

# STATE OF COLORADO

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Executive Director and Chief Medical Officer

Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department  
of Public Health  
and Environment

January 4, 2018

Stephen M. Strachan, President  
Strachan Exploration, Inc.  
383 Inverness Parkway, Suite 360  
Englewood, CO 80112

CERTIFIED MAIL # 7014 1200 0001 1455 8388  
Return Receipt Requested

Re: Compliance Advisory for NEU Compressor Station  
County Road 14, Prowers County, Colorado  
COGCC Facility ID: 444661  
SW/PRW/GEN 1.6

Mr. Strachan:

This Compliance Advisory provides notice related to information gained during a review of administrative records associated with the NEU Compressor Station (the "Facility") conducted by the Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the "Department"). The purpose of the review was to determine the Facility's compliance status with respect to the Solid Wastes Disposal Sites and Facilities Act ("the Act"), CRS 30-20-100.5 et seq., and the Regulations Pertaining to Solid Waste Sites and Facilities, 6 CCR 1007-2 (the "Regulations"). The Department advises you that the information gained during the review indicates there are violations of Colorado's solid waste laws associated with the Facility. Department personnel will review the facts established and this notice may be revised to include additions or clarifications as a result of that review.

Please be aware that as the new owner, you are responsible for complying with Colorado's solid waste regulations and that there are civil penalties for failing to do so. The issuance of this Compliance Advisory does not limit or preclude the Department from pursuing its enforcement options concerning this review including issuance of a Compliance Order and/or seeking an assessment of civil penalties. Also, this Compliance Advisory does not constitute a bar to enforcement action for conditions that are not addressed in this Compliance Advisory, or conditions found during future file reviews or inspections of your property. The Department will take into consideration your response to the requested actions listed below for each cited deficiency in its consideration of enforcement options.

The administrative record indicates that on January 28, 2016 and February 5, 2016, Inspectors for the Colorado Oil and Gas Conservation Commission (COGCC) identified spilled lubricating oil which impacted soils at the Facility operated by Prowers Gas Gathering Co LLC (Prowers Gas) in the vicinity

of a natural gas compressor, storage drums, and an aboveground tank (AST). Since solid waste associated with refined petroleum products is regulated by the Department and not the COGCC, the Department issued a Compliance Assistance letter to Prowers Gas dated February 26, 2017 which requested several actions to resolve the waste lube oil release and related storage of solid waste at the Facility. The requested actions included:

1. "If not already completed, remove the petroleum impacted soils, rags, potentially defective drums, and other potential solid wastes, and properly dispose of these materials at a permitted landfill in accordance with all applicable federal, state, and local regulations within sixty (60) days. Depending on the types of petroleum products released, operator knowledge, and landfill requirements, sample collection and analytical testing may be necessary to obtain disposal approval.
2. Following excavation of the impacted soils exhibiting petroleum staining and odors, collect soil samples from the base of each excavation cavity in the drum storage area, in the affected equipment area, and from below the AST location. At a minimum, each soil sample is to be tested for benzene, toluene, ethylbenzene and xylenes (BTEX); diesel range organics (DRO); and oil and grease (O&G). In addition, please submit the sample or samples exhibiting the highest DRO and O&G concentrations for polynuclear aromatic hydrocarbon (PAH) analysis. Soils exhibiting BTEX and/or PAH concentrations greater than the protection values listed on CDPHE's *Groundwater Protection Values Soil Cleanup Table* dated March 2014 (available on the CDPHE website) are to be removed. If groundwater is encountered at the base of an excavation cavity, collect a ground water sample and have it analyzed for BTEX and PAHs. All sample collection, sample handling, and analytical testing activities are to be conducted in general accordance with CDPHE guidelines. Additional information is available in the *Emergency Petroleum Spill Waste Management Guidance* document dated January 2014 published by the CDPHE.
3. To avoid future petroleum product releases, conduct the necessary equipment and piping repairs if not already completed.
4. Properly label and store drums and other containers. This may require installation of a catch basin or other appropriate engineering control for secondary containment in the storage area and below the AST.
5. Following completion of the above activities, submit a Cleanup Report to the Division, and a copy to the COGCC, within thirty (30) days of waste disposal to document these activities. At a minimum, the Report should include a description of the waste removal activities; the analytical results; diagrams illustrating the site features, excavation dimensions, and analytical results; photos of the excavation areas; and copies of the landfill disposal receipts."

