

Date: April 25, 2025

## RE: Notice of Deficiency for Permit Renewal Application, NM1-57: R360 Permian Basin, LLC – DNCS Environmental Solutions Surface Waste Management Facility

Ms. Barr:

R360 Permian Basin, LLC (R360) is requesting a 60-day extension to respond to the Notice of Deficiency for Permit Renewal Application dated February 28, 2025. An extension is needed to adequately address the numerous items requested in the letter.

If additional information is needed as part of this request, please do not hesitate to contact me at (913) 485-4857 or by email at <u>Dillon.baird@wasteconnections.com</u>.

Respectfully,

Pillon Baint

Dillon Baird, P.E. Region Engineer Michelle Lujan-Grisham Governor

Melanie A. Kenderdine Cabinet Secretary-Designate

Benjamin Shelton Deputy Secretary (Acting)

February 28, 2025

Mr. Dillon Baird, P.E. Waste Connections 1780 Hughes Landing Blvd., Suite 800 The Woodlands, Texas 77381

Gerasimos Razatos, Division Director (Acting) Oil Conservation Division



## RE: Notice of Deficiency for Permit Renewal Application, NM1-57: R360 Permian Basin, LLC – DNSC Environmental Solutions Surface Waste Management Facility

Dear Mr. Baird:

The Oil Conservation Division (OCD) received a renewal application for Permit NM1-57 on August 25, 2024, for R360 Permian Basin, LLC (R360) – DNCS Environmental Solutions Surface Waste Management Facility. After careful review of the renewal application, the OCD has determined that the renewal application is not approvable. This letter addresses the deficiencies found by the OCD. If R360 wishes to submit a revised renewal application, the below deficiencies/issues need to be addressed in the revised application submittal:

- The application does not meet 19.15.36.12.A(2)(b) NMAC which states, "An application for permit renewal shall include and adequately address the information necessary for evaluation of a new surface waste management facility permit as provided in Subsection C of 19.15.36.8 NMAC. Previously submitted *materials may be included by reference provided they are current*, readily available to the division and sufficiently identified so that the division may retrieve them."
  - R360 submitted an old application from June 2014 that references the previous operator "DNCS Properties, LLC" throughout the entire application. The current operator on record is R360 Permian Basin, LLC.
  - o The June 2014 application does not reference all current 19.15.36 NMAC regulatory citations. For example, when discussing Section 19.15.36.8.C NMAC in the renewal application, R360 quoted an older version of 19.15.36.8.C(2) NMAC. The older version of this rule evaluated structures, roads, water sources, etc. within one mile of the site's perimeter whereas the current rule evaluates these features within one-half mile of the site's office. In another example, the citations addressed from 19.15.36.9 NMAC are not from the current version of the rule.
  - The hyperlink to check the list of C-133 approved haulers is not current. The current link to find this information is at <u>https://www.emnrd.nm.gov/ocd/ocd-data/statistics/</u>.
  - OCD contact numbers are not current. The OCD emergency contact number is 575-626-0830 (Hobbs) and the Santa Fe contact number is 505-476-3441.

• Referenced forms are not the current version. For example the referenced C-138 Form was modified on October 11, 2022.

If R360 decides to submit a revised renewal application based on the old application from June 2014, R360 is strongly encouraged to double check the operator's name, all regulatory references, phone numbers, forms, hyperlinks, diagrams/maps, table of contents versus application organization, all reference materials, etc., to ensure that only current information/data is included in the renewal application.

- The renewal application in its entirety was not signed and stamped by a New Mexico Professional Engineer (PE). The OCD only saw a current PE stamp in the amended closure/postclosure cost estimates. R360 needs to ensure the renewal application is signed and stamped by a PE and that all engineering designs/plans are stamped by a PE. Note, the provided Permit Plans were not stamped by a PE.
- The renewal application did not include all pertinent, relevant information.
  - Volume III, Engineering Design and Calculations is missing the following Sections:
    - Section 2 Volumetrics Calculations.
    - Section 3 Drainage Calculations.
    - Section 4 HELP Model.
    - Section 5 Pipe Loading Calculations. Note, Volume 3, Part 3 of 3 did not include a table of contents. The beginning of Part 3 contains information from a Plastic Piping Handbook. Is this associated with Section 5 or Section 6?
    - Section 6 Geosynthetic Application and Compatibility Documentation. Only Attachment III.6.F was included.
    - Section 8 Missing Section 4.0, Figure III.8.2, and all associated attachments. R360 needs to make clear if additional erosion control measures are or are not required.
    - Section 9 Settlement Calculations.
    - Section 10 Evaporation Pond Calculations.
    - Section 11 Wave Action Calculations.
  - Volume IV, Siting and Hydrogeology is missing (Sections 1 and 2).

