



# RAILROAD COMMISSION OF TEXAS

## OIL AND GAS DIVISION

PERMIT TO RECEIVE, STORE, HANDLE, TREAT, AND RECLAIM CERTAIN  
NONHAZARDOUS OIL AND GAS WASTES

### **TRANSFERRED**

From Ri-Nu Environmental Services, Milano, LLC  
To Waste Mgmt Milam Property, LLC  
**Permit Nos.: STF-0121, R9 01-1516A  
and P008939**

Supersedes the permit issued on  
November 27, 2018

WASTE MGMT MILAM PROPERTY, LLC  
9708 GILES LANE  
AUSTIN TX 78754

Based on information contained in the original application received October 17, 2016; the request received on February 20, 2019 to transfer the permit from Ri-Nu Environmental Services, Milano, LLC to Waste Mgmt Milam Property, LLC, and subsequent information received to date, you are hereby authorized receive, store, handle, treat, recycle and reclaim certain nonhazardous oil and gas wastes subject to the jurisdiction of the Railroad Commission of Texas (RRC) as specified below at the following facility:

#### **Milano Oil and Gas Waste Recycling and Reclamation Facility**

Jezisek (07706) Lease  
Latitude/Longitude: 30.708970°, -96.843411°  
Milam County, Texas  
RRC District 01 – San Antonio

#### NARRATIVE DESCRIPTION OF PROCESS:

Incoming oil and gas waste will be offloaded into above ground storage or settling tanks. Oil-based mud (OBM) and fluid wastes will be unloaded via a closed-conduit system connected directly to a scalping shaker screen to begin processing. The fluid wastes will be pumped through a shaker screen to separate any solids. The separated saltwater will then be pumped to the on-site Class II Injection Well for disposal. The separated solids will be transferred to one of two 800-cubic yard Solids Storage Containers.

Water-based mud (WBM) will be unloaded via a closed-conduit system connected to storage tanks. The Washout/Collecting Pit (**P008939**) will receive wash water from the waste hauling vehicles and frac tanks.

Oil- and water-based muds will be processed through a shaker screen. The liquid portion of the mud slurry will fall into a Mud Tank. The resulting solids will then be processed through a centrifuge. Once the solids are sufficiently dry, they will be directed to the Movable Solids Collector and transferred to a hopper and then to a rotary dryer. The dryer unit is designed to dry and heat the soil at temperatures between 300°F and 900°F to vaporize the hydrocarbons in the soil.

After the solid waste is discharged from the dryer, it is conditioned by cooling and the addition of moisture in the soil conditioner unit. The soil conditioner unit discharges the conditioned solids into the Solids Storage Containers for testing. The partially treated waste will be sampled for the parameters listed under Permit Condition VI.B.1. (Reusable Product) and then stored in the Solids Storage Container and/or the Moveable Solids Container until analytical test results have determined the final reuse and disposition location for each load meets criteria. Solid waste generated during the separation process or mixed product that does not meet the limitations specified in the permit must be returned to the mixing cycle, reprocessed, and reanalyzed until it meets the required parameter limitations, or must be disposed of at an offsite RRC permitted disposal facility. The reconditioned mud is pumped into storage tanks, prior to being sold for off-site reuse.

Excess oil from the OBM Storage Tanks will be pumped into a mobile heat treatment unit for oil recovery prior to being sold.

Authority is granted by the Railroad Commission of Texas (RRC) to receive, store, handle, treat, and re-use oil and gas wastes and reclaim oilfield related hydrocarbons in accordance with 16 Texas Administrative Code (TAC) § 3.8 (Statewide Rule 8), Chapter 3.57 (Statewide Rule 57), and 16 TAC Chapter 4, Subchapter B, and is subject to the following minimum conditions:

## I. GENERAL PERMIT CONDITIONS

- A. This effective date of this permit is April 26, 2019. The authority granted by this permit expires on November 26, 2023.
- B. The permittee may not receive, store, handle, treat, reclaim or dispose of oil and gas wastes at the facility until financial security in the amount of \$634,732.00 is provided for and approved by the RRC for the referenced location. This amount provides financial security for the RRC permitted waste storage and treatment units as specified in this permit.
- C. In accordance with 16 TAC § 3.78, the permittee shall maintain financial security in the amount of \$634,732.00 until this facility and all the referenced Permit Nos: **STF-0121, R9 01-1516A** and **P0008939** including all associated equipment and tanks, have been closed in accordance with this permit. Technical Permitting reserves the right to revise this amount, as necessary. Prior to any modification of this facility that would require increased financial security, an updated closure cost estimate must be submitted to Technical Permitting in Austin, and any additional financial security must be filed with and approved by the RRC prior to making that modification.
- D. No waste may be received at the referenced facility until the groundwater monitoring wells required by Permit Condition VIII. have been completed. The documentation required by Permit Condition VIII. must be provided to Technical Permitting within 30 days after installation of the groundwater monitoring wells.
- E. A copy of the site-specific Spill Prevention and Control Plan that details means and methods of waste management and containment in the event of a release or discharge must be maintained on-site and made available to RRC staff for review and inspection upon request.
- F. The facility's Stormwater Management Plan shall be maintained on-site and made available upon request of the RRC.
- G. A discharge permit from the Environmental Protection Agency (EPA) may be required for non-contact storm water discharges. If required, the permit from the EPA must be in place prior to commencement of discharge operations.
- H. This permit does not authorize the discharge from the facility of any oil and gas waste, including contaminated or contact stormwater.

- I. The permittee may not begin receiving, storing, handling, or treating oil and gas waste at the facility until any necessary air permits or exemptions (if any) are obtained from the Texas Commission on Environmental Quality (TCEQ).
- J. Technical Permitting in Austin and the San Antonio District Office must be notified in writing when construction of the facility is initiated and with the completion of the disposal pit and/or each waste management unit.
- K. Technical Permitting in Austin and the appropriate District Office must be notified in writing upon final completion of construction of the facility. The permittee may not begin receiving, storing, handling, treating or disposing of oil and gas waste until the appropriate District Office has performed an inspection of the completed facility and has verified that the facility is constructed in accordance with the application and this permit.
- L. Unless otherwise required by conditions of this permit, construction, use, and maintenance of the facility must be in accordance with the information represented in the permit application and attachments thereto. When construction of the facility is completed, submit the "*as-built*" plans to be incorporated as part of the permit application.
- M. The "*Application For Permit To Operate A Reclamation Plant*" (Form R-9), which is attached and incorporated into this permit as **Permit Appendix A**, grants authority for the active reclaiming of oil field related hydrocarbons and does not cover reclamation of any refined products. Commingling or blending of refined products with crude oil or condensate is not permitted unless written authority is granted by the RRC's Director of Field Operations following a formal written request for such blending by the Reclamation Plant operator. Any deliveries made containing products or crude blended with products must be clearly identified on the RRC Form R-2 as "*Products*" or "*Crude Blended with Products*."
- N. The removal of tank bottoms or other hydrocarbon wastes from the facility for which monthly reports are not filed with the RRC must be authorized in writing by the RRC prior to such removal. A written request for such authorization must be sent to Technical Permitting in Austin, and must detail the location, description, estimated volume, and specific origin of the material removed, as well as the name of the reclaimer and intended destination of the material.
- O. The receipt of any tank bottoms or other hydrocarbons wastes from outside the State of Texas must be authorized in writing by the RRC prior to such receipt. Written approval is not required if another regulatory entity with jurisdiction over the waste will indicate, in the appropriate monthly report, a corresponding delivery of the same material.
- P. An On-Site Sewage Facility (OSSF) may be constructed, operated, and maintained within the boundaries of the subject facility without an additional permit from the Commission if: (1) the OSSF waste is not commingled with any other oil and gas waste; (2) the system is designed by a Texas registered Professional Engineer or a sewage system installer licensed in the state of Texas; and (3) the construction, operation, and maintenance of the OSSF complies with all applicable local, county, and state requirements.
- Q. Any deviation from the permit must be approved by amendment from Technical Permitting in Austin before implementation.
- R. Any soil additives, bioaccelerators or treatment chemicals must be approved by Technical Permitting prior to use at the facility.
- S. Safety Data Sheets (SDS) must be submitted to Technical Permitting in Austin for any chemical or bio-accelerator proposed to be used in the treatment of waste at the facility. Use of the compound

is contingent on RRC approval and must be used and stored according to the manufacturer's recommendations.

