State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-144 Revised June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.

For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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| Proposed Alternative Method Permit or Closure Plan Application | |
| Proposed Alternative Method Permit or Closure Plan Application Type of action: Below grade tank registration Permit of a pit or proposed alternative method Closure of a pit, below-grade tank, or proposed alternative method Modification to an existing permit/or registration Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method | |
| Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request | |
| Please 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 ordinate. | nces. |
| Operator: Dugan Production Corp. OGRID#: 006515 | |
| Address: 709 East Murray Drive, Farmington, New Mexico 87401 | |
| Facility or well name:Irish Com #90S | |
| API Number: 30-045-33725 OCD Permit Number: | |
| U/L or Qtr/Qtr O Section 11 Township 26N Range 13W County: San Juan | |
| Center of Proposed Design: Latitude 36.49878 N Longitude 108.18499 W NAD: 1927 X 1983 | |
| Surface Owner: Federal State Private Tribal Trust or Indian Allotment | } |
| 2. | |
| X Pit: Subsection F, G or J of 19.15.17.11 NMAC | |
| Temporary: X Drilling Workover | |
| Permanent Emergency Cavitation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yes no | |
| Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other | |
| ☐ String-Reinforced | |
| | |
| Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D | _ |
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| 3. Below-grade tank: Subsection I of 19.15.17.11 NMAC RCUD TON 29 1 4 | |
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| 3. Below-grade tank: Subsection I of 19.15.17.11 NMAC RCUD JAN 29 '14 Volume: bbl Type of fluid: OIL CONS. DIV. Tank Construction material: DIST. 3 Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off | |
| 3. Below-grade tank: Subsection I of 19.15.17.11 NMAC RCUD JAN 29 *14 | |
| 3. Below-grade tank: Subsection I of 19.15.17.11 NMAC RCUD JAN 29 '14 Volume: bbl Type of fluid: OIL CONS. DIV. Tank Construction material: DIST. 3 Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off | |
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| Below-grade tank: Subsection I of 19.15.17.11 NMAC CVD JAN 29 314 | |
| Below-grade tank: Subsection I of 19.15.17.11 NMAC CUD JAN 29 *14 | |
| Below-grade tank: Subsection I of 19.15.17.11 NMAC CUD JAN 29 14 | |
| Below-grade tank: Subsection I of 19.15.17.11 NMAC CUD JAN 29 14 | |
| Below-grade tank: Subsection I of 19.15.17.11 NMAC Subsection I of 19.15.17.11 NMAC Volume: | |

Alternate. Please specify

| Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks) | |
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| Screen Netting Other | |
| ☐ Monthly inspections (If netting or screening is not physically feasible) | |
| Signs: Subsection C of 19.15.17.11 NMAC 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 and Exceptions: Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance. Please check a box if one or more of the following is requested, if not leave blank: \[\subseteq \text{Variance(s)}: Requests must be submitted to the appropriate division district for consideration of approval. \[\subseteq \text{Exception(s)}: Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. | |
| Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptance are provided below. Siting criteria does not apply to drying pads or above-grade tanks. | otable source |
| General siting | |
| Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | Yes No |
| Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | Yes No |
| 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. (Does not apply to below grade tanks) - Written confirmation or verification from the municipality; Written approval obtained from the municipality | ☐ Yes ☐ No |
| Within the area overlying a subsurface mine. (Does not apply to below grade tanks) - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division | Yes No |
| Within an unstable area. (Does not apply to below grade tanks) 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. (Does not apply to below grade tanks) - FEMA map | Yes No |
| Below Grade Tanks | |
| Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site | Yes No |
| Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site | ☐ Yes ☐ No |
| Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter) | |
| Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site | ☐ Yes ☐ No |
| Within 300 feet from a occupied 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 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site | Yes No |

| Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site | ☐ Yes ☐ No | |
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| Temporary Pit Non-low chloride drilling fluid | | |
| Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site | ☐ Yes ☐ No | |
| Within 300 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 private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site | ☐ Yes ☐ No | |
| Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site | ☐ Yes ☐ No | |
| Permanent Pit or Multi-Well Fluid Management Pit | | |
| 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 | |
| Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number: or Permit Number: | | |
| Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached. Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC A List of wells with approved application for permit to drill associated with the pit. Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 and 19.15.17.13 NMAC Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC | | |
| Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Previously Approved Design (attach copy of design) API Number: or Permit Number: | | |
| | | |

| Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the | documents are |
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| attached. Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC | |
| Climatological Factors Assessment □ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC □ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC □ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC □ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC □ Quality Control/Quality Assurance Construction and Installation Plan □ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC □ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC □ Nuisance or Hazardous Odors, including H₂S, Prevention Plan □ Emergency Response Plan □ Chi Ent No. Control Plan (Chi Ent No. Control Plan (Chi | |
| Oil Field Waste Stream Characterization Monitoring and Inspection Plan | |
| Erosion Control Plan Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC | |
| Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan. | |
| Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well F | luid Management Pit |
| Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial Alternative Closure Method | |
| 14. Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be | attached to the |
| closure plan. Please indicate, by a check mark in the box, that the documents are attached. Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC | |
| 15. | |
| Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. F 19.15.17.10 NMAC for guidance. | |
| Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | ☐ Yes ☐ No ☐ NA |
| Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | ☐ Yes ☐ No ☐ NA |
| Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | ☐ Yes ☐ No ☐ NA |
| Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site | Yes No |
| Within 300 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 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site | Yes No |
| Written confirmation or verification from the municipality; Written approval obtained from the municipality | Yes No |
| Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site | ☐ Yes ☐ No |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance | |

| - Written confirmation or verification from the municipality; Written approval obtained from the municipality | ☐ Yes ☐ No | | |
|---|-----------------|--|--|
| Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division | | | |
| Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological | Yes No | | |
| Society; Topographic map Within a 100-year floodplain. | | | |
| - FEMA map | Yes No | | |
| On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved) Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC | | | |
| Operator Application Certification: | | | |
| I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and believed to the best of my | ief. | | |
| Name (Print): Kurt Fagrelius Title: VP-Land & Exploration | | | |
| Signature: Rwffzww Date: January 27, 2014 | | | |
| | | | |
| e-mail address: kfagrelius@duganproduction.com Telephone: 505-325-1821 | | | |
| e-mail address: kfagrelius@duganproduction.com Telephone: 505-325-1821 18. OCD Approval: X Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) | log d | | |
| e-mail address: kfagrelius@duganproduction.com Telephone: 505-325-1821 | 12014 | | |
| e-mail address: kfagrelius@duganproduction.com Telephone: 505-325-1821 18. OCD Approval: X Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) | 12014 | | |
| e-mail address: kfagrelius@duganproduction.com Telephone: 505-325-1821 18. OCD Approval: X Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: 1/31/ | | | |
| e-mail address: kfagrelius@duganproduction.com Telephone: 505-325-1821 18. OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: 1/31/ Title: OCD Permit Number: 19. Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed. | t complete this | | |

| 22. | |
|---------------------------------|--|
| Operator Closure Certification: | |
| | h this closure report is true, accurate and complete to the best of my knowledge and osure requirements and conditions specified in the approved closure plan. |
| Name (Print): | Title: |
| Signature: | Date: |
| e-mail address: | Telephone: |

8. Variances and Exceptions Attachment:

A variance to change the requirements of the burial marker is requested.

The variance request will read as follows: A steel marker will be set at the center of the on-site burial following onsite-pit closure (see application for administrative approval). The marker will be (24" X 24") and will have the "operator name" and that it designates an "on-site burial" lettering welded on the top side. The marker will be set at ground level and attached to a 4" diameter pipe that is cemented in a hole three feet deep. When the well is abandoned, a steel riser that is 4" in diameter, extending 4' above the ground will be welded to the pipe anchored in cement below the surface. The riser will have lettering welded on side showing the operator name, well number, location (UL, Sec., Twp. and Rge.) and that it designates an on-site burial location.

At all times during the production phase of the well, there will be a well sign showing the following: operator name, well name, lease number, API number, Qtr/Qtr, Sec., Twp., Rge., Latitude, Longitude, county, state and an emergency phone number on location.