



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

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DENVER, CO 80202-1129
Phone 800-227-8917
<http://www.epa.gov/region08>

November 30, 2011

Ref: 8EPR-EP

Peter Jensen
Prymorys Environmental Consulting,
150 Rockpoint Drive
Durango, CO 81301

Agent for
Samson Resources Incorporated
Two West Second Street
Tulsa, OK 74103-3103
Attn: Scott Rose

REF: CWA Section 401 Certification
for Samson Resources construction
of a natural gas well pad Melton 34-
7-24 #1;
SPK-2010-01463.

Dear Mr. Jensen:

U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the above referenced project for a Clean Water Act (CWA) Section 401 Water Quality Certification.

A request for Clean Water Act (CWA) Section 401 Water Quality Certification for the project was submitted to the U.S. Environmental Protection Agency Region 8 (EPA) by Prymorys Environmental Consulting for Samson Resources Melson 34-7-24 #1 project (SPK-2010-01463).

This certification does not address stormwater discharges, production water discharges or other intentional or unintentional CWA Section 402 point source discharges from the well pad or associated activities. This certification does not negate or lessen any requirements or conditions found in federal, state, tribal and local permits, regulations, ordinances, statutes and pollution control plans, such as Spill Prevention and Containment Plans, production water or stormwater permits, BLM permits, tribal permit,

county permits or conservation district permits.

Samson Resources is proposing to construct a natural gas well pad partially within a palustrine emergent wetland tributary to Ute Creek, which is within the Los Pinos River Basin. The proposed well pad will be accessed from the west via a new ~290 foot access road from La Plata County Road 523. An approximate 130 ft. by 170 ft. (0.57 acres) irregular shaped level well pad would be constructed within a 0.68 acre edge of disturbance area. The permanent level well pad would remain at 0.57 acres for the life of the well. The new well pad will permanently fill 0.099 acres of wetlands; additionally, there is an area of 0.086 acre temporary storage of top-soil for pad reclamation within a storage area off the NE corner of the pad. Upon completion of drilling activities the fill slopes within the wetland will be reclaimed to the maximum extent practicable; providing for a pad surface large enough to accommodate routing well activities but distant enough to provide for appropriate slopes to achieve permanent revegetation. The product will be piped offsite. The pipeline will be within the footprint of the access road. The well development will be completed with a closed system, no production waste or cuttings will remain on the site. Samson Resources proposes to purchase wetland credits from Animas River Wetlands, LLC to address mitigation requirements.

Conditions:

- 1) Project proponent/contractor must have a copy of the EPA CWA 401 certification conditions, including planned best management practices onsite.
- 2) Project proponent/contractor must notify the Southern Ute Indian Tribe (contact Tom Johnson, at 970-563-0135 x2229 (tojohns@southern-ute.nsn.us) 48 hours prior to beginning construction, with the most up to date construction timeframe and plans. All requested submittals should be copied to Southern Ute Indian Tribe Environmental Department.
- 3) Production facilities installed on location that have the potential to leak or spill oil, glycol, produced water, or other fluid, shall be placed within an appropriate containment or diversionary structure.
- 4) All existing drainage and erosion control structures such as diversions, ditches, and subsurface systems should be avoided or appropriate measures taken to maintain the effectiveness of the existing or replacement structures. Impacts to natural hydrology and surface and subsurface drainage should be considered in the placement and construction of the well pad, road and supporting facilities. Subsurface drainage can be damaged during the grading of the well site. Provisions for drainage restoration should be included construction plan. An effort to maintain natural drainage patterns and to avoid unintentional damming and ponding should be considered in the placement and construction of the well pad, road and supporting facilities. Any surface or subsurface drainage problems resulting from construction of the well pad will be corrected to maintain the continuity of tributary system to Ute Creek. Proposed under drains (tile, french drains, etc.) must be declared and described if proposed with the project.

