

State of Colorado
Oil and Gas Conservation Commission



received 12/30/2016
REM 9949
Document 2527569

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

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:	
<input type="checkbox"/> Spill	<input type="checkbox"/> Complaint
<input type="checkbox"/> Inspection	<input type="checkbox"/> NOAV
Tracking No:	

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

Spill or Release Plug & Abandon Central Facility Closure Site/Facility Closure Other (describe): _____

OGCC Operator Number: <u>10311</u>	Contact Name and Telephone:
Name of Operator: <u>Synergy Resources Corporation</u>	<u>Jerry Brian</u>
Address: <u>20203 Highway 60</u>	No: <u>(720) 616-4300</u>
City: <u>Platteville</u> State: <u>CO</u> Zip: <u>80651</u>	Fax: _____

API Number: _____	County: <u>Weld</u>
Facility Name: <u>Nelson Tank Battery</u>	Facility Number: <u>426021</u>
Well Name: _____	Well Number: _____
Location: (QtrQtr, Sec, Twp, Rng, Meridian): <u>NENE, Sec. 5, T4N, R67W, 6 PM</u> Latitude: <u>40.347524</u> Longitude: <u>-104.906878</u>	

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): 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.): residential, cultivated

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Nunn loam, 0 to 1 percent slopes

Potential receptors (water wells within 1/4 mi, surface waters, etc.): no potential receptors observed within 1/4 mile

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

Impacted Media (check):	Extent of Impact:	How Determined:
<input checked="" type="checkbox"/> Soils	<u>See attached.</u>	<u>Laboratory results</u>
<input type="checkbox"/> Vegetation	_____	_____
<input checked="" type="checkbox"/> Groundwater	<u>See attached.</u>	<u>Laboratory results</u>
<input type="checkbox"/> Surface Water	_____	_____

REMEDATION WORKPLAN

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

Facility was plugged and abandoned. The produced water tank and other facility equipment were removed. Source removal via excavation activities were completed. See Document # 401165019

Describe how source is to be removed:

Source removal excavation activities were completed at the site on 12/6/16 and 12/7/16 . Approximately 600 cubic yards of impacted soil were removed from the site and disposed of at a permitted disposal facility. Confirmation soil samples indicate no impacted soil remains. A Form 27 was submitted documenting excavation activities. See Document #2527425 for Remediation # 9949.

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.:

A groundwater amendment was applied to the excavation prior to back-filling activities to address any residual adsorbed/dissolved phase impacts remaining beneath the site. Eight soil borings/monitoring wells (MW-01 through MW-08) have been advanced/installed at the site. Based on laboratory analytical results, soil/groundwater impacts have been defined onsite. Quarterly groundwater monitoring will be completed at the site. Following the completion of additional quarterly groundwater monitoring events, the dissolved phase impacts will be evaluated to determine if additional remedial action is necessary or if the site can continue to be monitored for natural attenuation.



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

Page 2
REMEDIATION WORKPLAN (Cont.)

OGCC Employee: _____

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

Based on laboratory analytical results, dissolved phase impacts have been defined at the site. Groundwater samples will be collected quarterly from monitoring wells MW-01 through MW-08. Groundwater will be analyzed for BTEX following EPA Method 8260. A site map with monitoring well locations is attached.

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.

The excavation was backfilled with clean fill to grade. The environmental footprint will be assessed following any potential remediation activities.

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:

Aside from quarterly groundwater monitoring, further site investigation is not warranted at this time. If remediation is determined to be necessary other than monitored natural attenuation, a supplemental Form 27 will be submitted to the COGCC.

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

Remaining groundwater impacts will be remediated in place, and therefore, will not generate any waste requiring disposal.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 11/17/16 Date Site Investigation Completed: 12/23/16 Date Remediation Plan Submitted: 12/30/16
Remediation Start Date: 12/06/16 Anticipated Completion Date: TBD Actual Completion Date: TBD

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

Print Name: Jerry Brian Signed: [Signature]
Title: Manager of E&H Date: 12/30/16

OGCC Approved: _____ Title: _____ Date: _____

Submit reports of site investigation and progress of remediation including results of sampling and analysis on an annual basis or more often until remediation is closed.