



DEPARTMENT OF NATURAL RESOURCES
John W. Hickenlooper, Governor
1120 Lincoln St. Suite 801
Denver, CO 80203
Phone: (303) 894-2100
FAX: (303) 894-2109
www.colorado.gov/cogcc

June 6, 2012

Rio Grande County Board of County Commissioners,
Planning and Zoning Board, and
Land Use Planner - Rose Vanderpool
925 6th Street, Room 208
Del Norte, CO 81132
Phone: (719) 657-4003
Fax: (719) 657-2514

**Re: Dan A Hughes Company LP, San Francisco Creek #1 Pad, NWSE Sec 24 T39N R5E, Rio Grande County, Form 2#400210265 and 2A#400211669;
COGCC's Response to Rio Grande County's LGD and Public Comments**

Dear Ms. Vanderpool,

The Colorado Oil and Gas Conservation Commission (COGCC) has received and reviewed comments pertaining to the Oil and Gas Location proposed by Dan A. Hughes Company on October 12, 2011 in the San Francisco Creek Ranch Subdivision area, south of Del Norte, Rio Grande County, Colorado. Dan A. Hughes has submitted one Form 2 (San Francisco Creek #1, Document No. 400210265) and one Form 2A (San Francisco Creek#1, Document No. 400211669).

By statutory mandate, the COGCC has adopted and enforces Rules regulating oil and gas development to protect public health, safety, and welfare, including the environment and wildlife resources. In 2009, amended Rules took effect and established the Form 2A, Oil and Gas Location Assessment process, which provides for a site-specific review of surface disturbance associated with a proposed Oil and Gas Location. In this review process, the COGCC utilizes onsite inspections, consultation and input from the Colorado Department of Public Health and Environment, Colorado Division of Wildlife, local governments, surface owners and interested public. Using this input, the COGCC reviews the Rules and the operator's proposed surface use plans and best management practices (BMPs) in consideration of all the geographic and environmental conditions observed and evaluated and may apply conditions of approval (COAs) to address situations that require additional safeguards beyond the extent of the Rules.

During the site specific Form 2A review process for the planned San Francisco Creek #1 Pad, the COGCC reviewed environmental information, including proximity to surface water and groundwater, soil type, topography, climate, and wildlife; cultural information, including housing density, proximity to residences and other public use areas, and traffic patterns; and planned activities for the location, including type of equipment, duration of planned activities, and operational plans and practices. The COGCC has carefully considered the input received from the county government and from the public on this subject. The COGCC has worked with the operator to refine a number of their proposed BMPs and we have developed 41 site-specific COAs (9 COAs for Water Resources Protection, 15 COAs for General Site Protection; and 17 COAs for Nearby Residential Area Protection) to provide additional protection for public health, safety, and

welfare. These are provided as **Attachment A - Dan A. Hughes, San Francisco Creek #1 Pad, Conditions of Approval; Form 2#400210265; Form 2A#400211669**. These COAs and BMPs will require the operator to implement additional noise and lighting mitigation, traffic stipulations, safety measures, groundwater monitoring, emissions controls, and fluids containment to protect water resources, nearby residents, and the environment generally.

The COGCC has also required the operator of this location to notify us 48 hours prior to commencing construction, 24 hours prior to rig mobilization, and 48 hours prior to beginning fracture stimulation operations. This will allow for the COGCC to conduct coordinated inspections at critical times of operations and work with the operators to ensure that the prescribed measures are in place and effective. If warranted, the COGCC can work with the operator to further refine or enhance the measures taken.

The COGCC's Oil and Gas Location Assessment (OGLA) group, Permit group, and Engineering group reviews permits statewide with very similar issues and assesses each location's potential impact to both the public and the environment, and then places COAs that require the operator to conduct oil and gas activities in a safe (public health and welfare) and environmentally (water and wildlife resources) protective way. These COAs have been used statewide and have proved to be effective in protecting both the environment and the public, especially in residential areas and sensitive wildlife areas. The mission of the COGCC is to be both protective of the environment and the public, while developing the state's natural resources in a responsible way. The COGCC will continue to rely on the Rules, including the application of site-specific COAs and BMPs, to protect public health, safety and welfare, including the environment and wildlife resources.