- T. All chemical laboratory analyses required to be performed in accordance with this permit must be performed using appropriate Environmental Protection Agency (EPA) methods or Standard Methods by an independent, National Environmental Laboratory Accreditation Program (NELAP) certified laboratory neither owned nor operated by the permittee. Any sample collected for laboratory analysis must be collected and preserved in a manner appropriate for that analytical method as specified by 40 CFR, Part 136. All geotechnical testing is to be performed utilizing tests standardized by the American Society for Testing and Materials (ASTM) and certified by a Texas licensed Professional Engineer.
- U. The permit to operate a Stationary Treatment Facility (**STF-0121**) and associated pit may be considered for administrative renewal upon review by the RRC. Any application for renewal should be received at least 60 days prior to the permit expiration date and must include all requirements listed in TAC §4.261. The permit to operate a Reclamation Plant (**R9 01-1516A**) shall remain in effect until canceled at the request of the operator, the permitted facility has been inactive for 12 months, or there has been a violation, or a violation is threatened, of any provision of the permit, the conservation laws of the state, or rules or orders of Statewide Rule 57 (c)(7).
- V. This permit is nontransferable without the consent of the RRC. Any request for permit transfer should be filed with Technical Permitting in Austin at least 60 days before the permittee wishes the transfer to take place. The Reclamation Plant Permit (**R9 01-1516A**) cannot be transferred in accordance with TAC §3.57(c)(9) and a new permit to reclaim tank bottoms and other hydrocarbon wastes must be obtained by the new operator.
- W. The permittee shall make all records required by this permit available for review and copying during normal business hours upon request of RRC personnel.
- X. The permittee shall submit a Quarterly Report according to the following:
1. The report shall contain applicable information as required in Permit Conditions III.I., IV.M., V.I., VI.B.3., VIII.D. and X.E
  2. The quarterly reporting periods shall be January 1 through March 31, April 1 through June 30, July 1 through September 30, and October 1 through December 31 of each year.
  3. The reports shall be submitted to Technical Permitting in Austin and the appropriate District Office no later than the 30th day of the month following each reporting period, or each April 30th, July 30th, October 30th, and January 30th, respectively.
  4. An Executive Summary shall be included that describes facility operations and relevant activities that occurred during the specific quarter.
  5. Data tables presenting volumes or amounts of treated and untreated solid waste on-site at the end of each quarter shall be included.
  6. The laboratory analytical reports and the corresponding chain of custody shall be provided for all chemical analyses performed.
- Y. Failure to comply with any provision of this permit may be cause for modification, suspension, termination or cancellation of this permit in accordance with Statewide Rule 8 (d)(6)(E) or Statewide Rule 57 (c)(7).

## II. AUTHORIZED WASTES

- A. Only oil and gas wastes subject to the jurisdiction of the RRC that are non-hazardous according to Subtitle C (Resource Conservation and Recovery Act (RCRA)) may be received or processed at this facility. You may receive, store, handle, treat, and process only the following oil and gas wastes:
1. Water-based drilling fluids and associated cuttings
  2. Oil-based drilling fluids and associated cuttings
  3. Contaminated soils from crude oil spills, pipeline and saltwater spills from production operations
  4. Absorbent pads from crude oil spills
  5. Formation sands and other solids from saltwater storage tanks or vessels and saltwater pits
  6. Solid waste from gas dehydration and sweetening activities (spent filters and filter media, molecular sieves, precipitated amine sludge, iron sponge, and hydrogen sulfide scrubber sludge)
  7. Tank bottoms from gas plants, crude oil reclamation plants, crude oil separation facilities, and crude oil production facilities
  8. Liners and bottoms from reserve pits
  9. Other non-hazardous wastes generated in association with the exploration, development, and production of oil and gas resources subject to the jurisdiction of the RRC
- B. No other waste may be accepted at this facility.
- C. RCRA non-exempt wastes subject to the jurisdiction of the RRC may only be accepted and processed at the facility if the waste does not contain hazardous waste listed in 40 CFR Part 261, Subpart D, or the analytical results demonstrate that the waste is characteristically nonhazardous. See Permit Condition III.E.
- D. No oil and gas Naturally Occurring Radioactive Material (NORM) waste as defined in 16 TAC §4.603 (Oil and Gas NORM) or waste from a facility that is licensed by the Texas Department of State Health Services to process or treat oil and gas NORM waste may be received at this facility.
- E. No asbestos-containing material regulated under the Clean Air Act or polychlorinated biphenyl (PCB)-containing material regulated under the Toxic Substances Control Act may be accepted for processing at the facility.
- F. All waste haulers received at the facility must be RRC-permitted oil and gas waste haulers and must list this commercial facility as an authorized disposal facility on their "*Oil and Gas Waste Hauler's Authority to Use Approved Disposal/Injection System*" (Form WH-3).

## III. WASTE TESTING AND RECORD KEEPING REQUIREMENTS

- A. For the purposes of this permit a representative sample of incoming waste is defined as a composite sample composed of four grab samples mixed to form one composite sample from each 50 cubic yards of waste material from each job (e.g., from each well, pit, spill location).
- B. Each load of incoming waste, other than water-based drilling fluids and associated cuttings, or oil-based drilling fluid and associated cuttings, must be scanned for the presence of NORM using a

scintillation meter with a sodium iodide detector or other equivalent devices that comply with 25 TAC 289.259, Texas Regulations for Control of Radiation (TRCR Part 46). Manufacturer's specifications must be submitted to Technical Permitting for equivalent devices used for NORM detection. All instrument calibration records must be maintained onsite and made available upon request. Any load with a reading of 50 microrentgens per hour or greater may not be unloaded or processed at the facility unless further analysis of the waste demonstrates that the waste does not exceed 30 picocuries per gram of Radium-226 combined with Radium-228, or 150 picocuries per gram of any other radionuclide.

- C. The operator of the Reclamation Plant (**R9 01-1516A**) must conduct a shakeout test on all tank bottoms or other hydrocarbon wastes upon removal from any producing lease tank, pipeline storage tank, or other storage vessel from a production facility, to determine crude oil content and lease condensate thereof. The shakeout test must be conducted in accordance with the most current American Petroleum Institute (API) or ASTM International method.
- D. **Prior** to receipt at the site, representative samples of waste from commercial oil and gas facilities and Reclamation Plants must be for either of the parameters listed below and may not exceed the limitation for the respective parameter:

<u>PARAMETER</u>	<u>LIMITATION</u>
Extractable Organic Halides (EOX) <i>(EPA Method 9023)</i>	100 mg/kg
or	
Total Organic Halides (TOX) <i>(EPA Method 9020B)</i>	100 mg/l

Special authorization for receipt of waste with a EOX/TOX > 100 parts per million may be considered. Authority must be obtained from Technical Permitting in Austin prior to receipt of waste.