Based on reports from Braun Environmental, Inc. (Braun) dated April 29, 2016 and September 27, 2017, a December 19, 2016 email submitted to the Department by Braun, and observations of the Facility during a September 13, 2016 follow-up inspection by Department staff conducted with approval of Prowers Gas, it appears that items 3 and 4 have been addressed. However, important actions related to items 1, 2 and 5 have yet to be completed even though the Compliance Assistance letter was issued nearly two years ago.

In 2016 and 2017, Prowers Gas and Braun conducted some remediation and subsurface investigation activities at the Facility. Several of these activities, such as treatment and disposal of waste oil impacted soils at the Facility by thin-spreading/aeration, and transporting the majority of the impacted soils to another property not permitted as a landfill for treatment and disposal by thin-spreading/aeration, were not in accordance with the Department's requested scope of activities and were conducted without Department approval. Operating the Facility and the other property as solid waste disposal sites without a Certificate of Designation (CD) or an approved Engineering Design and Operations Plan (EDOP) is a violation of CRS 30-20-102(1) and 30-20-102(2) and Section 1.3.3 of the Regulations.

In addition, analysis of samples representing the soils remaining in place collected at the base and walls of the excavated areas has been inadequate since no PAH testing has been conducted to date on those soils (only stockpiled excavated soils have been tested for PAHs). PAH testing of soils remaining in place was requested in the February 26, 2017 Compliance Assistance letter in accordance with the *Emergency Petroleum Spill Waste Management Guidance* document. After the Department was informed of the impacted soils thin-spreading, BTEX and PAH testing of thin-spread soils was also requested in an August 16, 2016 email to Braun. However subsequent testing was for O&G only. The Department considers BTEX and PAH testing important due to the potential hazards posed to the environment and human health by these compounds.

Based on analytical results submitted by Braun in their April 29, 2016 report, eight soil samples representing soils remaining in place were tested for BTEX, DRO and O&G, but not PAHs. The associated BTEX concentrations in all soil samples from soils remaining in place and removed soils did not exceed their respective CDPHE standards. However, even though BTEX concentrations for these samples complied with Department standards, two samples from the wall and base of the former excavation pit east of the Facility's compressor unit contained concentrations of DRO and O&G petroleum greater than the Department's threshold value of 500 milligrams per kilogram. Based on the Department's *Emergency Petroleum Spill Waste Management Guidance*, and the *Colorado Soil Evaluation Values* document dated March 2014, PAH analysis should have been completed on the sample exhibiting the greatest petroleum concentration for soils remaining in place. PAH concentrations for soils remaining in place are currently unknown. Consequently, the Department will require further soil sampling and PAH analysis for soils remaining in place (for the sample exhibiting the greatest TPH value).

The Department is concerned that excavated soils impacted by waste oil were thin-spread (i.e. treated and disposed of) at two unapproved soil aeration pad areas in violation of the Regulations without Department approval. However, based on the BTEX and PAH results provided by Braun in April 2016 for two samples representing the soils removed to date, there were no BTEX or PAH compound concentrations greater than their respective Department standards. Therefore, the Department will not require further analysis for the thin-spread soils at this time.

To help identify where the off-site soil aeration pad is located, and to evaluate the potential presence of PAHs in soils left in place at the east excavation pit adjacent to the east side of the NEU Compressor Station compressor building, please complete the following actions:

- A. Within thirty (30) days of your receipt of this Compliance Advisory, provide the name and address of the owner and the address of the off-site facility where the majority of soils excavated from the NEU Compressor Station were transported to. Also indicate if soils from other locations have been treated and disposed of there and/or mixed with the impacted soils from the NEU Compressor Station. Include a diagram or satellite photo showing where on the

off-site property the soil aeration pad is situated and provide the dimensions of the pad and indicate if the thin-spread soils are on the ground surface or on an impermeable barrier, and if so, what the barrier is constructed of.

