

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

OGCC Employee:

Spill Complaint
 Inspection NOAV

Tracking No: _____

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.

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

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

OGCC Operator Number: <u>10079</u>	Contact Name and Telephone: <u>Gerard G Alberts</u>
Name of Operator: <u>Antero Resources Piceance Corporation</u>	No: <u>303-357-7341</u>
Address: <u>1625 17th Street, Suite 300</u>	Fax: <u>303-357-7315</u>
City: <u>Denver</u> State: <u>CO</u> Zip: <u>80202</u>	
API Number: <u>NA</u> County: <u>Garfield</u>	
Facility Name: <u>River Ranch A Pad access road</u> Facility Number: <u>NA</u>	
Well Name: <u>NA</u> Well Number: <u>NA</u>	
Location: (QtrQtr, Sec, Twp, Rng, Meridian): <u>SESE, Sec 7, T6S, 92W, 6th PM</u> Latitude: <u>39.536077</u> Longitude: <u>-107.700495</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. GW < 20 feet deep

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): Gravel mining, irrigated land

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Sandy loam and river gravels

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Surface water seeps in the gravel pit approximately 150 feet west.

Surface ponds are located 1,140 feet north.

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>Unknown</u>	<u>TBD through future site assessment</u>
<input type="checkbox"/> Vegetation	_____	_____
<input checked="" type="checkbox"/> Groundwater	<u>Unknown</u>	<u>TBD through future site assessment</u>
<input checked="" type="checkbox"/> Surface Water	<u>Limited to groundwater seeps</u>	<u>Visual and laboratory analytical results</u>

REMEDIALTION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):
A Form 19 was submitted on 8/10/10 (Spill # not available).

Describe how source is to be removed:
A susbequent Form 27 explaining remediation details will be provided following the site assessment. See attached workplan for an initial proposed remediation technology.

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.:
See above.



Tracking Number: _____
 Name of Operator: _____
 OGCC Operator No: _____
 Received Date: _____
 Well Name & No: NA NA
 Facility Name & No: River Ranch A Pad access road NA

REMEDIATION WORKPLAN (Cont.)

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

Antero is currently conducting site assessment activities. Groundwater monitoring will be conducted using the wells installed during the site assessment. A detailed plan and monitoring frequency will be provided in a subsequent Form 27.

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.

NA

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:

The Antero consultant is currently conducting site assessment activities at the site. Initially, delineation will begin at the pipeline release site and radiate outward until clean boundaries are established via point of compliance wells. A soil boring may be advanced inside the gravel pit to assess bedrock conditions and rule out bedrock impacts from weathered fracture flow. As there is a gravel pit liner present west of the release and it will be determine if impacts have migrated along the liner. Previous plans detailed multiple borings in the gravel pit. This has now changed to delineation east of the gravel pit boundary and liner. See attached workplan.

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

Investigation derived waste will be segregated depending on the level of impact. Impacted soil will be stored at the onsite equipment storage area. Depending on the volume of waste brought to the surface, the company will decide on the most effective means of treatment or disposal.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 7/27/10 Date Site Investigation Completed: NA Date Remediation Plan Submitted: 8/18/10
 Remediation Start Date: NA Anticipated Completion Date: NA Actual Completion Date: NA

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

Print Name: Gerard G Alberts Signed: *Gerard G Alberts*
 Title: Manager, Environmental & Regulatory Date: 8/18/10

OGCC Approved: _____ Title: _____ Date: _____