If R360 wishes to submit a revised renewal application, R360 must ensure the application contains all referenced Volumes, Sections, Tables, Attachments, etc. The OCD *will not approve* an incomplete application.

- Potential issues/concerns identified in Figures.
  - Figure I.2, Site Plan, indicates abandoned wells are located at the site. R360 needs to add a discussion on how these abandoned wells will be addressed prior to landfill construction. Also, a 500 foot buffer is shown for a drainage feature. R360 needs to discuss and show the distance of the drainage feature from the nearest portion of the landfill and oil field waste processing areas. Note, 19.15.2.7.W(4) NMAC defines a watercourse as "means a river, creek, arroyo, canyon, draw or wash or other channel having definite banks and bed with visible evidence of the occasional flow of water." The OCD cannot determine if the "drainage feature" meets the requirements of 19.15.36.13.B(1) NMAC for siting criteria and hydrogeology.
  - R360 should state that pipelines do not cross the surface waste management facility or indicate the pipeline crossings in a diagram.

- Figure I.1C, <sup>1</sup>/<sub>2</sub> Mile Radius Map Inhabited Structures, uses an aerial photo to demonstrate compliance. However, 19.15.36.8.C(2) NMAC requires this determination to be based upon the records of the applicable county clerk or clerk's office. R360 needs to include these records.
- Figure I.4, Site Entrance Sign, needs to be updated with the correct operator's name and OCD Emergency Line: 575.626.0830. Note, OCD: 575.393.6161 is no longer a working number.
- Sheet 7 of 14, Landfill Completion Drainage Plan, shows a drainage area *outside* of the site's boundary. R360 needs to explain this drainage area and what steps are being taken to prevent run-off from the property boundary.
- In Figure II.8.4, Vadose Zone Monitoring Network, why are three sumps labeled with the same name, "Sump 7?"
- Volume I, Section 19.15.36 NMAC, issues/concerns.
  - In Subsection 1.3, Development Sequence, the OCD does not agree with the following statement: "However, different combinations of these improvements may be constructed to any time." Note, an OCD issued permit for this site will dictate what Phase and associated equipment is allowed to be constructed. R360 needs to amend the language throughout the permit application to recognize that the site development will be specific to permit conditions and the provided/approved financial assurance.
  - In Subsection 19.15.36.8.C(13) NMAC, R360 states, "In compliance with 19.15.36.13.O NMAC, landfill gas safety management is addressed in Section 6.6 of Volume II.1. The Hydrogen Sulfide (H<sub>2</sub>S) Prevention and Contingency Plan is provided as Volume II.3." How does the H<sub>2</sub>S Contingency Plan address landfill gas safety management? This plan seems to primarily focus on liquids management. Are there no H<sub>2</sub>S concerns associated with the landfill areas?
  - To meet the requirements of 19.15.36.13.M NMAC, R360 needs to include a detailed discussion on stormwater management to prevent run-on and run-off at the surface waste management facility.
  - 19.15.36.14.A(7)(b) NMAC requires that for areas of the landfill that will not receive  $\cap$ additional oil field waste for one month or more, but have not reached the final waste elevation, the operator shall provide intermediate cover that shall be stabilized with vegetation. In response to this requirement, R360 states, "Intermediate cover may be seeded with temporary grasses such as rye if the area will not be subject to additional landfilling within 12 months. If long-term re-vegetation is required, native grass will be applied after consultation with the local Natural Resources Conservation Service (NRCS) representative (see Closure/Post-closure Plan, Volume II.4)." Conversely in the Intermediate Cover Inspection and Maintenance Plan (Attachment II.1.G in Volume II, Section 1), Subsection 2.2.3, R360 states, "Intermediate cover will not be seeded for vegetative growth; however, DNCS will routinely attempt to maintain any naturallyestablished vegetative cover." R360 needs to address this discrepancy and if applicable, request an exception to 19.15.36.14.A(7)(b) NMAC which demonstrates that the exception request provides equivalent protection of fresh water, public health, and the environment.
  - In Subsection 19.15.36.18.F NMAC, which should be 19.15.36.18.E NMAC, R360 states that no response is required. R360 is subject to the 3-year post-closure care period for the ponds and as such needs to state they will demonstrate compliance with this part.
  - In Subsection 19.15.36.19, Exceptions and Waivers, R360 requested five exception requests. The OCD cannot approve the below exception requests due to omitted sections in Volumes III and IV.

