations.

- Closed loop drilling on all locations has eliminated many potential environmental issues such as potential damage to pit liners and related soil contamination, and wildlife (including birds) from contacting drilling fluids.

Therefore, this letter serves as the requested report and Kinder Morgan looks forward to discussing this further with COGCC staff.

Kinder Morgan remains committed to compliance with the COGCC regulations and requests a meeting with COGCC staff to further explain and discuss this response. Please contact me at 970-882-5505 to schedule a time to meet or if you have any additional questions.

Sincerely,



Coy Bryant
Manager of Operations