- E. **Prior** to receipt at the site, a representative sample of any RCRA non-exempt waste or any international waste must be analyzed and may not exceed the limit for the following parameters:

<u>PARAMETER</u>	<u>LIMITATION</u>
Corrosivity <i>EPA method 1110A, 9040C or equivalent</i>	2.0 – 12.5 standard units (s.u.)
Reactivity	No materials exhibiting the characteristics of reactivity as defined by RCRA
Ignitability <i>EPA method 1010A/1020B/1030A</i>	Flash point < 60° C or 140°F
Toxicity <i>EPA Method 1311, Toxicity Characteristic Leaching Procedure (TCLP)</i>	No materials exhibiting the characteristics of toxicity as defined by RCRA
Benzene (TCLP) <i>EPA Method 1311/8260B/ 8021</i>	< 0.5 mg/L
Metals (TCLP) <i>EPA Method 1311/6010/ 6020/ 7471A</i>	
Arsenic	< 5.0 mg/L
Barium	< 100.0 mg/L
Cadmium	< 1.0 mg/L

<u>PARAMETER</u>	<u>LIMITATION</u>
Chromium	< 5.0 mg/L
Lead	< 5.0 mg/L
Mercury	< 0.2 mg/L
Selenium	< 1.0 mg/L
Silver	< 5.0 mg/L

- F. Details of receipts, deliveries for incoming waste to be processed at the Reclamation Plant (**R9 01-1516A**) and the stock on hand (available for re-sale) must be reported monthly on the Form R-2, "*Monthly Report for Reclaiming and Treating Plants.*" Submit the original of the Form R-2 report directly to Technical Permitting in Austin and a copy of the report to the appropriate District Office by the 15th day of the calendar month following the month of the report. Form R-2 shall be completed in accordance with Statewide Rule 57.
- G. The permittee must maintain the following records on each load of waste received at the facility for a period of three (3) years from the date of receipt:
1. Description of the site where the waste was generated, including:
    - a. Generator name;
    - b. Lease name and number and well number(s), or gas ID number(s), or American Petroleum Institute (API) well number(s); or latitude and longitude coordinates in decimal degrees if the waste was not generated on a lease; and
    - c. County.
  2. Name and RRC permit number of the transporter
  3. Volume of waste material (specify units)
  4. Detailed description of the type of waste, including any analysis required by Permit Conditions III.B., III.C., III.D., and III.E. above
- H. The permittee must maintain the following records on each load of waste removed from the referenced facility to an authorized disposal facility for a period of three (3) years from the date of shipment:
1. Date waste is removed and hauled to a disposal facility
  2. Name and RRC permit number of the transporter
  3. Volume (specify units) of each shipment of waste hauled to a disposal facility
  4. Type of waste (basic sediment, water, water-based mud, etc.)
  5. Name and permit number of the disposal facility
- I. A report must be submitted to Technical Permitting in Austin and the appropriate District Office as part of the Quarterly Report required in Permit Condition I.X. and shall include the following information:
1. All records required by Permit Conditions III.G. and III.H. above, as well as a summary of waste receipts
  2. The total volume of each type of waste material received during the specific quarter

3. Total volume of each type of waste that leaves the facility for disposal or final disposition during the quarter

#### IV. GENERAL FACILITY DESIGN AND MAINTENANCE REQUIREMENTS

- A. The general layout and arrangement of the facility must be consistent with the “*Facility Site Plan*” (Sheet 9.2-1) and “*Facility Site Plan (Detailed View)*” (Sheet 9.2-3) diagrams received on June 1, 2018, which are attached and incorporated into this permit as **Permit Appendix B**.
- B. A sign must be posted at each entrance to the facility. The sign must be readily visible and show the operator name, facility name, and permit number in letters and numerals at least three inches in height.
- C. The entire facility shall consist of the following waste management unit designations:
  1. Receiving Area and Washout/Collecting Pit (**P008939**):
    - a. Four 500-bbl Saltwater tanks
    - b. One 750-bbl Saltwater tank
    - c. One 250-bbl Saltwater tank
    - d. Two 400-bbl Fresh water tanks
    - e. Two 250-bbl Mud tanks
    - f. Washout/Collecting Pit (**P008939**)
    - g. Two centrifuges
  2. Processing/Treatment and Storage Area
    - a. Three 750-bbl WBM storage tanks
    - b. Four 400-bbl OBM storage tanks
    - c. Two 500-bbl OBM storage tanks
    - d. One 500-bbl Mud tank
    - e. One 200-bbl Open-top oil tank
    - f. One 200-bbl Oil storage tank
    - g. Two 800-cubic yard Solids storage containers
    - h. One 40-cubic yard Moveable solids storage collector
    - i. One rotary dryer
- D. No waste, treated or untreated, may be placed on the ground.
- E. All storage tanks, equipment and roll-off boxes must be maintained in a leak-free condition. If inspection of a tank, roll-off box or storage vessel reveals deterioration or leaks, it must be repaired or replaced before resuming use of the vessel.
- F. Any spill of waste, chemicals, or any other waste related material must be collected and containerized within 24 hours and conveyed through the treatment process or disposed of in an authorized manner.
- G. Any chemical used in the treatment process shall be stored in vessels designed for the safe storage of that particular chemical and these vessels shall be maintained in a leak free condition.



- H. Berms or containment structures must be constructed around all waste management units and must be compacted or constructed of material that has a measured hydraulic conductivity of  $1 \times 10^{-7}$  cm/sec or less, or that meets or exceeds 95% Standard Proctor (ASTM D698) or 90-92% Modified Proctor (ASTM D1557) density. Density may be tested in-place using a nuclear density gauge method (ASTM D 6938) or equivalent. Each berm shall maintain a slope no steeper than a one to three (vertical to horizontal) ratio, unless constructed of concrete or equivalent material (firewalls). These structures must be used to divert non-contact storm water around the waste management areas and contain and isolate contact storm water within the waste management units.
- I. All waste-related materials stored on the Solids Storage Area Pad must be containerized within the two elevated steel Solids Storage Containers. No waste or reusable product may be stored directly on the pad.
- J. The tank battery area and the Solids Storage Area/Processing Area must be surrounded by a steel wall a minimum of three (3) feet in height.
- K. The facility shall maintain security to prevent unauthorized access. Access shall be maintained by a 24-hour attendant or a six-foot-high security fence and locked gate when unattended. Fencing shall be required unless terrain or vegetation prevents truck or livestock access except through entrances with lockable gates.
- L. No oil may be allowed to accumulate on top of the water or wastes stored in the pits. Any oil on top of the liquids must be collected and handled in accordance with RRC rules. Any recovered oil must be recorded and filed with the RRC on either a Skim Oil/Condensate Report (Form P-18) or a "*Letter of Authority Request for Oil Movement*" (Form T-1) Letter:
  - 1. A Skim Oil/Condensate Report (Form P-18) must be filed with the RRC every month to record skim oil volumes recovered and sold during the operation of this facility. If no skim oil is recovered for a given month, a (Form P-18) should still be filed with the RRC.

