

State of New Mexico  
Energy Minerals and Natural Resources  
Department Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505  
<https://www.emnrd.nm.gov/ocd/ocd-e-permitting/>

Form C-147  
Revised October 11, 2022

## Recycling Facility and/or Recycling Containment

**Type of Facility:** ☐ Recycling Facility ☒ Recycling Containment\*

**Type of action:** ☐ Permit  
☐ Modification  
☐ Closure

☐ Registration  
☒ Extension  
☒ Other (explain) extension of cessation of operation  
request from January 2024 to June 2024

\* At the time C-147 is submitted to the division for a Recycling Containment, a copy shall be provided to the surface owner.

Be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.  
Operator: Solaris Water Midsteam, LLC (For multiple operators attach page with information) OGRID #: 371643  
Address: 9651 Katy Fwy, Suite 400, Houston Texas 77024  
Facility or well name (include API# if associated with a well): EKG Produced Water Containment  
OCD Permit Number: 2RF-159 (For new facilities the permit number will be assigned by the district office)  
U/L or Qtr/Qtr F Section 29 Township 24S Range 28E County: Eddy  
Surface Owner: ☐ Federal ☐ State ☒ Private ☐ Tribal Trust or Indian Allotment

2.  
☐ **Recycling Facility:**  
Location of recycling facility (if applicable): Latitude 32.117435° Longitude -104.075971° NAD83  
Proposed Use: ☐ Drilling\* ☐ Completion\* ☐ Production\* ☐ Plugging \*  
*\*The re-use of produced water may NOT be used until fresh water zones are cased and cemented*  
☐ Other, *requires permit for other uses. Describe use, process, testing, volume of produced water and ensure there will be no adverse impact on groundwater or surface water.*  
☐ Fluid Storage  
☐ Above ground tanks ☐ Recycling containment ☐ Activity permitted under 19.15.17 NMAC explain type \_\_\_\_\_  
☐ Activity permitted under 19.15.36 NMAC explain type: \_\_\_\_\_ ☐ Other explain \_\_\_\_\_  
☐ For multiple or additional recycling containments, attach design and location information of each containment  
☐ **Closure Report (required within 60 days of closure completion):** ☐ Recycling Facility Closure Completion Date: \_\_\_\_\_

3.  
☒ **Recycling Containment:**  
☐ Annual Extension after initial 5 years (attach summary of monthly leak detection inspections for previous year)  
Center of Recycling Containment (if applicable): Latitude 32.1893287° Longitude 104.1132493° NAD83  
☒ For multiple or additional recycling containments, attach design and location information of each containment  
☒ Lined ☐ Liner type: Thickness \_\_\_\_\_ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_  
☐ String-Reinforced  
Liner Seams: ☐ Welded ☐ Factory ☐ Other please see drawings Volume: \_\_\_\_\_ bbl Dimensions: L \_\_\_\_\_ x W \_\_\_\_\_ x D \_\_\_\_\_  
☐ Recycling Containment Closure Completion Date: \_\_\_\_\_

4.

**Bonding:**

- ☐ Covered under bonding pursuant to 19.15.8 NMAC per 19.15.34.15(A)(2) NMAC (These containments are limited to only the wells owned or operated by the owners of the containment.)
- ☒ Bonding in accordance with 19.15.34.15(A)(1). Amount of bond \$ see transmittal letter (work on these facilities cannot commence until bonding amounts are approved)
- ☐ Attach closure cost estimate and documentation on how the closure cost was calculated.

5.

**Fencing:**

- ☒ Four foot height, four strands of barbed wire evenly spaced between one and four feet
- ☒ Alternate. Please specify game fence

6.

**Signs:**

- ☒ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- ☐ Signed in compliance with 19.15.16.8 NMAC

7.

**Variances:**

Justifications and/or demonstrations that the proposed variance will afford reasonable protection against contamination of fresh water, human health, and the environment.

***Check the below box only if a variance is requested:***

☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. If a Variance is requested, include the variance information on a separate page and attach it to the C-147 as part of the application.

**If a Variance is requested, it must be approved prior to implementation.**

8.

