District I 1625 N. French Dr., Hobbs, NM 88240State of New MexicoForm C-147 Revised April 3, 2017District II 811 S. First St., Artesia, NM 88210DepartmentDepartmentDistrict III 1000 Rio Brazos Road, Aztec, NM 87410Oil Conservation Division 1220 So St. Francis Dr., Santa Fe, NM 87505Oil 220 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       0 Other (explain)         * 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:
2.       X 16 <sup>d</sup> ∪ ACCANC       Free Bond       Dested         Location of recycling facility (if applicable): Latitude 36.14847       Longitude -107.589762       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.
NMOCD DEC 2 1 2018 DISTRICT III Oil Conservation Division Page 1 of 3

### Smith, Cory, EMNRD

Smith, Cory, EMNRD From: Thursday, January 3, 2019 9:13 AM James McDaniel Fields, Vanessa, EMNRD; 'Andrea Felix' Enduring W. Lybrook Unit 720 Assigned 3RF-41 Subject:

James,

Sent:

To:

Cc:

The following Recycling Facility have been approved please see below for their assigned 3RF #'s.

W. Escavada Unit 300

3RF-42 Conditions of Approval 18" Free Board Variar

Enduring may search OCD online under Administrative/Environmental Orders "3RF - Recycling Facility - Aztec -(3RF)" to find the scanned document(Once it is scanned).

If you have any questions give me a call. Please remember Enduring will need the Admin # to report on form C-148 monthly please make sure that Enduring sends them in as soon as possible and even if there is no activity.

**Cory Smith Environmental Specialist Oil Conservation Division** Energy, Minerals, & Natural Resources 1000 Rio Brazos, Aztec, NM 87410 (505)334-6178 ext 115 cory.smith@state.nm.us

### **Bonding:**

4

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.

### Fencing:

5.

Four foot height, four strands of barbed wire evenly spaced between one and four feet

Alternate. Please specify\_\_\_\_

### 6.

7

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

### 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.

### 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
<ul> <li>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.</li> <li>Written confirmation or verification from the municipality; written approval obtained from the municipality</li> </ul>	□ Yes⊠ No □ NA
<ul> <li>Within the area overlying a subsurface mine.</li> <li>Written confirmation or verification or map from the NM EMNRD-Mining and Minerals Division</li> </ul>	🗌 Yes 🛛 No
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; topographic map</li> </ul>	🗌 Yes 🛛 No
Within a 100-year floodplain. FEMA map	🗌 Yes 🛛 No
<ul> <li>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).</li> <li>Topographic map; visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🛛 No
<ul> <li>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; aerial photo; satellite image</li> </ul>	🗌 Yes 🛛 No
<ul> <li>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.</li> <li>NM Office of the State Engineer - iWATERS database search; visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🛛 No
<ul> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; topographic map; visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🛛 No

### **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): James McDaniel	Title: <u>HSE Supervisor</u>
Signature:	Date: <u>12/21/2018</u>
e-mail address: jmcdaniel@eduringresources.com	Telephone: <u>505-636-9731</u>
<u>A//</u>	
11. OCD Representative Signature:	Approval Date: 1/3/19
Title: Environymented Spec	OCD Permit Number: <u>3RF-4/2</u>
OCD Conditions 18" Free Bard Dewied	
Additional OCD Conditions on Attachment	

Oil Conservation Division 1000 Rio Brazos Rd. Aztec, New Mexico 87410 Email: cory.smith@state.nm.us Phone (505) 334-6178 Ext 115

Re: Variance Request for 19.15.34 NMAC

Enduring Resources, LLC (Enduring) is proposing to mitigate migratory birds pursuant to the attached *Migratory Bird Mitigation Plan* as required in 19.15.34.12.E. We believe this will provide equal or better protection than the requirements listed in 19.15.34.12.E NMAC.

Enduring is proposing a variance to the required three (3) feet of freeboard, as required in 19.15.34.13(A)(2). Enduring is instead requesting eighteen (18) inches of freeboard for this containment, as Enduring believes that in the instance of the above grade tank, the containment can be quickly de-watered if a rain event threatens to overtop the tank, and due to the fact that the containment will not be subject to surface water runon as an above grade tank.