- Groundwater monitoring per 19.15.36.14.B(1-2) NMAC (Volumes II.8 and IV.2).
- Geonet Detection and Drainage Layers per 19.15.36.14.C (Volume III.4).
- Final Cover per 19.15.36.14.C(9) NMAC (Volume III.4).
- The updated closure and post-closure calculations need to be based on current cost estimates and include a more comprehensive breakdown of costs in the tables (e.g., show all capacity determinations, applicable equipment, and total acreage). For example some of the costs are not representative of all the equipment included in Phase 1. Phase 1 consists of 22,000 bbl of tank storage capacity, 294,800 bbl in pond capacity, and 3 landfill cells totaling 55.5 acres. However, the costs for liquids removal/disposal in Table 5 only account for 240 bbls; this number does not seem feasible for closure. Furthermore, R360 needs to specify what acreage is being accounted for in Table 3, Task 2.2. Lastly, R360 needs to include the omitted Table 4 as part of the updated closure and post-closure calculations.
- Volume II, Section 1 Operations, Inspection, and Maintenance Plan, issues/concerns.
  - In Subsection 4.2, Odor Control, R360 states, "Prior to oil field waste acceptance, vehicles will be randomly screened for the presence of hydrogen sulfide (H<sub>2</sub>S)." This statement is contradictory to the Oil Field Waste Management Plan and Hydrogen Sulfide (H<sub>2</sub>S) Prevention and Contingency Plan. These plans indicate that H<sub>2</sub>S will be monitored "on a continual basis on every oil field delivery waste vehicle arriving at the site."
  - In Subsection 4.3, Dust Control, R360 discusses utilizing dust palliatives for dust control. R360 needs to discuss the types of dust palliatives being proposed for use and the associated environmental impacts.
  - In Subsection 5.1, Landfill Equipment, R360 states, "The water wagon will be used on a daily basis to control dust that could originate from on-site roads, active excavations, covered areas, etc. The water sources for the wagon will be on-site tanks and ponds." Where are the tanks and ponds located?
  - The Inspection Form, Attachment II.1.C, does not include all the components/details outlined in Table II.1.10, Facility Inspections. For example, this form does not account for the evaporation spray system, stormwater control systems, etc.
  - In Subsection 7.0, Facility Inspection and Maintenance, R360 needs to address the sampling requirement of 19.15.36.13.L(1) NMAC in the event fluids are found present in leak detection sumps.
  - In Subsection 7.5, Tank Farm and Pump System (Processing Area), R360 states, "The Tank Farm is designed to contain the capacity of the maximum number of interconnected tanks plus 30%. In this case, there is a maximum of five 1,000 bbl tanks connected for a total of 5,000 bbl. The tank farm is designed to accommodate in excess of 6,500 bbl before flowing to the evaporation ponds." How is this design *in excess* of 6,500 bbl? Also, which tanks are located in the "tank farm berm." There are 16 proposed settling tanks that discharge produced water to the DAF units. The OCD did not see an as-built drawing of the "completed" tank farm berm. R360 needs to include this design/drawing.
  - In Attachment II.1.G, Intermediate Cover Inspection and Maintenance Plan, Subsection 2.1, R360 states that identified deficiencies will be corrected within 90 days. However, the Soil Repair Subsection of 2.2.2, states, "Areas where impacts are evident will be promptly repaired to maintain the integrity cover." The OCD does not believe that 90 days demonstrates "prompt" corrective action. R360 needs to correct noted deficiencies way in advance of 90 days.
  - Are the stormwater detention basins/ponds included in this plan? The OCD only saw stormwater controls included in the facility inspections. R360 needs to add a specific

inspection form for the stormwater detention basins/ponds and specify the inspection interval (i.e., monthly and/or after a significant rain event).