**OR**

- 2. An original signed "*Letter of Authority Request for Oil Movement*" (Form T-1) must initially be submitted on letterhead to Field Operations, Austin, TX, Oil and Gas Division, for every event in which sellable skim oil is recovered and intended to be sold during the operation of this facility. Filing frequency requirements may be redefined after the initial oil movement request has been processed. The request must include:
  - a. The time period for which oil movement authority is requested;
  - b. The name of the applicant requesting to move the oil;
  - c. Volume (barrels) of oil to be moved;
  - d. Name and location of the facility which the oil will be moved to;
  - e. Name, address, telephone, and fax number of facility buying the oil to be moved;
  - f. Contact person, T-1 permit number, and P-5 Operator Number of the oil buyer; and
  - g. A description of the source(s) of the oil at the facility.
- M. Each month an integrity inspection of the entire facility must be performed on all concrete slabs, processing equipment, dikes, firewalls or berms, and aboveground storage tanks for deterioration,

leaks, and spills. The records of each inspection must be kept on-site and maintained for a period of three (3) years from the date of the inspection. The following must be included in the inspection report and submitted as part of the Quarterly Report required by Permit Condition I.X:

1. The results of the monthly inspection of concrete slabs within the facility for evidence of deterioration, leakage, or lack of structural integrity, and a description of corrective action taken, if any.
2. The results of the monthly inspection of process equipment, tanks, and roll-off boxes for evidence of deterioration or leakage, and a description of corrective action taken, if any.
3. The results of the monthly inspection of waste levels within the storage areas, tanks, and roll-off boxes, and a description of corrective action taken, if any.
4. The results of the monthly inspections of the erosion structures to control and modulate run-off to surface waters and indicate whether debris has been removed.

**V. CONSTRUCTION AND OPERATION OF THE WASHOUT/COLLECTING PIT (P008939)**

- A. The construction of the Washout/Collecting Pit, Truck Washout Pad, and Frac Tank Washout Pad shall be consistent with the "*Washout Pit (P008939) Plan*" (Sheet 9.2-8) and "*Washout Pit (P008939) Cross Sections*" (Sheet 9.2-9) diagrams received on February 23, 2018, which are attached and incorporated into this permit as **Permit Appendix C**.
- B. Use of the Washout/Collecting Pit (**P008939**) is limited to the collection of wastewater, rinsate and residual solids generated from the washout of trucks and frac tanks. No other oil field fluids or oil and gas wastes may be stored or staged in the pit.
- C. A sign must be posted at the pit showing the pit permit number in letters and numerals at least three inches in height.
- D. The Washout/Collecting Pit must have dimensions of approximately 109 feet by 28 feet by 7.25 feet deep. The Washout/Collecting Pit must be surrounded on each side by either a two-foot concrete wall, or a rollover curb at least one foot high, and must be designed to prevent stormwater from entering the pit.
- E. The usable permitted capacity of the pit may not exceed 2,139 barrels or 445 cubic yards.
- F. The Truck Washout Pad and Frac Tank Washout Pad must be surrounded by rollover curbs at least 12 inches in height and must drain directly into the Washout/Collecting Pit. No waste may be allowed to accumulate on the Washout Pad Area.
- G. The Washout/Collecting Pit, Truck Washout Pad, and Frac Tank Washout Pad must be lined with concrete at least 12 inches thick. The concrete liner must be installed in accordance with the material manufacturer's specifications and best management practices.
- H. At least two feet of freeboard must be maintained between the fluid level of the pit and the pad surface.
- I. The pit must be emptied and visually inspected annually for deterioration and leaks. A record of each inspection and photographs of the interior of each pit must be maintained for the life of the pit and shall be submitted to Technical Permitting in Austin as part of the Quarterly Report required in Permit Condition I.X. The District Office must be notified by phone or email at least 48 hours before emptying the pit for inspection.
- J. The concrete liner must be inspected whenever evidence of liner leakage arises. If inspection of the concrete liner reveals cracking, a leak or other loss of integrity the pit must have all the waste

immediately removed. No waste shall be added to the affected pit until the liner has been replaced or repaired and re-inspected by RRC personnel.

- K. This permit does not authorize the discharge of waste from any pit to the ground surface or to surface water.
- L. Unless otherwise required by conditions of this permit, construction, use, and maintenance of the pits must be in accordance with the information represented on the application (Form H-11) and attachments thereto.

## **VI. REUSABLE PRODUCT (TREATED AGGREGATE) PROCESS AND FINAL DISPOSITION**

Oil and gas waste may be recycled for beneficial reuse as treated aggregate, including but not limited to non-load bearing fill material for construction, bulking agents for cement, cover and capping material for RRC landfill components, and berms exclusively at commercial or industrial sites.

### **A. REUSABLE PRODUCT TRIAL RUN**

- 1. The applicant must perform a Trial Run by demonstrating the ability to successfully process 1,000 cubic yards of solid oil and gas waste at the facility prior to receiving or processing any additional waste.
- 2. Technical Permitting and the appropriate District Office must be notified in writing at least 72 hours before waste processing begins.
- 3. Samples of the partially treated waste must be collected and analyzed and shall not exceed the parameters specified in Permit Condition VI.B.1.
- 4. A written report of the Trial Run shall be submitted to Technical Permitting and to the appropriate District Office within 60 days of receipt of the analytical requirement in Statewide Rule §4.258 of this title. The following information must be included:
  - a. A summary of the Trial Run and a narrative of the process
  - b. The actual volume of waste material processed
  - c. Type of waste and description of the waste material
  - d. The volume and type of stabilization material used
  - e. Copies of all chemical and geotechnical Laboratory Analytical Reports and Chain of Custody for the parameters specified in Permit Conditions VI.A.3. and VI.B.1.
- 5. No additional waste may be received or processed while the results of the Trial Run are being reviewed by Technical Permitting. Any reusable product produced during the Trial Run may not be used until Technical Permitting has received the Trial Run report and provides written confirmation that the Trial Run requirement has been fulfilled.

### **B. PROCESS CONTROL FOR REUSABLE PRODUCT**

- 1. A sample of the partially treated waste shall be tested for the parameters listed below for the 1,000-cubic yard Trial Run and every 800-cubic yard batch of treated waste produced thereafter. Each 800-cubic yard sample shall be composed of a composite of four sub-samples obtained at 200 cubic yard intervals. The 1,000-cubic yard Trial Run will consist of 5 composite samples. Each sample shall be analyzed for the following Parameters depending on the specific end product:

<u>PARAMETER</u>	<u>LIMITATION</u>
Moisture Content	< 50% (by weight) or zero free moisture
<i>ASTM D 2216 or equivalent</i>	
pH <sup>1</sup>	6.5 – 9 s.u.
<i>EPA Method 9045 or equivalent</i>	
Electrical Conductivity (EC) <sup>2</sup>	≤ 8.0 mmhos/cm
Sodium Adsorption Ratio (SAR) <sup>2</sup>	≤ 12 <sup>3</sup>
Exchangeable Sodium Percentage (ESP) <sup>2</sup>	≤ 15
Total Barium <sup>2</sup> - Reuse at Commercial Facility	≤ 100,000 ppm
LDNR Leachate Test Method, 1:4 Solid <sup>2</sup>	
TPH <sup>2</sup>	≤ 10.0 mg/L
Chlorides <sup>2</sup>	≤ 500 mg/L
Leachable Metals <sup>2</sup>	
<i>EPA Method SW-846/6010/6020/7000/7470/7471</i>	
Arsenic	≤ 0.5 mg/L
Barium	≤ 10.0 mg/L
Cadmium	≤ 0.1 mg/L
Chromium	≤ 0.5 mg/L
Copper	≤ 0.5 mg/L
Lead	≤ 0.5 mg/L
Mercury	≤ 0.02 mg/L
Molybdenum	≤ 0.5 mg/L
Nickel	≤ 0.5 mg/L
Selenium	≤ 0.1 mg/L
Silver	≤ 0.5 mg/L
Zinc	≤ 5.0 mg/L
TCLP Benzene	≤ 0.50 mg/L
<i>EPA Method SW-846/1311/8021/8260B</i>	

2. Any treated waste not meeting the limitations specified in Permit Condition VI.B.1. must be returned to the mixing cycle, reprocessed, and reanalyzed until it meets the required parameter limitations or must be disposed of in an authorized manner.
3. Copies of the laboratory analytical reports and chain of custody demonstrating that the treated waste has met the criteria defined in Permit Condition VI.B.1. must be submitted to Technical Permitting as part of the Quarterly Report required in Permit Condition I.X.