- B. Within sixty (60) days of your receipt of this Compliance Advisory, collect two samples of native soils from the former east excavation pit area at the Facility, if this can be accomplished safely. One sample will be from the base of the former pit immediately adjacent to the building, in the approximate location of former sample 040716-7 at a minimum depth of 4.5 feet below ground surface (bgs). The other sample will be from the east portion of the former east excavation pit in the approximate location of former sample 040716-8 at a depth of at least 3.0 feet bgs. These two soil samples are to be submitted to a laboratory for BTEX, DRO and O&G analysis following EPA Methods specified in the *Emergency Petroleum Spill Waste Management Guidance*.
- C. To help identify the vertical extent of soils impacted by waste oil, also collect at least two additional soil samples, if this can be accomplished safely, from the same boreholes or test pits at greater depths to determine if the waste oil contamination increases or decreases with depth. If, based on field observations, including PID screening results and soil staining and chemical odor observations, waste oil impacted soils appear to extend laterally from the former east excavation pit, collect additional representative soil samples to identify the horizontal extent of contamination. These soil samples are also to be submitted to a laboratory for BTEX, DRO and O&G analysis following the same EPA Methods.
- D. From the samples representing soils remaining in place described above, at a minimum, submit the sample exhibiting the greatest total petroleum hydrocarbon (TPH) value (the combined DRO and O&G value) for PAH analysis by EPA Method 8270.
- E. Waste soils and impacted decontamination materials generated during the sampling activities are to be contained and disposed of in accordance with all applicable state and federal regulations at an appropriately permitted disposal facility. Please submit a copy of the associated disposal manifest(s) to the Department.
- F. Within thirty (30) days following receipt of the analytical results associated with the above sampling activities, submit a report to the Division, and a copy to Mr. John Axelson at the COGCC, to document these activities. At a minimum, the report should include a description of the boring or test pit excavation and soil sampling procedures; the waste removal and disposal activities; the analytical results; diagrams illustrating the site features, sample locations, and the estimated vertical and horizontal extent of soils remaining in place exhibiting analyte concentrations greater than Department standards (if any); photos of the sampling activities; copies of the associated disposal manifests; a description of the sampling and equipment decontamination methods used; and sample handling, preservation, and laboratory chain-of-custody procedures.

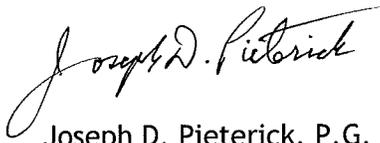
Based on the results obtained from completion of actions A through F above, a determination will be made regarding the potential need for additional investigation, additional remediation, and/or other requirements.

To facilitate resolution of the issues identified in this Compliance Advisory, please complete the requested activities and submit the requested documentation to the Department within the specified timeframes.

If desired, you may contact this office at the numbers listed below to schedule an in-person or teleconference meeting to discuss the Compliance Advisory and answer any questions that you may have; to develop an alternative schedule for correcting the deficiencies noted above; or to submit information necessary to show that the deficiencies are not a violation of Colorado's solid waste laws.

You may contact Joe Pieterick at (303) 692-3355 or Ed Smith (303) 692-3386 concerning the deficiencies detailed above and/or to set a meeting to discuss this Compliance Advisory.

Sincerely,



Joseph D. Pieterick, P.G.  
Environmental Protection Specialist  
Solid Waste Compliance Assurance Unit  
Solid Waste and Materials Management Program



Ed Smith  
Unit Leader  
Solid Waste Compliance Assurance Unit  
Solid Waste and Materials Management Program

EC: Seth Odett, Prowers County Public Health and Environment  
Randy Perila, HMWMD  
Justin Laboe, HMWMD  
John Axelson, COGCC  
Jason Kosola, COGCC  
Art Braun, Braun Environmental, Inc.