

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax:(303)894-2109



FOR OGCC USE ONLY

RECEIVED
2/16/2012

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

OGCC Employee:

☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV
Tracking No:

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

☐ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☐ Site/Facility Closure ☒ Other (describe): On-going Investigation and Remediation

OGCC Operator Number: 16700

Name of Operator: Chevron USA Inc

Address: 1400 Smith Street, Room 07065

City: Houston State: TX Zip: 77002

Contact Name and Telephone:

Eric Page

No: 713-372-1022

Fax: epage@chevron.com

API Number: COGCC Project No. 70

County: Rio Blanco

Facility Name: Wilson Creek

Facility Number: 93352

Well Name: Wilson Creek Unit 16

Well Number: NA

Location: (QtrQtr, Sec, Twp, Rng, Meridian): E/2, SE/4, 27, 3 North, 94 West, 06 Latitude: NA Longitude: NA

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Crude, Condensate, Produced Water

Site Conditions: Is location within a sensitive area (according to Rule 901e)? ☐ Y ☐ N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): E&P, recreation (BLM), ranching

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan:

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Wilson Creek

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):

- ☐ Soils
☐ Vegetation
☐ Groundwater
☐ Surface Water

Extent of Impact:

Refer to attached scope of work.
Refer to attached scope of work.
Refer to attached scope of work.
Refer to attached scope of work.

How Determined:

REMEDIAL WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

Refer to attached scope of work dated January 30, 2012:

"2012 Proposed Scope of Work for the Chevron North America Exploration and Production Company, Wilson Creek Unit, Rio Blanco County, Colorado. COGCC Project No. 70"

Describe how source is to be removed:

Refer to attached scope of work dated January 30, 2012:

"2012 Proposed Scope of Work for the Chevron North America Exploration and Production Company, Wilson Creek Unit, Rio Blanco County, Colorado. COGCC Project No. 70"

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:

Refer to attached scope of work dated January 30, 2012:

"2012 Proposed Scope of Work for the Chevron North America Exploration and Production Company, Wilson Creek Unit, Rio Blanco County, Colorado. COGCC Project No. 70"



REMEDATION WORKPLAN (Cont.)

Tracking Number: _____
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: _____
Facility Name & No: _____

OGCC Employee: _____

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

Refer to attached scope of work dated January 30, 2012:

"2012 Proposed Scope of Work for the Chevron North America Exploration and Production Company, Wilson Creek Unit, Rio Blanco County, Colorado. COGCC Project No. 70"

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

Refer to attached scope of work dated January 30, 2012:

"2012 Proposed Scope of Work for the Chevron North America Exploration and Production Company, Wilson Creek Unit, Rio Blanco County, Colorado. COGCC Project No. 70"

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? ☐ Y ☐ N If yes, describe:

Refer to attached scope of work dated January 30, 2012:

"2012 Proposed Scope of Work for the Chevron North America Exploration and Production Company, Wilson Creek Unit, Rio Blanco County, Colorado. COGCC Project No. 70"

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

Refer to attached scope of work dated January 30, 2012:

"2012 Proposed Scope of Work for the Chevron North America Exploration and Production Company, Wilson Creek Unit, Rio Blanco County, Colorado. COGCC Project No. 70"

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: _____ Date Site Investigation Completed: _____ Date Remediation Plan Submitted: _____
Remediation Start Date: _____ Anticipated Completion Date: _____ Actual Completion Date: _____

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Christopher Beall (Stantec)

Signed: 

Title: Project Geologist

Date: 01/30/12

OGCC Approved: _____ Title: _____ Date: _____



Stantec Consulting Services, Inc.
2000 South Colorado Blvd., Suite 2-300
Denver, CO 80222
Tel: (303) 758-4058
Fax: (303) 758-4828

Stantec

January 30, 2012

Mr. Chris Canfield, P.G.
State of Colorado
Oil and Gas Conservation Commission
707 Wapiti Court
Suite 204
Rifle, CO 81650

**RE: 2012 Proposed Scope of Work for the Chevron North America Exploration and Production Company, Wilson Creek Unit, Rio Blanco County, Colorado.
COGCC Project No. 70**

Dear Mr. Canfield:

As follow-up to the meeting on May 18, 2011, Stantec Consulting Services, Inc. (Stantec) and Chevron Environmental Management Company (CEMC) are proposing the following remedial activities and investigations at the Wilson Creek Unit in 2012. This letter is to serve as a basic work plan for 2012. Work plans with additional details may be submitted as necessary based on changes in scope.