- Volume II, Section 2 Oil Field Waste Management Plan, issues/concerns.
  - In Subsection 3.1, Prohibited Wastes, R360 states, "Regulated non-exempt hazardous waste and non-exempt Naturally Occurring Radioactive Material (NORM) wastes which are subject to other Federal or State regulations are prohibited at DNCS." This statement is inaccurate, the wording should be that regulated hazardous waste will not be accepted. Note, oil and gas Exempt waste is not classified as hazardous waste and no surface waste management facility is allowed to accept hazardous waste.
  - In Subsection 3.2(2), Presence of H<sub>2</sub>S, R360 states, "The tube wand will be used to acquire a sample, and the H<sub>2</sub>S reading and related notes will be recorded on the DNCS Disposal Log (Attachment II.3.D)." Note, the actual attachment should be Attachment II.2.D. Also, the Disposal Log does not contain a column for the H<sub>2</sub>S reading nor a place to record treatment related information. Lastly, why is Trash (sales) included in this Disposal Log? Trash is not allowed to be accepted at this site.
  - In Subsection 3.2(3), Presence of Non-Exempt fluids, R360 states, "Samples will be maintained at the Facility for two weeks for inspection by the generator's personnel and OCD, as necessary." What happens to the sample(s) after the two week period?
  - In Section 4.0, Training, R360 must include a discussion on the site's permit conditions as part of the required training.
- Volume II, Section 3 Hydrogen Sulfide (H<sub>2</sub>S) Prevention and Contingency Plan, issues/concerns.
  - This plan does not discuss the characteristics of sulfur dioxide as required by 19.15.11.9.B(2)(b) NMAC. This plan should also address Threshold Limit Values, Short Term Exposure Limits, and Time Weighted averages for H<sub>2</sub>S.
  - In Subsection 1.4, Hydrogen Sulfide Characteristics, R360 states, "The monitoring is intended to confirm that the H<sub>2</sub>S concentration being accepted at the Facility is less than 1 ppm." However, in Subsection 3.1, Incoming loads, R360 states, "The monitors will issue a visual and audible signal at 10 ppm of H<sub>2</sub>S in the ambient air that becomes more rapid at 20 ppm. In the event of an H<sub>2</sub>S detection of 10 ppm or greater, the following procedures will be implemented." How does this ensure accepted waste is less than 1 ppm H<sub>2</sub>S and what equipment/monitoring device is used to determine the H<sub>2</sub>S is less than 1 ppm?
  - In Subsection 1.5, Regulatory Requirements: 19.15.36 NMAC and 19.15.11 NMAC, R360 states, "Should monitoring results identify unexpected concentrations of H<sub>2</sub>S in excess of 100 ppm (RP-55 limit = 30 ppm) in a public area, the requirements of 19.15.11.8.C NMAC will be implemented and this Plan, developed specifically to be responsive to 19.15.11.9 NMAC, will be implemented as required with proper notification." Note, the H<sub>2</sub>S concentration is not specific to a "public area" but rather a concentration within the facility.
  - The below issues were identified in Subsection 3.2.1, Stationary Monitors:
    - R360 indicates that only the evaporation ponds will be monitored for the presence of H<sub>2</sub>S via continuous monitors as identified in Figure II.3.3. However, in Subsection 5.6 of the Operations, Inspection, and Maintenance Plan, R360 states, "H<sub>2</sub>S monitors that issue a visual and audible signal at 10 ppm will be installed in areas around the solid waste disposal cells, treating plant, liquid solidification, and evaporation ponds to ensure compliance with regulatory alert

levels." R360 needs to include all monitors and locations in the Hydrogen Sulfide  $(H_2S)$  Prevention and Contingency Plan.