#### C. FINAL DISPOSITION OF REUSABLE PRODUCT

Prior to reuse and distribution of the reusable product at commercial or industrial sites, the applicant must fulfill the following requirements:

1. Complete the Trial Run as specified in Permit Condition VI.A.
2. Demonstrate that the reusable product has met the parameter limits specified in Permit Condition VI.B.1.

<sup>1</sup> In addition to the criteria set forth, E&P waste, when chemically treated (fixated) shall be acceptable as reusable material with a pH range of 6.5 to 12 s.u. and an electrical conductivity of up to 50 mmhos/cm, provided such reusable material passes leachate testing requirements for chlorides and metals.

<sup>2</sup> LDNR Lab Procedures for Extraction and Analysis of E&P Waste or equivalent

<sup>3</sup> SAR calculated using milliequivalents per liter

3. Once the permit to produce reusable product has been granted, submit a separate application for a **Letter of Authority (LOA)** to Technical Permitting requesting the application of the reusable product for each specific project/location. The following information must be submitted within the LOA application to reuse the treated material:
  - a. Site specific requirements including a map drawn to scale showing the general location of the final disposition of the reusable product with latitude and longitude coordinates for the site location;
  - b. A description of the purpose for the reusable product (e.g. concrete bulking agent, landfill cover or capping material, treated aggregate, closure or backfill material, berm material, or other construction fill material, etc.);
  - c. Estimated volume of reusable product to be used at the location;
  - d. The time frame needed for the production and application of reusable product volume; and
  - e. Landowner approval for the management and final disposition of the reusable product on-site. If the reusable product is to be used as a concrete bulking agent at a concrete production plant, then written approval from a company officer from the receiving facility or corporation is sufficient.

## VII. STORMWATER MANAGEMENT

- A. The facility must be designed and constructed to capture, contain, and isolate contact stormwater, and prevent run-on of non-contact stormwater. A continuous perimeter berm must be installed as shown on the "*Facility Site Plan*" (Sheet 9.2-1) schematic attached as **Permit Appendix B**. The berm must be constructed to surround the entire facility and must be designed to prevent storm water run-on and prevent storm water runoff from the site. The perimeter berm must be constructed to a minimum height of two feet above land surface with a slope no steeper than a three to one (horizontal to vertical) ratio on each side.
- B. Berms and other containment structures must be constructed around all waste management units and storage areas. These structures must be used to divert non-contact stormwater around the waste management areas, and isolate and contain contact stormwater within the waste management units. Spills and releases into the interior ditches must be contained and removed immediately to prevent contact with stormwater.
- C. Contact stormwater shall be prevented from migrating outside of the waste processing and storage areas. The Washout/Collecting Pit area, and the Solids Separation and Storage Area Pads must be covered with a roof to prevent stormwater from running onto the areas.
- D. All aboveground storage tanks must be contained within dikes. Dikes must be constructed and maintained at a minimum to contain the largest tank's maximum capacity, plus freeboard to contain a 25-year, 24-hour storm event volume for Milam County.
- E. Contact stormwater shall be prevented from entering the three non-contact storm water retention ponds on the north and east sides of the facility. In the event that contact storm water enters a storm water retention pond the permittee must submit a written report detailing the event to Technical Permitting in Austin before disposing of the contents of the pond. Contact storm water must be removed and disposed of in an authorized manner.

- F. Non-contact surface flow stormwater shall be prevented from entering the waste processing and storage areas. Areas outside of the diked waste processing and storage areas shall be sloped to prevent non-contact stormwater from contacting waste.
- G. Contact stormwater must be collected within 24 hours of accessibility and disposed of in an authorized manner.
- H. This permit does not authorize the discharge from the facility of any oil and gas waste, including contaminated or contact stormwater. A discharge permit from the Environmental Protection Agency (EPA) may be required for non-contact stormwater discharges. If required, the permit from the EPA must be in place prior to commence of discharge operations.

## VIII. GROUNDWATER MONITORING

- A. At least three (3) monitor wells must be installed at the facility prior to receiving waste deliveries. The monitor wells are to be installed at the locations designated on the “*Facility Site Plan*” (Sheet 9.2-1) schematic included in **Permit Appendix B**.
  - 1. The wells must be completed by a certified water well driller in accordance with 16 TAC Part 4, Chapter 76 (Water Well Drillers and Water Well Pump Installers).
  - 2. The wells must be completed and penetrate the shallowest groundwater zone, and the completion must isolate that zone from any deeper groundwater zone.
  - 3. The screened interval of the wells must be designed to intercept at least five feet of groundwater.
  - 4. Provision must be made to protect the well heads from damage by vehicles and heavy equipment.
  - 5. The wells must be water tight at the surface and fitted with a lockable water tight expansion cap.
  - 6. The following information must be submitted after the wells are completed:
    - a. A soil boring lithologic log for the well, with the soils described using the Unified Soil Classification System (equivalent to ASTM D 2487 and 2488). The log must also include the method of drilling, well specifications, slot size, riser and screen length, bentonite and cement intervals, total depth, and the top of the first encountered water or saturated soils. The sand pack size should be compatible with well screen and slot size, as well as the local lithology.
    - b. A well installation diagram for each well detailing construction specifications for each well, including riser and screen length, screen slot size, bentonite and cement intervals. The sand pack size should be compatible with the well screen slot size and the local lithology.
    - c. A survey elevation for each well head reference point (top of casing) relative to a real or arbitrary on-site benchmark and relative to mean sea level.
    - d. A potentiometric contour map showing static water levels and the estimated direction of groundwater flow and the calculated gradient.
- B. The groundwater monitor wells must be able to provide a sample that is representative of the groundwater underlying the site for the duration of facility operations. If a monitor well is not capable of providing a representative sample, the permittee must notify Technical Permitting in

Austin and install a replacement monitor well that is acceptable to the RRC. Additional groundwater monitoring wells may be required with future site development.

- C. The groundwater monitor wells must be sampled or monitored for the following parameters after installation and quarterly thereafter:

<u>PARAMETER</u>	<u>UNITS</u>
Static Water Level	Feet (ft)
Total Depth	ft
pH <i>EPA Method 150.1, 150.2, or equivalent</i>	s.u.
Total Dissolved Solids (TDS) <i>Standard Method 160.1 or equivalent</i>	mg/L
TPH <i>Method TX1005</i>	mg/L
Benzene <i>EPA Method 8260/8021B or equivalent</i>	mg/L
Soluble Cations: Calcium, Magnesium, Potassium, and Sodium <i>EPA Method 6010/6020 or equivalent</i>	mg/L
Soluble Anions: Bromides, Carbonates, Chlorides, Nitrates, and Sulfates <i>EPA Method 300/9056 or equivalent</i>	mg/L

- D. Copies of the monitoring-well gauging and sampling event data shall be filed quarterly with Technical Permitting and the San Antonio District Office as part of the Quarterly Report required in Permit Condition I.X. The laboratory analytical reports and the corresponding chain of custody shall be provided for all chemical analyses performed.
- E. If any of the parameters listed in Permit Condition VIII.C. shows potential impacts, Technical Permitting reserves the authority to initiate an appropriate sampling frequency.