Primary 2012 activities:

- Conduct groundwater monitoring on-site in accordance with the current sampling program as detailed in Table 1 (attached).
 - Groundwater samples will be analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) using EPA Method 8021B.
 - Wells with phase-separated hydrocarbon (PSH) will not be sampled.
 - Purge water generated from well development or groundwater sampling activities may be managed on-site in three ways:
 - Groundwater may be returned to the formation via the same well bore from which it was extracted; or,
 - Groundwater may be solidified using soil from the landfarm and assimilated into that landfarm; or,
 - Groundwater may be added into the Class II UIC disposal system operated on-site by Chevron.
 - Decontamination water generated from well development or groundwater sampling activities may be managed on-site in two ways:
 - Decontamination water may be solidified using soil from the landfarm and assimilated into that landfarm; or,
 - Decontamination water may be added into the Class II UIC disposal system operated on-site by Chevron.
- Collect surface water samples from the drainage associated with Wilson Creek and analyze for BTEX using Method 8021B. Surface water samples will be collected from three locations (SW-1, SW-2, and Pond-1) on a semi-annual basis. All three locations are up-gradient from Wilson Creek proper.

Reference: 2012 Proposed Scope of Work for the Wilson Creek Unit in Rio Blanco County, Colorado

- Operate the site landfarm as permitted. Sample landfarm annually, at a minimum. Recognize criteria provided in Table 910-1 (dated December 17, 2008) as being applicable for current COGCC series 900 rules.
- Suspend operations of Air Sparge System #1 (Trench #2 and Trench #3) during 2012 to allow for evaluation of system effectiveness.
- Continue soil remediation activities at Tank Battery #4 in accordance with the previously submitted and approved work plan: *2011 Final Reclamation Work Plan - Former Tank Battery 4 (COGCC SPILL #2213635)*, dated September 22, 2011.

In addition, Stantec and CEMC will continue to provide assistance to Chevron operating company as requested during various abandonment activities if opportunities to address site impacts arise. Potential 2012 opportunities include:

- Provide abandonment, documentation, and investigation activities for Chevron operations, as requested.
- Changes and/or upgrades to the current permitted landfarm.

Your approval of the proposed activities is requested. Should you have any questions, please contact Eric Page with CEMC at 713-372-1022 (EPage@Chevron.com) or me at 970-214-1126 (christopher.beall@stantec.com).

Respectfully,

STANTEC CONSULTING SERVICES, INC.



Christopher Beall
Project Geologist

Cc:

Eric Page, Chevron Environmental Management Company
Luke Allred, Chevron
Dale Harber, Chevron
Chris Beall, Stantec

Table 1
2012 Proposed Groundwater and Surface Water Sampling Locations
Wilson Creek Unit

April - 2012	October - 2012		
MW-1	MW-1	MW-20	MW-40
MW-4	MW-2	MW-21	MW-42
MW-5	MW-3	MW-22R	MW-43
MW-9	MW-4	MW-23	MW-44
MW-20	MW-5	MW-25	MW-45
MW-21	MW-6	MW-26	MW-46
MW-28	MW-7	MW-27	MW-47A
MW-29	MW-8	MW-28	SVE-1
MW-30	MW-9	MW-29	SVE-2
MW-31	MW-10	MW-30	SW-1
MW-32	MW-11	MW-31	SW-2
MW-35	MW-12	MW-32	Pond-1
MW-38	MW-13	MW-33	
MW-43	MW-14	MW-34	
MW-45	MW-15	MW-35	
MW-46	MW-16	MW-36	
SW-1	MW-17	MW-37	
SW-2	MW-18	MW-38	
Pond-1	MW-19	MW-39	
(19 Locations)	(50 Locations)		