Respectfully Submitted,

MD:1

James McDaniel, CHMM #15676 HSE Supervisor Enduring Resources, LLC

# **Design & Construction Plan**

WEU 300H Water Recycle Facility



Enduring Resources, LLC 200 Energy Court Farmington, New Mexico 87401

> *Prepared by:* James McDaniel HSE Supervisor

### Introduction

This Design and Construction Plan is designed to meet the requirements of NMAC 19.15.34.13, which outlines the requirements for design and construction criteria for a produced water recycling containment. Enduring Resources, LLC (Enduring) will construct this recycling containment in accordance with the following design and construction plan.

1. The operator shall design and construct a recycling containment to ensure the confinement of produced water, to prevent releases and to prevent overtopping due to wave action or rainfall.

The recycling containment has been designed the containment to meet the above criteria, ensuring the confinement of produced water, the prevention of releases, and the prevention of overtopping due to wave action or rainfall.

2.

a. A recycling containment shall have a properly constructed foundation and interior slopes consisting of a firm, unyielding base, smooth and free of rocks, debris, sharp edges or irregularities to prevent the liner's rupture or tear. The recycling containment has been designed, and will be constructed, to have a properly

The recycling containment has been designed, and will be constructed, to have a properly constructed foundation with an unyielding base, free of rocks debris and sharp edges.

b. Geotextile is required under the liner when needed to reduce localized stress-strain or protuberances that otherwise may compromise the liner's integrity. The operator shall construct the containment in a levee with an inside grade no steeper than two horizontal feet to one vertical foot (2H:1V). The levee shall have an outside grade no steeper than three horizontal feet to one vertical foot (3H:1V). The top of the levee shall be wide enough to install an anchor trench and provide adequate room for inspection and maintenance.

Geotextile will be placed under the liner the secondary liner in order to reduce stressstrain on the liner.

3.

a. Each recycling containment shall incorporate, at a minimum, a primary (upper) liner and a secondary (lower) liner with a leak detection system appropriate to the site's conditions.

The recycling containment is designed to have a 45 mil, string reinforced LLDPE liner as the primary liner, and a 40 mil LLDPE liner as the secondary liner.

b. The edges of all liners shall be anchored in the bottom of a compacted earth-filled trench. The anchor trench shall be at least 18 inches deep.
 This containment is an above grade tank, and the liner will be secured to the top of the AST using steel bolts

4.

a. All primary (upper) liners in a recycling containment shall be geomembrane liners composed of an impervious, synthetic material that is resistant to ultraviolet light, petroleum hydrocarbons, salts and acidic and alkaline solutions. All primary liners shall be 30-mil flexible PVC, 45-mil LLDPE string reinforced or 60-mil HDPE liners.

The primary liner will be a 45-mil, LLDPE, string reinforced liner that is composed of material that is resistant to ultraviolet light, petroleum hydrocarbons, salt solutions, acidic

solutions and alkaline solutions. Liner compatibility meets the conductivity requirement of  $1 \times 10^{-9}$  cm/sec.

- b. Secondary liners shall be 30-mil LLDPE string reinforced or equivalent with a hydraulic conductivity no greater than 1 x 10-9 cm/sec. Liner compatibility shall meet or exceed the EPA SW-846 method 9090A or subsequent relevant publications. The secondary liner will be a 40-mil, LLDPE, string reinforced liner that is composed of material that is resistant to ultraviolet light, petroleum hydrocarbons, salt solutions, acidic solutions and alkaline solutions. Liner compatibility meets the conductivity requirement of 1 x 10<sup>-9</sup> cm/sec.
- 5. The operator of a recycling containment shall minimize liner seams and orient them up and down, not across, a slope of the levee. Factory welded seams shall be used where possible. The operator shall ensure field seams in geosynthetic material are thermally seamed. Prior to field seaming, the operator shall overlap liners four to six inches. The operator shall minimize the number of field seams and corners and irregularly shaped areas. There shall be no horizontal seams within five feet of the slope's toe. Qualified personnel shall perform field welding and testing.

Liner material will be factory welded by the manufacturer by qualified personnel. The liner material will overlap a minimum of 4 inches. No horizontal seam will be placed within 5 feet of the slopes toe. All welding and testing will be completed by qualified personnel.