**Siting Criteria for Recycling Containment**

**Instructions:** The applicant must provide attachments that demonstrate compliance for each siting criteria below as part of the application. Potential examples of the siting attachment source material are provided below under each criteria.

**General siting****Ground water is less than 50 feet below the bottom of the Recycling Containment.**

NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☒ No  
☐ NA

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

☐ Yes ☒ No  
☐ NA

- Written confirmation or verification from the municipality; written approval obtained from the municipality

Within the area overlying a subsurface mine.

☐ Yes ☒ No

- Written confirmation or verification or map from the NM EMNRD-Mining and Minerals Division

Within an unstable area.

☐ Yes ☒ No

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; topographic map

Within a 100-year floodplain. FEMA map

☐ Yes ☒ No

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

☐ Yes ☒ No

- Topographic map; visual inspection (certification) of the proposed site

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

☐ Yes ☒ No

- Visual inspection (certification) of the proposed site; aerial photo; satellite image

Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.

☐ Yes ☒ No

- NM Office of the State Engineer - iWATERS database search; visual inspection (certification) of the proposed site

Within 500 feet of a wetland.

☐ Yes ☒ No

- US Fish and Wildlife Wetland Identification map; topographic map; visual inspection (certification) of the proposed site

9.

**Recycling Facility and/or Containment Checklist:**

Instructions: Each of the following items must be attached to the application. Indicate, by a check mark in the box, that the documents are attached.

- ☒ Design Plan - based upon the appropriate requirements.
- ☒ Operating and Maintenance Plan - based upon the appropriate requirements.
- ☒ Closure Plan - based upon the appropriate requirements.
- ☒ Site Specific Groundwater Data -
- ☒ Siting Criteria Compliance Demonstrations -
- ☒ Certify that notice of the C-147 (only) has been sent to the surface owner(s)

10.

**Operator Application Certification:**

I hereby certify that the information and attachments submitted with this application are true, accurate and complete to the best of my knowledge and belief.

Name (Print): Chad Gallagher Title: Permit Agent  
Signature: Chad Gallagher Date: 1/14/2024  
e-mail address: chad.gallagher@ariswater.com Telephone: (575)444-9786

11.

OCD Representative Signature: Victoria Venegas Approval Date: 01/30/2024

Title: Environmental Specialist OCD Permit Number: 2RF-159

- ☒ OCD Conditions \_\_\_\_\_  
☐ Additional OCD Conditions on Attachment



January 14, 2024

## Statement Explaining Why the Applicant Seeks a Variance

The prescriptive mandates of the Rule that are the subject of this variance request are:

19.15.34.13.C A recycling containment shall be deemed to have ceased operations if less than 20% of the total fluid capacity is used every six months following the first withdrawal of produced water for use. The operator must report cessation of operations to the appropriate division district office. The appropriate division district office may grant an extension to this determination of cessation of operations not to exceed six months

The EKG Containment is associated with the Landes Recycling Facility as it receives treated produced water via pipeline when hydraulic stimulation of oil wells occurs in the area. Thus, the use of The EKG Containment is 100% dependent upon the drilling schedule of wells in the vicinity. The EKG Containment received treated produced from the Landes recycling facility and transferred 1,814,750 bbls for use at the Conoco Phillips Tomahawk wells. This use of The EKG Containment ceased on June 30<sup>th</sup> 2023.

**Matador Energy plans drill and stimulate the Edelstein Wells sometime during Q2 or Q3 2024. While schedules can change, The EKG Containment is essential to allowing these scheduled wells to use treated produced water in lieu of fresh water.**

Closure of The EKG Containment to maintain compliance with Rule 34 followed by reconstruction of the containment provides no environmental or financial benefit.



## Demonstration That the Variance Will Provide Equal or Better Protection of Fresh Water, Public Health and the Environment

Prior to introduction of produced water into the containment for the next stimulation event in Q2 or Q3 of 2024, Solaris will provide OCD with

- An update regarding the anticipated start of recycling activities
- A leak detection report 2 weeks prior to use in stimulation with the Containment filled with water. If Solaris detects leakage, the Containment will be drained and repaired prior to re-filling for use in well stimulation.

