

Comobined environmental inspections were conducted on July 17, 2024, by ECMC Environmental Protection Specialists Laurel Anderson, to document spill response and ongoing remediation activities at two flowline spills along KP Kauffmans Facility 8 Flowline System (Facility ID 478839):

George Norden West - Spill ID 487301 / Date of Discovery 7/16/2024

George Norden Consolidation - Spill ID 479923/ Remediation Project 19716/Date of Discovery 4/29/2021

Any corrective actions from previous inspections that have not been addressed are still applicable. Any comments/conditions of approval from previously denied/approved forms that have not been addressed are still applicable.

No Operator or contract personnel were on location at the time of either inspection.
Photos attached to document site conditions.

George Norden West - Spill ID 487301

Open excavation in Weld CR 89 right-of-way

Free product observed on groundwater within open excavation

Property fencing removed needs reinstalled

Surface/vegetation scraped needs reclaimed

Strong odor

Visibly stained soil remains observed within open excavation

Sidewalls of the open excavation are unstable and collapsing

Located <200' from unmapped surface water

Site controls and BMPs are inadequate

George Norden Consolidation - Spill ID 479923/ Remediation Project 19716/Date of Discovery 4/29/2021

See previous inspections for Corrective Actions (housekeeping, reporting)

Both spills are located within:

CPW Mule Deer Migration Corridor High Priority Habitat

Fort Lupton

Located within PWS - GUDI & Type III Wells - Generalized External Buffer

Adjacent to City of Aurora Water - Prarie Water Project

100-year effective floodplain

The spills are located ~300 feet apart and both excavations are open and have been infiltrated by groundwater

Location

Overall Good:

Signs/Marker:

Type	OTHER		
Comment:	No signage present at open excavations.		
Corrective Action:		Date:	

Emergency Contact Number:

Comment:	<input type="text"/>	Date:	
Corrective Action:	<input type="text"/>		

Overall Good:

Spills:

Type	Area	Volume		

In Containment: No

Comment:

Multiple Spills and Releases?

Fencing/:

Type	OTHER		
Comment:	Orange construction fencing has been installed around the open excavations; however, fencing is not adequate for site conditions.		
Corrective Action:	Operator shall continuously monitor and maintain BMPs to protect the environment, public health, safety and welfare and the environment as required by Rule 913.b.(5)B.i and ECMC Guidance 913.b.(5)B i-v which requires fencing used be appropriate to site conditions, ie: nearby public roadway, residences, depth of excavation, presence of ground or surface water, livestock, wind, etc. when sites are not attended.		Date: 09/10/2024
Type	OTHER		
Comment:	Property fencing was taken down. Landowner has requested the fencing be reinstalled.		
Corrective Action:	Operator shall reinstall property fence and consult with landowner regarding future access.		Date: 09/10/2024

Venting:

Yes/No			
Comment:	<input type="text"/>		
Corrective Action:		Date:	

Flaring:

Type			
Comment:	<input type="text"/>		
Corrective Action:		Date:	

Inspected Facilities

Facility ID: 478839 Type: Flowline API Number: - Status: AC Insp. Status: EI

The subreport 'InspWellFlowline' could not be found at the specified location \\10.14.12

Facility ID: 479923 Type: SPILL OR API Number: - Status: CL Insp. Status: EI

The subreport 'InspWellFlowline' could not be found at the specified location \\10.14.12

Facility ID: 487301 Type: SPILL OR API Number: - Status: AC Insp. Status: EI

The subreport 'InspWellFlowline' could not be found at the specified location \\10.14.12

Environmental

Spills/Releases:

Type of Spill: _____ Estimated Spill Volume: _____

Comment: Visibly impacted soil and groundwater remain insitu within the open excavation at George Norden West and are in close proximity to City of Aurora Prairie Water Project and associated monitoring wells.

Corrective Action: In accordance with 913.d.(1) Operator will investigate impacts to soil, Groundwater, and surface water as soon as the impacts are discovered. Operator shall consult with City of Aurora to discuss sampling of the existing monitoring wells. Additionally, Operator shall control and contain spills/releases and clean up per Rule 912.a. and notify ECMC Area EPS and DJ Basin Region Environmental Supervisor, Nikki Graber (nikki.graber@state.co.us), at least 48 hours prior to backfill, monitoring well installation, or any sampling events performed on location.

Date: 09/10/2024

Reportable: YES GPS: Lat _____ Long _____

Proximity to Surface Water: 185 Depth to Ground Water: 4

Water Well Complaint:

DWR Receipt Num: _____ Owner Name: _____ GPS : _____ Lat _____ Long _____

Field Parameters:

Sample Location: _____ Comment: _____

Waste Management:

Type	Management	Condition	GPS (Lat)	(Long)
Oily Soil	Other			
Comment		Stained soils remain in-situ in the open excavation.		
Corrective Action		Operator shall properly dispose of oily waste in accordance with Rule 905.e and attach all waste manifests, gate tickets/receipts to the next Form 19 or Form 27 per Rule 905.b.(3).		Date: _____

Spill/Remediation:

Comment: A segment of the flowline has been exposed and soils removed from the location. Stained soils remain in-situ in the open excavation. Free product was observed on groundwater within the excavation.