- 6. At a point of discharge into or suction from the recycling containment, the operator shall insure that the liner is protected from excessive hydrostatic force or mechanical damage. External discharge or suction lines shall not penetrate the liner. External discharge or suction lines will not penetrate the liner. The liner will be protected from excessive hydrostatic force or mechanical damage, and the point of discharge and suction from the containment is specifically designed to eliminate damage from suction or discharge in and out of the containment.
- 7. The operator of a recycling containment shall place a leak detection system between the upper and lower geomembrane liners that shall consist of 200-mil geonet or two feet of compacted soil with a saturated hydraulic conductivity of 1 x 10-5 cm/sec or greater to facilitate drainage. The leak detection system shall consist of a properly designed drainage and collection and removal system placed above the lower geomembrane liner in depressions and sloped to facilitate the earliest possible leak detection.

The containment has been designed with a leak detection system made up of a conductive geocomposite material, at least 200 mm thick. The pond is comprised of a 40 mil liner base, with a 200 mm geocomposite material for leak detection, and overlaid with an additional 45 mil liner. The bottom of the containment will have a 6" PVC pipe inserted between the liners. The pipe will be checked during the weekly inspection for the presence of water using a water level meter. In the event water is detected in the leak detection sump, the water will be immediately pumped out to determine if the water will return.

8. The operator of a recycling containment shall design the containment to prevent run-on of surface water. The containment shall be surrounded by a berm, ditch or other diversion to prevent run-on of surface water.

The containment is above ground, and will not be subject to water run-on.

9. Prior to constructing containment, the operator shall strip and stockpile the topsoil for use as the final cover or fill at the time of closure.

The location is a previously constructed pad, and no top-soil will be required to be removed in order to construct the containment.

10. The operator shall post an upright sign no less than 12 inches by 24 inches with lettering not less than two inches in height in a conspicuous place on the fence surrounding the containment. The operator shall post the sign in a manner and location such that a person can easily read the legend. The sign shall provide the following information: the operator's name, the location of the site by quarter-quarter or unit letter, section, township and range, and emergency telephone numbers.

A sign meeting these requirements will be posted.

11. The operator shall fence or enclose a recycling containment in a manner that deters unauthorized wildlife and human access and shall maintain the fences in good repair. The operator shall ensure that all gates associated with the fence are closed and locked when responsible personnel are not onsite. Recycling containments shall be fenced with a four foot fence that has at least four strands of barbed wire evenly spaced in the interval between one foot and four feet above ground level.

The pad is surrounded by a fence meeting the requirements of this section.

12. The operator shall ensure that a recycling containment is screened, netted or otherwise protective of wildlife, including migratory birds. The operator shall on a monthly basis inspect for and, within 30 days of discovery, report the discovery of dead migratory birds or other wildlife to the appropriate wildlife agency and to the division district office in order to facilitate assessment and implementation of measures to prevent incidents from reoccurring.

Enduring Resources will install a bird deterrent system pursuant to the attached *Migratory Bird Mitigation Plan*. The containment will be inspected weekly for dead migratory birds, and will report and found accordingly.

# LakeTank<sup>™</sup>

### **Overview:**

Contain more than 5 acre feet (1.7 million gallons) of water with just one tank. The LakeTank<sup>™</sup> B-40 reduces traffic and carbon footprint on your jobsite, by replacing 80 traditional 500 BBL frac tanks and minimizes manifolding time.

#### Features:

- · Specially designed panel handling system for safe, rapid deployment
- Two OSHA compliant access/egress ladders
- One stairway observation platform
- Four 4" fill lines, Three 4" circulation lines
- One 12" low suction line for high volume pumping applications
- · Heavy duty connecting plates and pins for safe reliable containment
- · Six temporary panel supports to ensure safety during installation
- No easy access to the liner from outside the tank
- Standard liner is 40mil LLDPE
- Standard underlayment is 100Z Geotextile Ground Pad
- Reduced transportation costs: Complete tank structure is delivered on three trucks (6 truck trips vs. 98 for conventional 500bbl frac tanks)
- · Reduced labor costs during manifolding and operation
- · Reduced heating costs
- Reduced site preparation costs (smaller footprint compared to 500bbl frac tanks)

Structure Diameter	160 ft.
Working Clearance	220 ft.
Capacity with 8" free board	40,280 BBL
Number of Panels	18
Number of Trucks to transport	3
Size of each Panel	12x28 ft.
Panel Weight (w/o insulation)	6,550 lb.
Liner Diameter	204 ft. Diameter
Liner Weight = 0.19 lb./sq. ft.	5,150 lb.