- Table II.3.7 (Implementation, Assessment, and Notification Procedures for H<sub>2</sub>S) is specific to evaporation pond monitoring. This Table must apply to the entire site.
- R360 states, "The EC will be notified, and will implement the procedures outlined below if H<sub>2</sub>S readings are ≥ 10 ppm. If H<sub>2</sub>S readings are ≥ 20 ppm, the employee will implement the procedures listed in Table II.3.7."
  - For the procedures outlined, R360 needs to specify what tests for  $H_2S$  levels will be made at the fenceline downwind from the area of concern.
  - If two consecutive H<sub>2</sub>S Readings of 10 ppm or greater are recorded, wouldn't R360 evacuate the area as described in number 4 of Table II.3.7?
  - Also, R360 should clarify that if the second reading from the two consecutive H<sub>2</sub>S readings is greater than or equal to 20 ppm then the employee should implement the procedures listed in Table II.3.7.
- Table II.3.10 in Section 5.0, Emergency Equipment, needs to include all equipment utilized in an emergency response. R360 needs to include the H<sub>2</sub>S monitors assigned to the employee and the stationary monitors installed at the site. Are windsocks not utilized at the site? If so, where are they installed and spares stored? Is the Loader not intended for other uses than just for "Berm Repair?"
- Volume II, Section 4 Closure/Post-Closure Plan, issues/concerns.
  - In Subsection 2.3, Evaporation Pond Liner Removal, R360 states, "Once the sludge has been removed, the high-density polyethylene (HDPE) liner system components will be thoroughly cleaned in accordance with 19.15.35.8 NMAC." What does R360 plan to do with generated rinsate?
  - In Subsection 2.7, Site Sampling, R360 needs to add sampling for major anions and cations which is required for an oil treating plant (19.15.36.18.C NMAC). Furthermore, the OCD does not agree with the following statement, "If contamination is observed at 42 inches, excavation and sampling will continue to the depth where no contamination is observed." Any and all contamination observed at any depth must be remediated.
  - Subsection 2.8, Final Site Closure Processing Area, must address all requirements of 19.15.36.18.A(6) NMAC (e.g., vegetative cover consists of at least three native plant species, including at least one grass, but not including noxious weeds, and maintenance of that cover through two successive growing seasons."
  - Subsection 2.9, Solid Waste Disposal Area, must address all requirements of 19.15.36.18.C(2)(b) (e.g., re-vegetate the area overlying the cell with native grass covering at least seventy percent of the landfill cover and surrounding areas, consisting of at least two grasses and not including noxious weeds or deep rooted shrubs or trees, and maintain that cover through the post closure period).
- Volume II, Section 5 Contingency Plan, issues/concerns.
  - Subsection 1.3, Purpose, inaccurately references Table I.5 (Volume 1) as the list of comprehensive definitions. This should be Table I.6 (Volume 1).
  - Table II.5.7, Part 29: Release Notification, needs to be updated with the most recent version of 19.15.29 NMAC.
  - In Table II.5.10, Spill/Release: Control Guidelines, item 2 references a "spill control list." R360 needs to elaborate on what this means. Also, in item 3, some of the materials/equipment mentioned are not included in Table II.5.5 (e.g., sand, heavy

equipment, non-reactive sorbent materials). R360 needs to include these items, along with windsocks, personal  $H_2S$  monitors, etc. in Table II.5.5 and include location and a brief outline of capabilities. Note, the only capability mentioned for the loader in this table is "Berm Repair."