**IX. FACILITY CLOSURE**

- A. Technical Permitting and the District Office must be notified in writing at least 45 days prior to commencement of final closure activities. The permittee must submit a closure plan to Technical Permitting in Austin to be reviewed and approved prior to beginning closure activities.
- B. At facility closure, all waste, chemicals, and waste related materials must be processed through the facility and/or removed from the facility for authorized reuse or disposal.
- C. All waste processing equipment, aboveground storage tanks, and any other non-maintenance related equipment must be emptied, cleaned, and removed from the facility.
- D. All equipment must be dismantled, removed, salvaged, or disposed of in an authorized manner.
- E. All liners, pads, tanks, and vaults must be steam-cleaned and demolished, and the generated rubble and waste water must be disposed of in an authorized manner.
- F. All affected or contaminated soils must be removed and disposed of in an authorized manner.

- G. Provisions must be taken to prevent erosion both during and following site closure.
- H. Once waste removal is completed, a soil sampling plan must be submitted to Technical Permitting to characterize the scope of contamination (if any) at the facility. After the removal of wastes, composite soil samples must be taken comprising of a minimum of four representative soil samples per acre. Samples must be taken from around and underneath the Washout/Collecting Pit, Washout Pads, Solids Storage Area Pad, Separation Equipment Pad, and tank battery pads.
- I. Soil samples must be analyzed for the parameters listed in Permit Condition IX.J., and those limitations shall not be exceeded. If soil parameter limitations are exceeded, the identified waste must be removed and disposed of in an authorized manner, and the area must be resampled. The process shall be repeated until the soil samples meet the closure criteria.
- J. Soil samples must be acquired and analyzed for the following parameters and the specified limitations shall not be exceeded:

<u>PARAMETER</u>	<u>LIMITATION</u>
pH	6 to 10 standard units
<i>EPA Method 9045C or equivalent</i>	
Electrical Conductivity (EC) <sup>1</sup>	≤ 4.0 mmhos/cm
TPH	≤ 10,000 mg/kg or 1 % by weight
<i>EPA Method 5035A/TX1005</i>	
Total Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)	≤ 30 mg/kg
<i>EPA Method 5035A/8021/8260B</i>	
Metals (Total)	
<i>EPA Method 6010/6020/7471A</i>	
Arsenic	≤ 10 mg/kg
Barium	≤ 10,000 mg/kg
Cadmium	≤ 10 mg/kg
Chromium	≤ 100 mg/kg
Lead	≤ 200 mg/kg
Mercury	≤ 10 mg/kg
Selenium	≤ 10 mg/kg
Silver	≤ 200 mg/kg

- K. A summary of the soil sampling required by Permit Conditions IX.I. must include:
  1. A map drawn to scale with coordinates of the sampling locations;
  2. A table indicating the results of the parameters sampled;
  3. The date of sampling;
  4. The approximate depth of the sample below land surface; and
  5. Copies of the laboratory analytical reports and chain of custody.
- L. Any soil sample that exceeds the parameter limitations specified in Permit Condition IX.J. is considered waste and must be disposed of at an authorized disposal facility.
- M. When acceptable constituent levels have been verified in writing by Technical Permitting, the Washout/Collecting Pit must be dewatered, emptied, demolished, backfilled, compacted, and properly closed. All wastes, including the liners, must be removed and disposed of in an

<sup>1</sup> LDNR Lab Procedures for Extraction and Analysis of E&P Waste or equivalent.



authorized manner. All berms must be leveled, and the site must be backfilled with clean fill and restored to natural grade. Topsoil must be contoured and seeded with appropriate vegetation.


- N. Final grading of the site must be accomplished in such a manner that rainfall will not collect at former pits, waste processing areas, and storage area locations after closure.

**X. POST-CLOSURE CARE AND MONITORING**

- A. In accordance with 16 TAC § 3.78 the permittee shall maintain financial security in the amount of **\$634,732.00** after the facility has stopped receiving waste and met all specified closure requirements. Technical Permitting reserves the right to revise this amount, as necessary. Prior to closure, an updated post-closure cost estimate must be submitted to Technical Permitting in Austin, and any additional financial security must be filed with and approved by the RRC before the operating financial security referenced in Permit Condition I.B. will be released.
- B. The site will be monitored for a period of no less than five years after closure of the facility.
- C. Any areas showing signs of erosion, slumping and instability must be contoured, backfilled, and reseeded as necessary.
- D. All groundwater monitoring wells must remain operational, and monitoring requirements must continue as specified in Permit Condition VIII.C. until written approval from Technical Permitting in Austin is granted for plugging and abandoning the wells.
- E. A summary of the results of the post-closure monitoring activity must be submitted to Technical Permitting in Austin as part of a Quarterly Report required in Permit Condition I.X.
- F. The permittee must request in writing permission to cease post-closure monitoring. Post-closure monitoring requirements may be extended by Technical Permitting based on the monitoring results.

This authorization is granted subject to review and cancellation should investigation show that such authorization is being abused.

APPROVED AND ISSUED ON APRIL 26, 2019

  
Tiffany Humberson, Manager  
Environmental Permits and Support  
Technical Permitting

**Note:** Permit transferred from Ri-Nu Environmental Services, Milano, LLC to Waste Mgmt Milam Property, LLC.

CC: RRC San Antonio, District 01  
RRC Production Audit – Austin

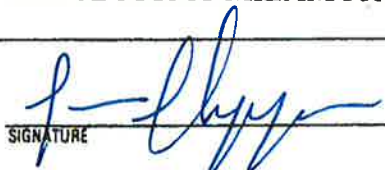
# **PERMIT APPENDIX A**

Application for Permit to Operate a Reclamation Plant  
(Form R-9)

**READ INSTRUCTIONS ON BACK**

DRAFT

R9 01-1516A (Amend)


1. OPERATOR NAME, exactly as shown on P-5, Organization Report <b>WASTE MGMT MILAM PROPERTY, LLC</b>		2. OPERATOR P-5 NO. <b>900267</b>	3. RRC DISTRICT NO. <b>01</b>	4. COUNTY OF PLANT LOCATION <b>Milam</b>
5. OPERATOR ADDRESS, including city, state, and zip code <b>634 CR 342 Milano, TX 76556</b>		6. PURPOSE OF FILING <input type="checkbox"/> New permit for new facility. Estimated completion date: _____ <input checked="" type="checkbox"/> New permit for existing facility. Name of previous operator: <b>Re-Nu Environmental Services, Milano, LLC</b> <input type="checkbox"/> One-time renewal of existing permit serial/registration (R-2) no. _____		
7. TYPE OF FACILITY <input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Portable				
8. Driving directions from the nearest town (identify town). <b>From downtown Milano, go east on US Hwy 79 approximately 0.7 miles. Turn right onto State Hwy 36, and after 0.1 miles turn left onto County Road 342. Go southeast approximately 0.6 miles to entrance on left.</b>				
9. Brief description of treating process. <b>Facility reclaims oil from RRC-regulated waste liquids and solids using mechanical and thermal separation, and re-sales the oil.</b>				
10. Material transported to plant in: (see Inst. No. 8) <input type="checkbox"/> vehicles owned by applicant <input checked="" type="checkbox"/> for-hire vehicles <input type="checkbox"/> both applicant's and for-hire vehicles				
11. Identify all oil and/or gas-related facilities located within 100 yards of facility. (example: well, pipeline, saltwater disposal facility, tank battery, etc.)				
TYPE OF FACILITY <b>Commercial SWD</b> <b>Jezisek (07706) Lse, Well 1</b>		OPERATOR <b>WASTE MGMT MILAM PROPERTY, LLC</b>		
CERTIFICATION. I certify under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that it was prepared by me or under my supervision and direction, and that the data and facts stated herein are true, correct, and complete to the best of my knowledge.		SIGNATURE  <b>Timothy J. Champagne, P.E.</b> NAME (print or type)		TITLE <b>Environmental Manager</b> PHONE <b>(512) 272-6261</b> DATE <b>2/18/2019</b>