During the first three weeks after the initial test described above, Solaris will monitor the leak detection system and provide OCD with the findings via email.

We contend that these actions provide equal protection of fresh water, public health and the environment when compared to closure of the containment and rebuilding.

Pond or AST	Date	Operator Name	Break in Berms and run-on storm				Leak Detection Working (Y/N)?	Freeboard Fluid	
			Tear in Liner (Y/N)?	water (Y/N)?	Dead Wildlife (Y/N)?	Oil on fluid (Y/N)?		Level (ft)	Pond Level (ft)
EKG Really Scary Pond	5/29/2023	Samuel Cantu	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	6/4/2023	Samuel Cantu	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	6/10/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	6/14/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	6/18/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	6/25/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	7/1/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	7/8/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	7/15/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	7/22/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	7/27/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	7/31/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	8/7/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	8/14/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	8/19/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	8/24/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	8/27/2023	Samuel Cantu	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	9/3/2023	Samuel Cantu	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	9/10/2023	Samuel Cantu	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	9/17/2023	Samuel Cantu	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	9/24/2023	Samuel Cantu	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	10/1/2023	Samuel Cantu	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	10/4/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	10/8/2023	Samuel Cantu	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	10/15/2023	Samuel Cantu	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	10/22/2023	Samuel Cantu	FALSE	FALSE	FALSE	FALSE	TRUE	4.00	11.00
EKG Really Scary Pond	10/29/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	11.00	4.00
EKG Really Scary Pond	11/6/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	11.00	4.00
EKG Really Scary Pond	11/13/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	11.00	4.00
EKG Really Scary Pond	11/20/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	11.00	4.00
EKG Really Scary Pond	11/27/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	11.00	4.00
EKG Really Scary Pond	12/2/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	11.00	4.00
EKG Really Scary Pond	12/5/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	10.00	3.60
EKG Really Scary Pond	12/12/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	10.00	3.60
EKG Really Scary Pond	12/19/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	10.00	3.60
EKG Really Scary Pond	12/26/2023	Agustin Carmona	FALSE	FALSE	FALSE	FALSE	TRUE	10.00	3.50

**Venegas, Victoria, EMNRD**

---

**From:** Venegas, Victoria, EMNRD  
**Sent:** Wednesday, January 31, 2024 9:03 AM  
**To:** 'Chad Gallagher'  
**Subject:** 2RF-159 - EKG PRODUCED WATER CONTAINMENT FACILITY ID [FVV2110949066]  
**Attachments:** C-147 2RF-159 - EKG PRODUCED WATER CONTAINMENT FACILITY ID [FVV2110949066] 01.30.2024.pdf

**2RF-159 - EKG PRODUCED WATER CONTAINMENT FACILITY ID [FVV2110949066]**

Mr. Gallagher,

NMOCD has reviewed the cessation of operations extension request for 2RF-159 - EKG PRODUCED WATER CONTAINMENT FACILITY ID [FVV2110949066] received from [371643] SOLARIS WATER MIDSTREAM, LLC on 01/14/2024. The extension of the cessation of operations is approved with the following conditions of approval:

- 2RF-159 - EKG PRODUCED WATER CONTAINMENT FACILITY ID [FVV2110949066] extension of cessation of operations is approved from January 1, 2024, to July 1, 2024. Per NMAC 19.15.34.13.C extensions are considered for a maximum length of six months. **However, if after this 6-month period, the containment was not utilized at a minimum of 20% fluid capacity, no additional extensions would be granted, and the operator would be directed to remove all fluids and proceed with the closure requirements.**
- [371643] SOLARIS WATER MIDSTREAM, LLC will maintain a liquid level in the containment that is at least equal to the weight of the liner plus 20%. [371643] SOLARIS WATER MIDSTREAM, LLC may maintain a higher liquid level if they choose.
- [371643] SOLARIS WATER MIDSTREAM, LLC will provide written notice to [OCD Online](#) at least 72 hours, but no more than one week, prior to the recommencement of operations. Recommencement of recycling operations means that the operator plans to resume moving fluids through the containment and discharging fluids from the containment.
  - At the resumption of recycling operations, [371643] SOLARIS WATER MIDSTREAM, LLC is required to perform an incremental fluid level test for containment liquid levels above the minimum liquid level.
  - [371643] SOLARIS WATER MIDSTREAM, LLC will fill the containment [371643] SOLARIS WATER MIDSTREAM, LLC will pause filling operations at every 10% of total fluid capacity above the minimum level.
  - [371643] SOLARIS WATER MIDSTREAM, LLC will maintain the liquid level for each 10% volume increase for 24 hours and inspect and operate the leak detection system at the end of the 24-hour period.
  - If there are no liquids present in the leak detection system, [371643] SOLARIS WATER MIDSTREAM, LLC may proceed to fill the next 10% volume and repeat the process until the containment full design capacity minus the 3-feet of freeboard is reached.
  - If liquids are present, [371643] SOLARIS WATER MIDSTREAM, LLC should immediately cease the incremental fill test and perform a liner inspection. [371643] SOLARIS WATER MIDSTREAM, LLC should provide written notice of the fluid detection and liner inspection findings to OCD via [OCD Online](#) using a C-147 (long form) with the "Other" box checked and "Notice of fluid detection" written as the explanation of "Other."
  - Upon notification of fluid detection in the leak detection system, the OCD will verify the source of water (condensation versus produced water).
  - If the detected fluid is confirmed to be condensation, the OCD will issue a written approval to proceed with the incremental fluid level test.
  - If the detected fluid is confirmed to be produced water, [371643] SOLARIS WATER MIDSTREAM, LLC must comply with 19.15.34.13 NMAC. [371643] SOLARIS WATER MIDSTREAM, LLC must provide written notification to [OCD Online](#) on the actions taken to comply with 19.15.34.13 NMAC.

- After fluid is detected in the leak detection system, the incremental fill test cannot continue until after a written approval to proceed is issued by the OCD.
- [371643] SOLARIS WATER MIDSTREAM, LLC must submit copies of the detailed containment inspection records for the prior three months and a report detailing the incremental fluid level test process and results through the [OCD Online](#) system using a C-147 (long form) with the "Other" box checked. "Recommendation of Operations - Incremental Fluid Level Test" should be written as the explanation of "Other." Form C-147 must be completed and include information in sections 1 General Information, 2 Recycling Facility, 3 Recycling Containment, 4 Bonding, and 10 Operator Application Certification. Section 9 Recycling Facility and/or Containment Checklist may also need to be partially completed. Operators should verify that the resumption of operations notification does not result in any changes to the recycling containment operating and maintenance plan or the closure plan. If the recommencement of operations will affect the operating and maintenance plan or closure plan, operators should check those boxes in section 9 and provide updated plans or plan addendums as attachments to the C-147.
- [371643] SOLARIS WATER MIDSTREAM, LLC will continue to operate, maintain, and close 2RF-159 - EKG PRODUCED WATER CONTAINMENT FACILITY ID [FVV2110949066] in compliance with 19.15.34 NMAC, to include but not limited detailed inspection records, removal of trash/oil from containment, and monthly C-148 reporting (even if there is zero activity).
- A minimum of 3-feet freeboard must always be maintained in the recycling containment during operations.

Please let me know if you have any additional questions.

Regards,

**Victoria Venegas** • Environmental Specialist

Environmental Bureau

EMNRD - Oil Conservation Division

506 W. Texas Ave. Artesia, NM 88210

(575) 909-0269 | [Victoria.Venegas@emnrd.nm.gov](mailto:Victoria.Venegas@emnrd.nm.gov)

<https://www.emnrd.nm.gov/oed/>





**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

CONDITIONS

Action 303349

CONDITIONS

Operator: SOLARIS WATER MIDSTREAM, LLC 907 Tradewinds Blvd, Suite B Midland, TX 79706	OGRID: 371643
	Action Number: 303349
	Action Type: [C-147] Water Recycle Long (C-147L)

CONDITIONS

Created By	Condition	Condition Date
vvenegas	• 2RF-159 - EKG PRODUCED WATER CONTAINMENT FACILITY ID [FVV2110949066] extension of cessation of operations is approved from January 1, 2024, to July 1, 2024.	1/31/2024