- 5) The stability of wetland soils should be considered in the construction of the pad, road and supporting facilities and mitigating construction methods should be utilized.
- 6) Construction of the well pad can require significant grading of the existing surface. Topsoil should be removed from the drilling site and stockpiled separate from subsoil and other material. Topsoil and subsoil graded from the drilling site should not block natural drainage.
- 7) Culverts and waterbars shall be installed along access roads to minimize erosion and runoff impacts.
- 8) In wetland areas with temporary fill or construction activities, place a barrier down before stockpiling topsoil so that the topsoil can be removed with minimal disturbance to the wetland. Topsoil stockpile areas shall be clearly designated in the field.
- 9) During the drilling operation, water with a high salt content must be contained and removed from the site. Brine and production waste pits are not authorized under this certification
- 10) Drill cuttings should not be permanently buried at the site. Temporary storage for drilling fluids and drill cuttings should accommodate removal from the site, such as the placement of barriers. Soils with an extended seasonal-perched high water table will sustain a chronic state of wetness throughout the mass of buried drill cuttings. The same condition may also lead to the potential leaching of residual salts within the soil profile resulting in potential long term impacts to the wetlands on site.
- 11) Following construction, all areas temporarily used for the well pad must be regraded to restore the original drainage and contours to the extent possible. After the well pad is regraded, all disturbed areas should be decompacted to a depth of 18 inches, if the process can be accomplished without further damage to waters of the U.S. (wetland). Subsoil decompaction and topsoil replacement should be avoided when soils are frozen, to prevent erosion over the winter months. If areas are to be restored after soils are frozen, necessary provision should be made to restore any eroded areas in the springtime, to establish proper growth.
- 12) Following restoration, all construction debris will be removed from the site.
- 13) All persons engaged in any phase of operation of any well or wells shall conduct such operation or operations in a manner which will not contaminate or pollute the surface of the land, or water on the surface or in the subsurface.
- 14) All spills or leakages of oil, gas, salt water, toxic liquids or waste materials, blowouts, fires, personal injuries, and fatalities shall be reported by the operator to the BLM, Southern Ute Indian Tribe, EPA and all other appropriate agencies.
- 15) When operating equipment or otherwise undertaking construction in a river, stream or wetland the following conditions apply:
 - a) This certification requires all equipment to be inspected for oil, gas, diesel, anti-freeze, hydraulic fluid and other petroleum leaks. All such leaks will be properly repaired and equipment cleaned prior to being allowed on the project. Leaks that occur after the equipment is moved to the project site will be fixed that same day or the next day or removed from the project area. The equipment is not allowed to continue operating once any leak is discovered.

- b) Containment booms and/or absorbent material must be available onsite. Any spills of petroleum products must be reported to the Corps, Tribes and EPA within 24 hours.
 - c) All equipment is to be inspected and cleaned before and after use to minimize the spread of invasive or undesirable species.
- 16) Upland, riparian and instream vegetation should be protected except where its removal is absolutely necessary for completion of the work. Revegetation should be completed as soon as practicable. Applicant/contractor should revegetate disturbed soil in a manner that optimizes plant establishment for the site. Revegetation may include topsoil replacement, planting, seeding, fertilization, liming, and weed-free mulching as necessary. The applicant should use native material where appropriate and feasible. Nursery and seed stock is to be acquired from localized sources. Where practical, stockpile weed-seed-free topsoil and replace it on disturbed areas. All slopes should be revegetated with appropriate species to prevent erosion. This certification does not allow for the introduction of non-native flora or fauna.
- 17) Any mitigation required by the USACE permit shall be completed prior to, or concurrent with, the project impacts. Restoration of areas with temporary impacts should replace or enhance the native wetland plant community. If the USACE recommends utilization of a mitigation bank and the permittee chooses to utilize the option of a mitigation bank, the applicant must submit the name of the bank or program, and the number and type of credits to be purchased prior to project impacts.
- 18) Best management practices for the reduction of sediment and stabilization of the project area should be submitted to USEPA. These include application of certified weed-free straw or hay across all disturbed wetland areas; installation and maintenance of sediment control measures; the placement of spoil; recovery of all disturbed wetland areas where possible; and construction timing planned to minimize disturbance.
- 19) The Project Sponsor will provide a monitoring and remediation period of no less than two years immediately following the completion of initial restoration. Monitoring to ensure satisfactory revegetation and that noxious weeds do not establish should occur during the next two growing season or more often if required by the USACE NWP conditions. The monitoring will be used to identify any remaining impacts associated with construction that are in need of mitigation and to implement follow-up restoration. Photographs of the completed project, stabilization and revegetation should be submitted to EPA.

While electronic submittals are preferred, through emailing the current Region 8 assigned staff; hard copy or disk submittals of BMPS and post project photographs of the site may be submitted to the:

US EPA Region 8 Wetland Program
1595 Wynkoop Street, 8EPR-EP
Denver Colorado 80202
Attention: CWA 401 Certification Monitoring, SPK-2010-01463

This letter should be retained in your files of the applicable USACE NWP as documentation of EPA certification with conditions for the above referenced project. If you have any questions please contact me at the above address, by phone at 303-312-6909, or by email at ott.toney@epa.gov.

Sincerely,



Toney Ott
Environmental Scientist

Cc: Sal Valdez, SUIIT
Tom Johnson, SUIIT
Scott Rose, Samson Resources Incorporated
Kara Helliage, USACE Durango Office