**TO BE COMPLETED BY RAILROAD COMMISSION PERSONNEL**

This permit is valid until cancellation under either of the following conditions:

- The above named operator requests cancellation in writing.
- The commission cancels the permit after notice and opportunity for hearing because
  - the permit facility has been inactive for 12 months, or
  - there has been a violation or a violation is threatened of any provision of the permit, the conservation laws of the state, or rules or orders of the Commission.

This permit is non-transferable. The financial assurance filed in support of this application shall be renewed and continued in effect until its conditions have been met or release is authorized by the Commission. The facility schematic diagram is to be kept with this permit. Permit and diagram are to be kept at facility.

Serial/registration no. **R9 01-1516A** issued/renewed effective **4/26/2019**  
(date)  
by  **Tiffany Thompson** Phone No. **512 463 4354**  
Signature of RRC representative Name (type or print)

**ALL WASTES GENERATED BY RECLAIMING OPERATIONS SHALL BE DISPOSED OF IN ACCORDANCE WITH STATEWIDE RULES, 8, 9, AND 46 (RELATING TO WATER PROTECTION, DISPOSAL WELLS, AND FLUID INJECTION)**

RECEIVED  
RRC OF TEXAS

Facility Site Name: **Milano O/G Waste Recycling Reclamation STF Facility**  
Associated with: **STF-0121, P008939**

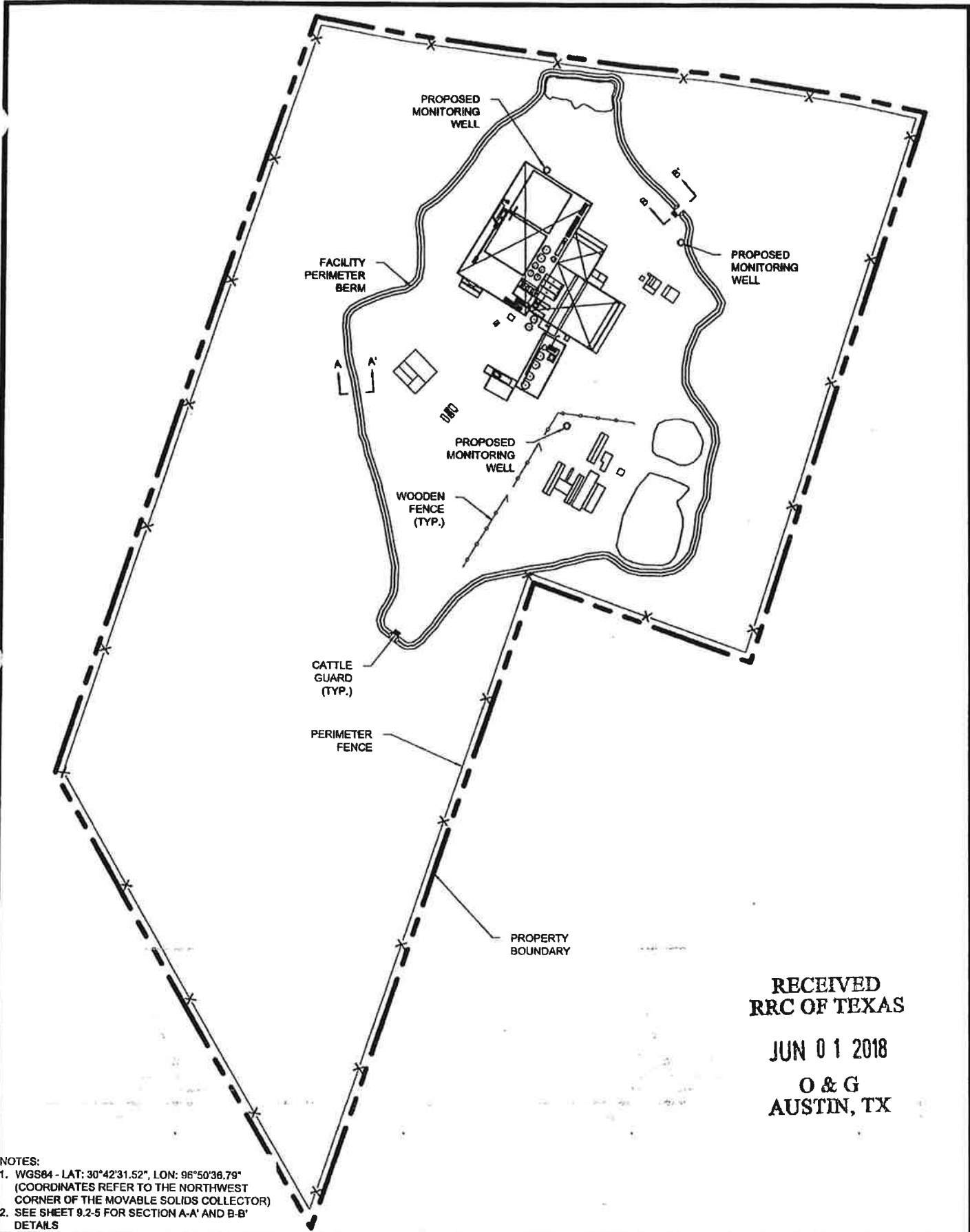
FEB 20 2019

O & G  
AUSTIN, TX

# **PERMIT APPENDIX B**

**Facility Site Plan (Sheet 9.2-1)**

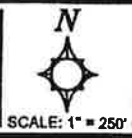
**Facility Site Plan (Detailed View) (Sheet 9.2-3)**



RECEIVED  
 RRC OF TEXAS  
 JUN 01 2018  
 O & G  
 AUSTIN, TX

- NOTES:  
 1. WGS84 - LAT: 30°42'31.52", LON: 96°50'36.79"  
 (COORDINATES REFER TO THE NORTHWEST  
 CORNER OF THE MOVABLE SOLIDS COLLECTOR)  
 2. SEE SHEET 9.2-5 FOR SECTION A-A' AND B-B'  
 DETAILS

SHEET:  
 9.2-1



Date: 6/24/2018  
 Revisi...  
 THIS DRAWING IS TO BE  
 USED FOR PERMIT  
 INFORMATION PURPOSES  
 ONLY.