COGCC has reviewed the 40 comments submitted on the Application for Permit to Drill, Form 2#400210265 and the 7 comments submitted on the Oil and Gas Location Assessment, Form 2A#400211669. Each original comment on the Oil and Gas Location Assessment, Form 2A#400211669 and Application for Permit to Drill, Form 2#400210265 has been given its own identification number (1 to 40 for the Form 2 and 41 to 47 for the Form 2A). These 47 comments have been provided as **Attachment B - Dan A. Hughes, San Francisco Creek #1 Pad, Renumbered Comments for Easy Reference; Form 2#400210265; Form 2A#400211669**, attached to this correspondence. We have also attached a Comment/Response Table (**Table 1 - COGCC's Response to Public and LGD Comments; Dan A Hughes Company, San Francisco Creek #1, Rio Grande County; Form 2#400210265; Form 2A#400211669**) that lists general responses to the issues and concerns identified in each of the comments along with references to either our rules or specific COAs that are applicable and been placed on the Form 2A or Form 2 to address those issues/concerns. Any and all comments that contained any reference to these particular issues/concerns are also listed on this table next to the appropriate issue/concern.

In addition, COGCC has reviewed the Rio Grande County LGD's comments and has either suggested revisions to the operator or made the changes. Below are the Rio Grande County LGD's Comments and brief responses (**in bold dark red text**) made by COGCC (more detailed explanation can be found in **Table 1 - COGCC's Response to Public and LGD Comments; Dan A Hughes Company, San Francisco Creek #1, Rio Grande County; Form 2#400210265; Form 2A#400211669 Comment/Response Table 1**):

COMMENT NO. 47

LGD (10/27/2011; 11:43:20 AM)

Form 2A#400211669

The Rio Grande County Board of County Commissioners, Planning and Zoning Board, and the Land Use Administrator (LGD) have reviewed forms 2/2A, and submits the following comments:

Form 2A - Item no. 10: Current Land Use: (check all that apply) Only Non-crop land: Rangeland was checked. We feel Crop Land: Dry land and "Subdivided" and "Residential" should also have been checked. San Francisco Creek Ranch Filing No. 2 was subdivided and platted on Sept 6, 1996, Drawer 11, Map 25.

Land Use classification is used for reclamation purposes.

*Item no. 11: Future Land Use: This land was developed primarily for residential uses. "Subdivided and Residential" should also have been checked. **Land Use classification is used for reclamation purposes.***

*Item no. 14: Water Resources: The San Francisco Creek drainage is a sensitive area in many ways, and should have been acknowledged as such. **Has been changed to "Sensitive Area".***

*Residential Area: Any exploration/drilling in the predominately residential area is a concern as any contamination of the underground water source that supplies the existing homes and future homes could occur. The town of Del Norte is located below (or to the north) of the proposed area. There is concern about the proximity of drilling activity to Del Norte's town ponds (roughly two to three miles to the west from the proposed site) and ensuing effects on the town's water supply. Allen Davey, an Engineer with Davis Engineering located in Alamosa Colorado, pointed out at a public forum held in Rio Grande County on January 26, 2011, that this site is located in the Conejos Formation. He talked about the unique hydrology of the San Luis Valley and its multiple aquifers. The San Francisco Creek drainage is a significant recharge area and is a tributary to the Rio Grande River. Any contamination from the San Francisco Creek drainage into the river would be detrimental. Mr. Davey suggested that cement casing be required to 3,000-4,000 feet or more. COGCC and operator engineers have reviewed the well cementing program. **The surface casing will extend to 1100 feet below ground surface and cemented. The entire borehole's production string will also be cemented.***

There are natural ponds located on lots 44 and 46 that are year round spring-fed ponds within the one mile radius of the well site which is located on lot 46. The pond is in the northeast corner of the same lot, which is closer than the San Francisco Creek that is identified as the closest water source on Form 2A. Due to a dry winter and spring of 2011, the level of these ponds have dropped significantly, which is an example of how sensitive and changeable ground water in the area near the proposed site is to drought, and likely would also be to disturbances in subsurface water-bearing levels. Rio Grande County requests to COGCC that it help us enforce baseline well testing from the footprint of pad (Rio Grande County Oil and Gas Regulations (8.8.1.2.)). Craig Cotton, Division Three Engineer of the Colorado Division of Water Resources says that the San Luis Valley (Valley) is over-appropriated in terms of water and there can be no more demand on the aquifer system. Therefore, Dan Hughes Company (Hughes) will have to purchase water on the open market and change the decreed use to "commercial use" which could take some time; and any water taken has to be replaced. Dan Hughes did not state how it planned on replacing the water it uses.

