

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

## Recycling Facility and/or Recycling Containment

Type of Facility:  Recycling Facility  Recycling Containment\*

Type of action:  Permit  Registration  
 Modification  Extension  
 Closure  Other (explain) PS 1902229621

\* 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: Enduring Resources IV, LLC (For multiple operators attach page with information) OGRID #: 372286  
Address: 200 Energy Court, Farmington, New Mexico 87401  
Facility or well name (include API# if associated with a well): KWU 2309-19K  
OCD Permit Number: #3RF-43 (For new facilities the permit number will be assigned by the district office)  
U/L or Qtr/Qtr NE/4 SW/4 Section 19 Township 23N Range 9W County: San Juan  
Surface Owner:  Federal  State  Private  Tribal Trust or Indian Allotment

2.  
 **Recycling Facility:**  
Location of recycling facility (if applicable): Latitude 36.210825 Longitude 107.831105 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 36.210825 Longitude 107.831105 NAD83  
 For multiple or additional recycling containments, attach design and location information of each containment.  
 Lined  Liner type: **Primary** Thickness 60 mil  LLDPE  HDPE  PVC  Other \_\_\_\_\_  
 String-Reinforced  
 Lined  Liner type: **Secondary** Thickness 60 mil  LLDPE  HDPE  PVC  Other \_\_\_\_\_  
 String-Reinforced  
Liner Seams:  Welded  Factory  Other \_\_\_\_\_ Volume: 212,746 bbl Dimensions: L 320' x W 350' x D 25'  
 Recycling Containment Closure Completion Date: \_\_\_\_\_

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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 \$ \_\_\_\_\_ (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 8 foot chain link 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.

**Variiances:**

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.

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

- Yes  No
- NA

Within the area overlying a subsurface mine.

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

- Yes  No

Within an unstable area.

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

- Yes  No

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).

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

- Yes  No

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

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

- Yes  No

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.

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

- Yes  No

Within 500 feet of a wetland.

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

- Yes  No

9.

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

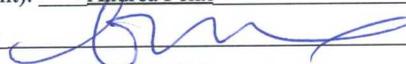
**Instructions:** Each of the following items must be attached to the application. Indicate, by a check mark in the box, that the documents are attached.

- Design Plan - based upon the appropriate requirements. *Attached design plan section modification*
- 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)

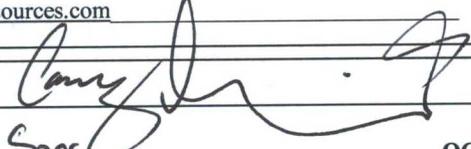
10.

**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): Andrea Felix Title: Regulatory Manager  
 Signature:  Date: 4-24-2019  
 e-mail address: afelix@enduringresources.com Telephone: 505-386-8205

11.

OCD Representative Signature:  Approval Date: 5/2/19

Title: Environmental Spec OCD Permit Number: 3RF-43

- OCD Conditions Enduring will install a geotextile Between Liners to Facilitate Drainage.
- Additional OCD Conditions on Attachment



*Enduring Resources IV, LLC*  
*KWU 2309-19K Recycling Facility / Containment*  
*#3RF-43*  
*Modification*

4. Design and Construction Plan

➤ 4.2 Liner Construction

**Modification to primary liner:** The primary liner will now be a 60-mil smooth conductive HDPE liner.

The primary liner is a 60-mil smooth conductive HDPE liner resistant to UV light, petroleum hydrocarbons, salt and acidic/alkaline solutions and covers the bottom sides of the pit including the three (3) feet of freeboard. This liner is in compliance with 19.15.34.12

**Modification to secondary liner:** The secondary liner will now be a 60-mil smooth nonconductive HDPE liner.

The secondary liner is a 60-mil smooth nonconductive HDPE liner resistant to UV light, petroleum hydrocarbons, salt and acidic/alkaline solutions and covers the bottom sides of the pit including the three (3) feet of freeboard. This liner is in compliance with 19.15.34.12

➤ 4.2 Drain Tube gas ventilation grid

**Modification to drain tube:** Enduring will not be installing the Drain Tube gas ventilation grid.

➤ 4.3 Leak Detection

**Modification to PVC Leak Detection Port:** Install a 6-inch PVC pipe to the leak detection system in replace of the approved 4-inch PVC pipe.

The leak detection system between the upper and lower geomembrane liners consist of a 200-mil geo net to facilitate drainage. The leak detection system consists of a properly designed drainage and collection and removal system placed above the

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lower geomembrane liner in depressions and sloped to facilitate the earliest possible leak detection. A 3-foot-wide by 3-foot-long by 2-foot-deep depression will be constructed to allow for collection of any leaking liquid. A 2-inch and 6-inch PVC liner will be installed in between the primary and secondary liners from the top of the tank to the depression to allow for detection and removal of liquid. The leak detection system as modified is in compliance with 19.1.34.12



*Enduring Resources IV, LLC*  
*KWU 2309-19K Recycling Facility / Containment*  
*#3RF-43*

April 24, 2019  
Variance Request for 19.15.34.12 NMAC

**Design & Construction Specifications for a Recycling Containment:**

Enduring is requesting variance to section 4 of the Design & Construction Specifications for a Recycling Containment regarding Secondary Liners.

Enduring would like to install a 60-mil HDPE liner in place of the specified 30-mil LLDPE string reinforced or equivalent as stated in the rule. Enduring believes this liner will provide equal or better protection of fresh water, public health and the environment.