#### Specs:



### Accessories:

- FreezeSentry<sup>™</sup> Heating equipment
- Tank Sidewall Insulation
- Floating Insulated Covers
- Bird Netting
- Filtration Equipment
- Temperature and Level Indicators/Alarms/Telemetry
- Various Liner Materials & Thicknesses
- Additional Suction or Fill Lines





Liquid Ingenuity, 800-742-7246 rainforrent.com

PUMPS • TANKS • FILTRATION • PIPE • SPILLGUARDS Rain for Rent is a registered trademark of Western Oilfields Supply Company. Features and specifications are subject to change without notice. **B-40** 



## **Operations and Maintenance Plan**

# W Escavada Unit 300H Water Recycle Facility



Enduring Resources, LLC 200 Energy Court Farmington, New Mexico 87401

> **Prepared by:** James McDaniel HSE Supervisor

### Introduction

This Operations and Maintenance (O&M) plan is designed to meet the requirements of NMAC 19.15.34.13, which outlines the requirements for O&M of a produced water recycling containment. Enduring Resources, LLC (Enduring) will operate this recycling containment in accordance with the following O&M plan.

### **Operations and Maintenance Plan**

- 1. Enduring will inspect the recycling containment and associated leak detection systems weekly while the containment is holding fluids. An inspection log will be maintained by Enduring, and will be available for review upon request by the division.
- 2. Enduring will remove and visible oil from the surface of the recycling containment upon discovery.
- 3. Enduring will maintain a minimum of eighteen (18) inches of freeboard in the containment at all times.
- 4. The injection and withdrawal of fluids from the containment shall be accomplished through a header, diverter or other hardware that prevents damage to the liner by erosion, fluid jets or impact from installation and removal of hoses or pipes.
- 5. If a leak is discovered in the containments primary liner above the liquid level in the containment, Enduring will repair the primary liner within 48 hours, or request an extension on repair within the 48-hour time limit.
- 6. If a leak is discovered in the containments primary liner below the liquid level in the containment, Enduring will notify the division office of the leak, remove all fluids above the leak level, and repair the primary liner within 48 hours, or request an extension on repair within the 48-hour time limit.
- 7. The recycling containment will be operated in such a way to prevent the collection of surface water.
- 8. The recycling containment will not be used for the storage or discharge of hazardous waste.
- 9. Enduring will consider the recycling containment to have ceased operations if less than 20% of the total fluid volume is used every six (6) months following the first withdrawal of produced water for use. Enduring will report cessation of operations to the appropriate division district office. If additional time is needed for closure, Enduring will request an extension from the appropriate division district office prior to the expiration of the initial six (6) month time period.

# **Closure Plan**

# W Escavada Unit 300H Water Recycle Facility



Enduring Resources, LLC 200 Energy Court Farmington, New Mexico 87401

> *Prepared by:* James McDaniel HSE Supervisor

### Introduction

This closure plan is designed to meet the requirements of NMAC 19.15.34.14, which outlines the requirements for closure of a produced water recycling containment. Enduring Resources, LLC (Enduring) will perform the following actions upon final closure of this produced eater recycling containment.