This is regulated by the Division of Water Resources, not the COGCC. Rio Grande County feels that this is a Sensitive Area therefore a determination should be performed. The location pictures submitted do not accurately depict ALL the homes in the area. It is our belief, the pictures purposely mislead that this area is a very low density area which is not true. **Per COGCC rules, this subdivision is not considered to be High Density Residential.** There are a total of 106 lots in the San Francisco Creek Subdivision which is approximately at a 50% build out. There are 27 lots in the San Francisco Creek Subdivision Filing No.2 alone; 15 of these lots have homes on them. Specifically, lots with homes that surround the drill site are: Lots 44,

47 - has 2 homes, 48 and 50. **Dan A Hughes has voluntarily begun a baseline groundwater and surface quality sampling program and the COGCC has placed a COA requiring sampling in the future.**

*Lights and noise: There will be a significant impact in the area concerning use of lights and noise during the drilling process. **This has been addressed with COAs.***

Riparian area: The proposed drill site is not in a riparian area itself, but the riparian corridor along San Francisco Creek is approximately 1,750 yards east of the drill site on lot 46. Snow melt, rain runoff and spring waters across the open meadows in the area around lot 46 drains east toward that riparian area. This suggests that lot 46 lies within a sensitive watershed area.

Sensitive Wildlife Area: Lot 46 and the surrounding properties are within a summer and winter range of a herd of pronghorn antelope that are vulnerable to disturbance and changes of traffic, increased human activity, and noise. As indicated in the application in regards to the map, this is also winter range for significant herds of deer and elk. They are sensitive to human disturbance and deserve protection.

*Sensitive Air Quality: Monitoring of air quality prior to and throughout any drilling operations, at the operator's expense is recommended by Rio Grande County to be included in COGCC's requirements to insure that air quality is not compromised or diminished. The Valley's clean and clear air is essential to our resident's health, and our tourism and a burgeoning solar production industry. Prevailing winds in the San Francisco Creek valley are from the west and south. Particulate matter from heavy traffic along dirt roads in the area and any release of methane, chemicals or volatile organic compounds generated by or used in drilling would be carried downwind to Del Norte, through other residential areas, across two school campuses, and on into the San Luis Valley floor. This poses a potentially serious threat to safety and health of people living and working here. **Air monitoring in and around the well pad will be conducted prior to and during drilling, during completion activities, and during production as required by a COA.***

*Existing Roads: To clarify, there isn't a 'Del Rio' road as commented on page 1 in the Surface Plan. Wagon Wheel Road (a private road which is maintained by the homeowners association) and County Road 13 (CR 13) would be significantly degraded by the intensely heavy traffic needed to support a drilling operation. In the event of frequent use by large heavy vehicles, several areas along CR 13 would pose significant safety issues concerned with speed and weather conditions. To access the San Francisco Creek area, vehicles must turn from Hwy 160 onto French Street in the Town of Del Norte which will then first take the vehicles by the high school and a high density residential area; during sports activities (football, baseball, track and outdoor curriculum) the students, faculty and public have to cross French Street to get to the football/baseball field. Local high school students who are new drivers without long experience who frequently drive on this stretch of road would be vulnerable to the very heavy traffic associated with fossil fuel exploration. The County has an obligation to assure and protect their safety. There are no turnouts on either Wagon Wheel Road, or CR 13. The current surface of CR 13 may be inadequate for heavy industrial traffic and Wagon Wheel Rd. definitely is inadequate. Wagon Wheel which is a cul-de-sac, there is only one way in and one way out; Wagon Wheel Rd is only 20 feet wide edge to edge, and one of the two culverts in the section that Hughes will use is only 23ft long . Traffic flow could be impeded and other road users could be stuck if there is a truck on this section of Wagon Wheel Rd. The Valley can have an unpredictable spring weather pattern, and the start date of April 1, 2012 can be bad for driving on gravel roads. If the start date were after the end of the school year it might mitigate some road issues, not to mention safety issues. County Rd 13 is not accurately depicted on the topographical map provided, unless they are planning on rerouting the road. Again, we have concern for the large increase in the heavy volume of traffic on paved streets in the town of Del Norte (French Street). It is our belief that this street was not designed nor engineered with the thought of increased volume of heavy truck traffic. We also have great concern for our county roads as well. **Access Road has been revised. Several traffic related***

COAs have been placed on the Form 2A to address concerns around the high school and other nearby roads.