FACILITY SITE PLAN  
 STF FACILITY  
 RI-NU ENVIRONMENTAL SERVICES, MILANO, LLC  
 MILAM COUNTY, TEXAS  
 250 0 125 250



500 Moseley Road  
 Cross Roads, TX 76227  
 Phone (840) 387-0805  
 Fax (840) 387-0830  
 (TBPE #F-12214)



# **PERMIT APPENDIX C**

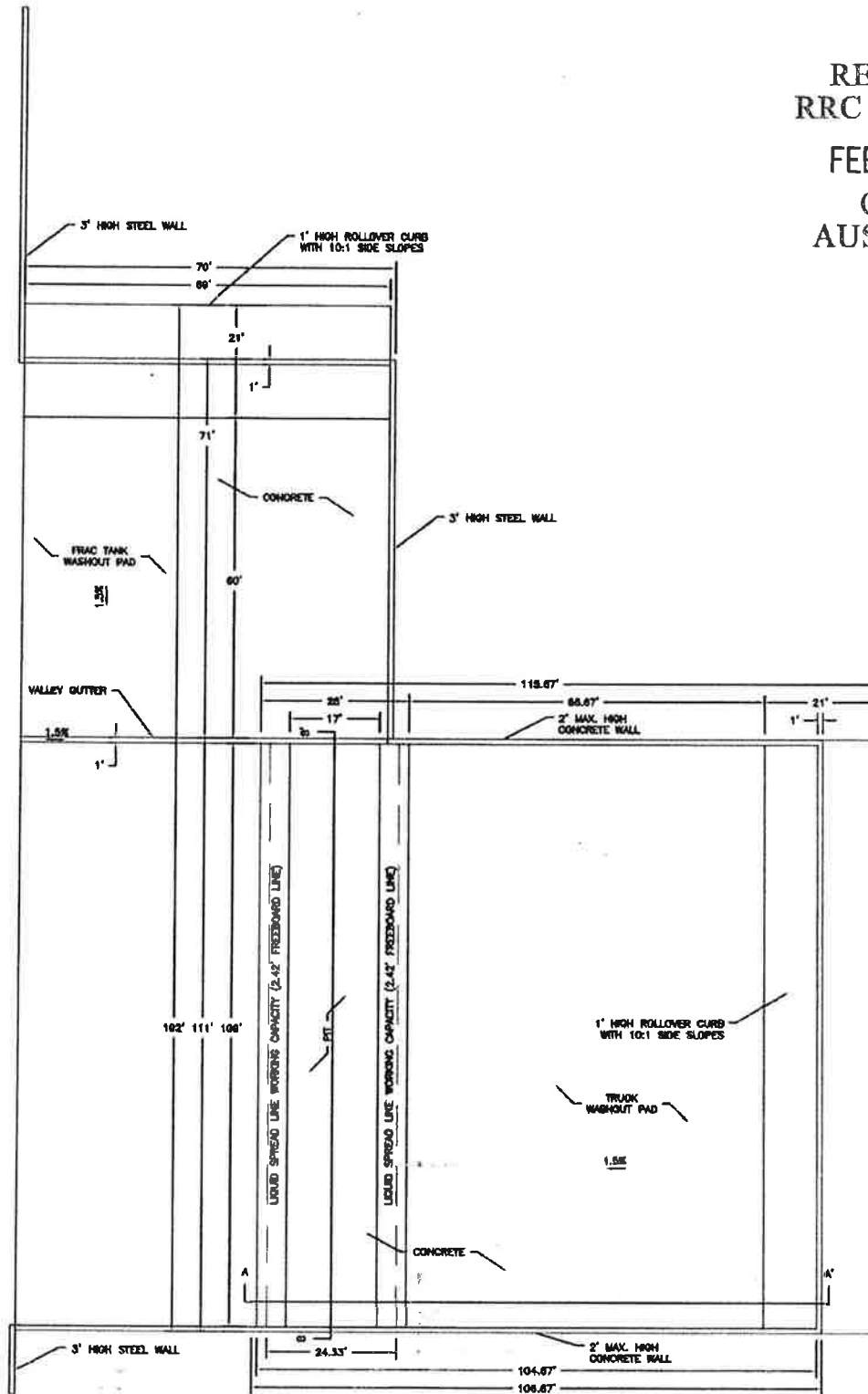
**Washout Pit (P008939) Plan (Sheet 9.2-8)**

**Washout Pit (P008939) Cross Sections (Sheet 9.2-9)**

RECEIVED  
RRC OF TEXAS

FEB 23 2018

O & G  
AUSTIN, TX



NOTE:  
1. SEE SHEET 9.2-9 FOR THE WASHOUT PIT  
CROSS-SECTIONS.

SHEET:

9.2-8



SCALE: 1" = 30'

Date: 2/23/2018  
Revision:

THIS DRAWING IS TO BE  
USED FOR PERMIT  
OR CONSTRUCTION PURPOSES  
ONLY.

WASHOUT PIT (P008939) PLAN  
STF FACILITY  
RI-NU ENVIRONMENTAL SERVICES, MILANO, LLC  
MILAM COUNTY, TEXAS

30 0 15 30



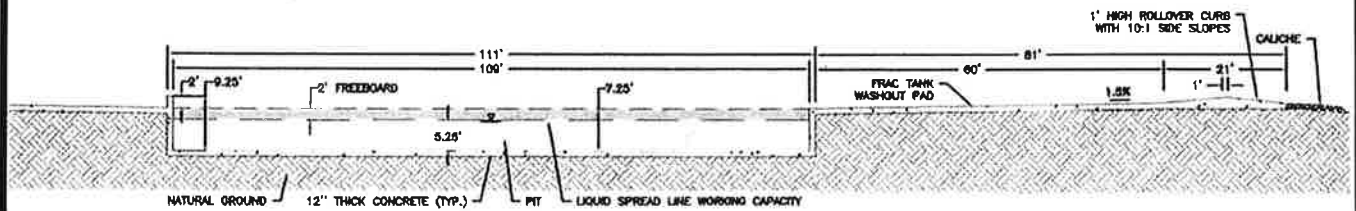
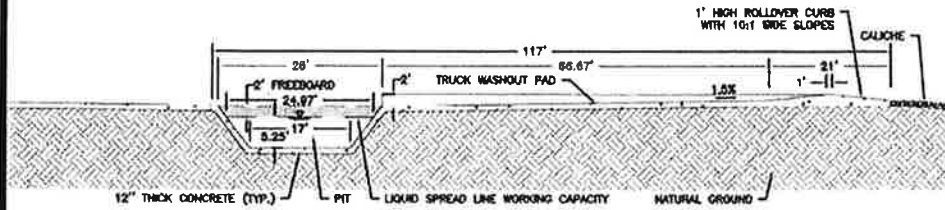
500 Moseley Road  
Cross Roads, TX 76227  
Phone (940) 387-0805  
Fax (940) 387-0830  
(TBPE #F-12214)



RECEIVED  
RRC OF TEXAS

FEB 23 2018

O & G  
AUSTIN, TX



**LEGEND**

 FREEBOARD AREA

NOTE:  
1. SEE SHEET 9.2-8 FOR THE WASHOUT PIT  
PLAN VIEW.

SHEET:

9.2-9



SCALE: 1" = 30'

Rev. 2/2/2016

Revised:

THIS DRAWING IS TO BE  
USED FOR PERMIT  
INFORMATION PURPOSES  
ONLY

WASHOUT PIT (P008939) CROSS-SECTIONS

STF FACILITY  
RI-NU ENVIRONMENTAL SERVICES, MILANO, LLC  
MILAM COUNTY, TEXAS

30 0 15 30



500 Moseley Road  
Cross Roads, TX 76227  
Phone (940) 387-0805  
Fax (940) 387-0830  
(TBPE #F-12214)