Corrective Action: In accordance with 912.a.(2) Operator will investigate, cleanup, and document impacts resulting from Spill and Releases as soon as the impacts are discovered.

Remove free product and impacted groundwater.

Date: _____

Emission Control Burner (ECB): _____

Comment: _____

Pilot: _____ Wildlife Protection Devices (fired vessels): _____

Reclamation - Storm Water - Pit

Interim Reclamation:

Date Interim Reclamation Started: _____ Date Interim Reclamation Completed: _____

Land Use: _____

Comment: _____

1002 SITE PREPARATION AND STABILIZATION

1002a. FENCING _____

Comment _____

Corrective Action _____

Date _____

1002b. SOIL REMOVAL AND _____

Comment _____

Corrective Action _____

Date _____

1002c. PROTECTION OF SOILS _____

Comment _____

Corrective Action _____

Date _____

1002E. SURFACE DISTURBANCE MINIMIZATION _____

Comment _____

Corrective Action _____

Date _____

1003a. Waste and Debris removed? _____

Comment _____

Corrective Action _____

Date _____

Unused or unneeded equipment onsite? _____

Comment _____

Corrective Action _____

Date _____

Pit, cellars, rat holes and other bores closed? _____

Comment _____

Corrective Action _____

Date _____

Guy line anchors marked? _____

Comment _____

Corrective Action _____

Date _____

1003b. Area no longer in use? _____ Production areas stabilized ? _____

1003c. Compacted areas have been cross ripped? _____

1003d. Drilling pit closed? _____ Subsidence over on drill pit? _____

Cuttings management: _____

1003e. Areas no longer needed for drilling or subsequent operations for have been re-vegetated to 80% of pre-existing? _____

Production areas have been stabilized? _____ Segregated soils have been replaced? _____

RESTORATION AND REVEGETATION

Cropland

Top soil replaced _____ Recontoured _____ Perennial forage re-established _____

Non-Cropland

Top soil replaced _____ Recontoured _____ 80% Revegetation _____

1003e. INTERIM VEGETATION TRANSECT

TRANSECT RESULTS OF DISTURBED AREA% _____

TRANSECT RESULTS OF REFERENCE AREA% _____

TOTAL % OF DESIRABLE VEGETATION COVER _____

VEGETATIVE COVER _____

1003 f. Weeds Noxious weeds? _____

Comment Surface has been disturbed by spill response and remediation activities. All disturbed areas shall be reclaimed as early and as nearly as practicable to their original condition or their final land use as designated by the surface owner and shall be maintained to control dust and minimize erosion to the extent practicable.

Corrective Action Operator shall restore and revegetate all disturbed areas in accordance with Rule 1003.b. and 1003.e.(2). Use a seed mixture requested by the surface owner, or a mixture prescribed by the local county NRCS. Ensure erosion controls are implemented to stabilize the seeded soil, and continue to monitor and manage this site until the location meets Rule 1003 standards, including stormwater and weed management.

Reclamation activities shall be complete as soon as environmental conditions will permit.

Date _____

Overall Interim Reclamation

Final Reclamation/ Abandoned Location:

Date Final Reclamation Started: _____ Date Final Reclamation Completed: _____

Final Land Use: _____

Reminder: _____

Comment:

Well plugged _____ Pit mouse/rat holes, cellars backfilled _____

Debris removed _____ No disturbance /Location never built _____

Access Roads Regraded _____ Contoured _____ Culverts removed _____

Gravel removed _____

Location and associated production facilities reclaimed _____ Locations, facilities, roads, recontoured _____

Compaction alleviation _____ Dust and erosion control _____

Non cropland: Revegetated 80% _____ Cropland: perennial forage _____

Weeds present _____ Subsidence _____

1004.d. FINAL VEGETATION TRANSECT

TRANSECT RESULTS OF DISTURBED AREA% _____

TRANSECT RESULTS OF REFERENCE AREA% _____

TOTAL % OF DESIRABLE VEGETATION COVER _____

VEGETATIVE COVER _____

Comment:

Corrective Action:

Date _____

Overall Final Reclamation _____

Well Release on Active Location

Multi-Well Location

Storm Water:

Loc Erosion BMPs	BMP Maintenance	Lease Road Erosion BMPs	Lease BMP Maintenance	Chemical BMPs	Chemical BMP Maintenance	Comment

Comment: Inadequate BMPs in place to control stormwater run-on and runoff into open excavations.

Corrective Action: Operators will properly store, handle and manage all E&P waste to prevent contamination of stormwater, surface water, groundwater and soil. Manage surface water and stormwater around spill site in manner that prevents impacts to those matrices. Install BMPs in accordance with 1002.f.(2) to prevent runoff and completely contain impacts.

Date: 09/17/2024

Pits: NO SURFACE INDICATION OF PIT

Attached Documents

You can go to ECMC Images (<https://ecmc.state.co.us/weblink/>) and search by document number:

Document Num	Description	URL
710100243	George Norden West Photo Documentation	https://ecmc.state.co.us/weblink/DownloadDocumentPDF.aspx?DocumentId=6699319
710100244	George Norden Consolidation Photo Documentation	https://ecmc.state.co.us/weblink/DownloadDocumentPDF.aspx?DocumentId=6699320