### **Closure Plan**

- 1. Upon cessation of operations (Defined as the use of less than 20% of the pond's total fluid capacity), Enduring will remove all fluids within 60 days of the official date of cessation.
- 2. Enduring will close the produced water containment within six (6) months from the official date of cessation. If Enduring will require more than 6 months to complete closure activities, an extension request will be filed prior to the six (6) month time limit for closure.
- 3. Closure activities will consist of the following:
  - a. Removal of all containment contents
  - b. Removal of liners and associated leak detection equipment for disposal at a division approved facility.
  - c. Removal of all equipment associated with the continued operation of the recycling containment.
  - d. A 5-point composite soil sample will be collected in the containment area under the location of the liner, and the sample will be analyzed for the constituents listed in *Table I*.
  - e. Additional grab samples of any obvious wet or stained areas will be collected and analyzed for the constituents listed in *Table I*, in addition to the 5-point composite sample.
  - f. If the closure sample(s) collected return results equal to or less than the values listed in *Table I* for sites with groundwater from 51-100' below ground surface, closure will be completed.
  - g. If the closure sample(s) collected return results above the values listed in *Table I*, Enduring will report the elevated sample values to the NMOCD, and additional delineation may be required at that time.
- 4. The containment will be an above ground AST on an existing pad that will be used for future oil and gas development. The location will not require backfill or reclamation at this time, as the pad will be used for the continued development of the Enduring lease in this area.
- 5. Within 60 days of final closure completion, Enduring will submit a closure report on form C-147, including required attachments, to document all closure activities including sampling results. The closure report will certify that all information in the report and attachments is correct and that Enduring has complied with all applicable closure requirements and conditions specified in division rules or directives.

Closure Criteria for Becycli	ng Containments	fable I	
Depth below bottom of containment to groundwater less than 10,000 mg/l TDS	Constituent	Method*	Limit**
51 feet - 100 feet	Chloride	EPA 300.0	10,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg
> 100 feet	Chloride	EPA 300.0	20,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

\* Or other test methods approved by the division. \*\* Numerical limits or natural background level, whichever is greater. [19.15.34.14 NMAC - N, 3/31/15]

- On September 18, 2018, Mo-Te Drilling drilled a boring to 60' below ground surface at the WEU 300H Pad. Vanessa Field w/ NMOCD was on-site
- On September 19, 2018, James McDaniel, Enduring Resources, and Vanessa Fields, NMOCD returned to the location to check the boring for water. The boring was tagged DRY at 56' below ground surface.
- Vanessa Fields determined that the location would meet the siting criteria for groundwater at over 50' below ground surface based on these results. Email confirmation is attached for reference.



#### **James McDaniel**

Fields, Vanessa, EMNRD <vanessa.fields@state.nm.us></vanessa.fields@state.nm.us>
Wednesday, September 19, 2018 2:31 PM
James McDaniel; Smith, Cory, EMNRD; Powell, Brandon, EMNRD
RE: WEU 300H Recycling Containment Water Test Boring

Good afternoon James,

Per our conversation today, along with discussing with Santa Fe and todays site assessment on the WEU 300H, the groundwater is 50' or greater as there was no fluid observed in the open hole after setting for 24 hours.

Thank you,

Vanessa Fields Environmental Specialist Oil Conservation Division Energy, Minerals, & Natural Resources 1000 Rio Brazos, Aztec, NM 87410 (505)334-6178 ext 119 Cell: (505) 419-0463 vanessa.fields@state.nm.us

From: James McDaniel <JMcDaniel@enduringresources.com> Sent: Wednesday, September 19, 2018 2:25 PM To: Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us> Subject: WEU 300H Recycling Containment Water Test Boring

Vanessa,

Based on our conversation today, the groundwater at the WEU 300H Pad is considered to be 50' or greater below the surface, allowing this site to meet the criteria for a Recycling Containment as far as depth to groundwater is concerned. Thank you for your time in regards to this project.

James McDaniel HSE Supervisor Enduring Resources CSP #30009 CHMM #15676 *Office*: 505-636-9731 *Cell*: 505-444-3004 jmcdaniel@enduringresources.com



Page 1 of 1

	New Mexico Office of the State Engineer Wells with Well Log Information		
	No wells found.		
PLSS Search: Section(s): 17	Township: 22N Range: 07W		

The data is furnished by the NMOSE/ISC and is accepted by the socipient with the expressed understanding that the OSE/ISC make no warrenties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability for ar particular purpose of the data. B/28/18 6:44 AM WELLS WITH WELL LOG INFORMATION