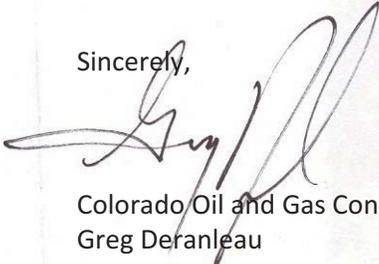
In regards to Form 2: Water Supply has not been secured/purchased, nor has an official agreement with the City of Monte been established to our knowledge. It has been discussed but that was two years ago. In regards to the "pad construction drawing" under "Notes", item no. 2 states that pit location and size to be determined at time of construction. Per the Rio Grande County Oil and Gas Regulations only closed looped systems will be allowed. (8.8.6.1.) this also does not match comments made on Page 3, #7. Page 3 of Surface Use Plan, #7: Methods of Handling Waste Disposal. Rio Grande County does not believe comments made about wastewater handling are adequate. How does Dan A. Hughes plan on disposal – offsite and if so, how?

Summary of recommendations by Rio Grande County:

1. That Rio Grande County Oil and Gas regulations be followed; particularly water baseline studies at a minimum. **COGCC cannot and does not enforce any other agency's rules and regulations.**
2. Monitoring of air quality prior to and throughout any drilling operations, at the operator's expense. **Operator will conduct air monitoring at the well pad site, as previously stated.**
3. Consider a different start date. **Operator will try to avoid school sessions, but will be limited by other timing restrictions placed on the permit by BLM.**
4. Only a closed looped system should be approved. **Operator has specified that a closed loop system will be used.**
5. Any requirements should be "more restrictive" for first time applicants as this is an unknown area for all involved. **COGCC conducts thorough reviews of well permit applications throughout the state, many of which are investigating new areas.**
6. Roads and traffic need to be assessed. **An Emergency Management Plan and Traffic Control Plan have been requested from the operator and provided.**
7. Noise should be addressed. **Addressed by COA.**
8. Lights should be addressed. **Addressed by COA.**
9. The drilling company should file an Emergency response plan prior to any drilling. **Emergency Response Plan has been requested from the operator and provided.**
10. Chemical inventory: Owners or operators shall maintain a chemical inventory by well site for each chemical product used downhole or stored in an amount exceeding 500 pounds during any quarterly reporting period and the maximum capacity of fuel stored on the oil and gas location during drilling, completion, and work over operations including fracture stimulation. Entities maintaining chemical inventories under this section shall update these inventories quarterly throughout the life of the well site. These records must be maintained in a readily retrievable format. The county health department may obtain information provided to the department or director in a chemical inventory upon written request to the director. Where the composition of the chemical product is considered trade secret by the vendor or service provider, owners or operators shall only be required to maintain the identity of the trade secret chemical product and shall not be required to maintain information concerning the amounts of such constituents to make chemical product. **Chemical inventory will be provided by operator.**
11. Waste water needs to be better defined and more specific on its handling and disposal; particularly if off-site. **COGCC 900-Seires rules govern the handling of Exploration and Production waste, including water.**
12. Company work history and references. The County would like to request the company provide references to verify their previous work records. The County would also request that the company provided documentation from not only the state of Drilling/Completion Operations An APD, including a Surface Use Plan of Operations, which incorporates BLM BMPs, will be submitted to the COGCC and is included under attachments. **Not required by COGCC Rules.**

We thank you for your participation in the process and recognize the valuable input you and the public have provided. If you have any questions, please do not hesitate to call me at (303) 894-2100 x5153 or Dave Kubeczko at (970) 309-2514 (cell), or email. Thanks.

Sincerely,



Colorado Oil and Gas Conservation Commission
Greg Deranleau
Oil and Gas Location Assessment Supervisor

cc. Thom Kerr, Director, COGCC