- Volume II, Section 6 Migratory Bird Protection Plan. This plan should address the inclusion or absence of tanks exceeding eight feet in diameter.
- Volume II, Section 7 Liner Construction Quality Assurance (CQA) Plan. Section 12.0, Engineering Certification, needs to also include a statement in the Engineering Certification Report that the installation of the subgrade, liner, leak detection system, and leachate collection system meets the applicable requirements of 19.15.36.14 NMAC.
- Volume II, Section 8 Vadose Zone Monitoring Plan. In Subsection 3.3, Monitoring Data Evaluation, R360 states, "If the VRS analytical results indicate that a potential Landfill release may have occurred, within 90 days of the finding, fluid samples from each active Landfill sump will collected and analyzed for the parameters listed in Table II.8.2 for comparative evaluation with the VRS results." The OCD does not consider a 90 day time-line to conduct Landfill sump sampling to be protective of the environment. R360 needs to change this time-line to within 14 days. Also, the methane concentration limit of greater than or equal to 500 ppm needs to be recognized as the limit to devise a scope of work for assessing methane monitoring.
- Volume II, Section 9 Leachate Management Plan, issues/concerns.
  - In Section 3.0, Leachate Generation, R360 states, "The leachate generation rate decreases to nearly zero following the placement of the first lift of waste on the liner. This has been calculated in the HELP Model (Volume III.4) and confirmed through experience at other facilities." R360 needs to support this statement by including the HELP Model calculation as an attachment to this plan.
  - In Section 5.0, Leachate Disposal, the OCD does not approve the following proposed disposal methods:
    - Applying recirculated leachate to landfill wastes.
    - The use of diluted leachate for dust control *over lined cells* is not allowed unless analytical testing for TPH, BTEX, and chlorides demonstrate that the leachate is not contaminated and is essentially condensation. Note, no ponding or pooling of water even for dust control is allowed.
  - In Section 6.0, Leak Detection Monitoring, R360 states, "In the event and excessive liquid level [i.e., > corrective action level (ACL)] is observed in a leak detection system, OCD will be notified within 24 hours." What ACL is R360 proposing? Note, 19.15.36.13.L(1) NMAC requires sampling if fluids are present; therefore, the requirement to sample is not triggered by a specified leakage rate.
  - Also in Section 6.0, R360 states that if this liquid level is observed in an evaporation pond the pond will be drained and prior to placing the pond back into service the facility will initiate corrective action which may include liquids testing and submittal of results to the OCD. Again, 19.15.36.13.L(1) NMAC requires sampling if fluids are present in the leak detection sump with analyses of fluid samples furnished to the OCD.
  - Lastly in Section 6.0, R360 states, "Any liquids recovered from the Leak Detection Sump will be disposed of in the same manner as leachate generated from the landfill cells." Note, R360 will not be allowed to use produced water for dust suppression in the event R360 decides to test leachate to determine if it can be used for dust control over lined cells.

- Volume III, Section 1 Engineering Design, issues/concerns.
  - In Section 3.2, Leachate Collection and Leak Detection System, Sheet 10 is referenced to reflect the deployment of SDR 11 HDPE piping for the leachate collection pipe and leak detection sump riser pipes. However, Sheet 10 is for Stormwater Drainage Details.
  - In Section 7.0, Pond Operation, R360 states, "... the leak detection sumps will be monitored at least monthly for the presence of fluids, *which may be extracted and tested* when the level in the sump(s) exceeds 24 in." 19.15.36.13.L(1) NMAC requires sampling and analyses if fluids are present.
  - The OCD did not see any detailed engineering designs for the two stormwater detention basins/ponds. R360 needs to include these designs in the application.

If R360 decides to submit a revised renewal application, the OCD strongly encourages R360 to address all the above identified issues and concerns. R360 should also double check the revised application for accuracy and ensure that all referenced application components are current and are included in the application. Please note, 19.15.36.9.B(3) NMAC states the below:

• "If the division issues a deficiency letter, the applicant shall have 60 days from the division's issuance of the deficiency letter to submit a revised application. The applicant may request, in writing, additional time to submit a revised application. The division shall grant additional time for good cause. The applicant may notify the division that it will not submit a revised application. Within 10 days of receipt of the notification the division shall deny the application without prejudice. If the applicant fails to timely submit a revised application or notify the division that it will not submit a revised application, the division shall deny the application without prejudice within 10 days after the 60 day time limit for the applicant to respond to the deficiency letter has expired."

If you have any questions regarding this deficiency letter, please contact me at (505) 795-1722 or at LeighP.Barr@emnrd.nm.gov.

Respectfully,

Leigh Barr

Leigh Barr Administrative Permitting Supervisor

Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

| Operator:                | OGRID:  |
|--------------------------|---|
| R360 PERMIAN BASIN, LLC  | 289936  |
| 1780 Hughes Landing Blvd | Action Number:  |
| The Woodlands, TX 77381  | 455870  |
|                          | Action Type:  |
|                          | [C-137] Non-Fee SWMF Submittal (SWMF NON-FEE SUBMITTAL) |

## CONDITIONS

| Created By     | Condition                | Condition<br>Date |
|----------------|--------------------------|-------------------|
| joseph.kennedy | Extended to July 8, 2025 | 4/25/2025         |

Page 10 of 10

Action 455870