# National Flood Hazard Layer FIRMette



### Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT 36°8'52.04"N Without Base Flood Elevation (BFE) Zone A, V, A99 With BFE or Depth Zone AE, AO, AH, VE, AR SPECIAL FLOOD **Regulatory Floodway** HAZARD AREAS TT22N RR07W S9 TT22N RR07W S8 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone ) **Future Conditions 1% Annual** Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee. See Notes, Zone X **OTHER AREAS OF** Area with Flood Risk due to Levee Zone D FLOOD HAZARD NO SCREEN Area of Minimal Flood Hazard Zone X **Effective LOMRs OTHER AREAS** Area of Undetermined Flood Hazard Zone - ---- Channel, Culvert, or Storm Sewer GENERAL STRUCTURES IIIIII Levee, Dike, or Floodwall 20.2 Cross Sections with 1% Annual Chance Navajo Indian Reservation Water Surface Elevation 17.5 350THR AREA OF MINIMAL FLOOD HAZARD **Coastal Transect** (8)- - -Base Flood Elevation Line (BFE) Zone X Limit of Study **Jurisdiction Boundary** ----- Coastal Transect Baseline OTHER **Profile Baseline** FEATURES **Hydrographic Feature** Sandoval County TT22N RR07W S17 eff. 3/18/2008 350055 **Digital Data Available** No Digital Data Available  $\square$ MAP PANELS Unmapped The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location. This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/28/2018 at 8:48:07 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or 07°35'4.51 become superseded by new data over time. This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, Ž legend, scale bar, map creation date, community identifiers, USGS The National Map: Orthoimagery. Data refreshed October 2017. FIRM panel number, and FIRM effective date. Map images for 36°8'22.99"N unmapped and unmodernized areas cannot be used for Feet 1:6.000 regulatory purposes. 1.000 1,500 2,000 250 500



![](_page_21_Picture_0.jpeg)

### U.S. Fish and Wildlife Service National Wetlands Inventory

**WEU 300H** 

![](_page_22_Picture_2.jpeg)

National Wetlands Inventory (NWI) This page was produced by the NWI mapper

### Enduring Resources, LLC's Recycling Containment Migratory Bird Mitigation Plan

Enduring Resources, LLC (Enduring) is proposing this Migratory Bird Mitigation Plan (Mitigation Plan) in compliance with the New Mexico Oil Conservation Division (NMOCD) Rule 19.15.34.12.E Enduring shall ensure that the recycling containment is protective of wildlife by implementing the following proposed Mitigation Plan. Enduring employees will inspect the containment weekly for and, within 30 days of discovery, report the discovery of dead migratory birds or other wildlife to the appropriate wildlife agency and to the division district office in order to facilitate assessment and implementation of measures to prevent incidents from reoccurring. This Mitigation Plan will utilize a combination of visual and audio deterrents to discourage wildlife, particularly birds and bats, from the recycling containment in order to mitigate potential impacts. This Mitigation Plan would be implemented while the Recycling Containment is active and in use, as to not desensitize birds to the deterrents.

The following mitigations will be implemented to reduce any wildlife impacts that may occur from the Recycling Containment:

- The following visual bird deterrents will be installed (Appendix A):
  - Bird-X Prowler Owl decoys will be installed at all four corners of the Containment.
  - Scare-Eye Balloons will be installed along the perimeter of the Containment.
- A Bird-X BroadBand PRO System will be installed at the Containment facility. It utilizes sonic (naturally-recorded bird distress calls & predator cries) to deter birds; as well as, ultrasonic high-frequency sound waves to deter bats. Bird propane cannons were avoided, so as not to disturb other wildlife species.
- The containment will be inspected on a weekly basis when water is present in the containment. All inspectors will insure the containment is receiving only filtered produced water with no hydrocarbons, as well as being trained to inspect the premises for, and respond to any wildlife incident, should it occur.
- Inspection will include:
  - An inspection of the filtration system and all visual and audio deterrents to insure they are in working order and functioning properly.
  - A thorough search of the entire containment facility, and just beyond, for the presence of any wildlife (entrapped, injured, dead, etc.).
- In the event a wildlife incident should occur, James McDaniel with Enduring will be contacted immediately and he will notify the appropriate wildlife agency and division district office. Enduring, appropriate wildlife agency, and division district office will then work collaboratively to address the incident appropriately to insure the incident does not reoccur.

### Appendix A: Visual and Audio Deterrents

![](_page_24_Picture_1.jpeg)

	Ja Search
st centrel for today's environment	Call Us 888.683.1834 Home About News Blog International GSA Retail Products Con
Bird Products Anin	al/Rodent Products Insect Products Interactive Problem Solver Knowledge Center FREE Evaluation
All Bird-X Products	Prowler Owl
Electronic Bird Control Sonic Bird Control Ultrasonic Bird Control Other Electronic Bird	Proven Visual Scare Saves Money on Cleanup & Repair Eliminates Bird & Small Pest Problems Money-Back Guarantee
Deterrents Solar Panel Products Bird Spikes	Decades-proven visual deterrent, improved with dynamic realism & movement! Scare away birds & small pests with this predator replica of th most-feared aerial predator, the Great Horned Owl, which catches & eats predator exercition it can part to
Bird Spikes Kits Stainless Steel Spikes Plastic Spikes	Lifelike, wind-catching design increases effectiveness     Accurate plumage & hunting flight pose     Intimidating, glassy eyes "follow" pests     Elevible wind realistically
Bird Netting	Without movement, an owl scare is useless - don't be fooled by imitations are immobile! Install Provide Owl decoy in any open outdoor area when are immobile! Install Provide Owl decoy in any open outdoor area when third or any open outdoor area when are immobile! Install Provide Owl decoy in any open outdoor area when third or any open outdoor area when third or any open outdoor area when any open outdoor area when area immobile of the open of the open of the open outdoor area when any open outdoor any open outdoor an
Laser Bird Control	Quantity 1
Shock Track Systems	Price \$ 39.25 Product Total \$ 39.25
Bird Balls	ADD TO CART >
Bird Wire	Quality Guarantee
Visual Scares and Predator Decoys >	Guaranteed to be manufactured to specifications & free from defect at the time of purchase.
Bird Gels, Taste Aversions, & OvoControl® P	Reviews Details Applications Benefits Add & Combine Specs
For Songbird Lovers	Predator owl replice; life-size owl     Owl scare repels pest birds & other small animals     Always, moving "porture issens birds away
Remote Control Drone	<ul> <li>Anways-moving numbing posture keeps onds away</li> <li>4-foot wingspan &amp; ecourate markings</li> <li>Safe, humane, non-toxic, silent</li> </ul>
Retail Products	Covers up to 6,000 sq. ft.

Accessories

![](_page_26_Picture_0.jpeg)

![](_page_26_Picture_1.jpeg)

News

5100

Simple, Highly Effective Bird Repellent

Reduce Time & Energy Spent on Cleanup

Reflective Mylar Eyes and Tails included

![](_page_26_Picture_2.jpeg)

Bird Spikes Bird Spikes Kits Stainless Steel Spikes Plastic Spikes

All Bird-X Products

![](_page_26_Picture_4.jpeg)

Drones

Laser Bird Control

Shock Track Systems

**Bird Balls** 

Bird Wire

Visual Scares and Predator Decoys>

Bird Gels, Taste Aversions, & OvoControl® P

For Songbird Lovers

Remote Control Drone

Details

- Includes mylar eyes, mylar tails, and strings for each balloon
- Westherproof, vinyl, inflatable balloon
- · Design exaggerates the glaring stare and gaping mouth of natural predators
- Easy installation

#### (3-Pack)

About

Interactive Problem Solver

Home

Keep birds away with these simple vinyl ball visual deterrents that move with the wind & intimidate pest birds within visible range.

International GSA

Knowledge Center FREE Evaluation

Retail Products Contact

100

- · Includes three balloons one white, one yellow, one black
- · Easy to use, cost-effective solution hang the balloons anywhere

Scare Eye® balloons are useful in many applications - homes, gardens,

- Balloons move in the wind for fear of movement

barns, trees, garages, marinas, doorways, & many more. Quantity 1 Price \$ 32.55 Product Total \$ 32.55 ADD TO CART 1 Guaranteed to be manufactured to specifications and free from defect at the time of purchase. Applications Benefits Add & Combine Specs

- Predator decoy; 3D balloons

**Quality Guarantee** 

**Reviews** 

- Three balloons included: one (1) white, one (1) black, and one (1) yellow

- Wind causes the Scare-Eye Balloons to move in the wind, increasing efficacy