# RAILROAD COMMISSION OF TEXAS HEARINGS DIVISION

#### OIL & GAS DOCKET NO. 08-0318617

APPLICATION OF HR MARTIN COUNTY LANDFILL, LLC (407462) FOR A PERMIT TO OPERATE A COMMERCIAL OIL AND GAS WASTE STATIONARY TREATMENT FACILITY UNDER STATEWIDE RULE 8 AND STATEWIDE RULE 78, FOR THE MARTIN COUNTY DISPOSAL FACILITY, MARTIN COUNTY, TEXAS

### **FINAL ORDER**

The Railroad Commission of Texas ("Commission") finds that after statutory notice in the above-docketed case, heard on October 1-4, 7-8, 2019; January 23, 2020; and February 3-7, 10-11, 2020, the presiding Technical Examiner and Administrative Law Judges have made and filed a Proposal for Decision containing findings of fact and conclusions of law, which was served on all parties of record, and that this proceeding was duly submitted to the Railroad Commission of Texas at a conference held in its offices in Austin, Texas.

The Commission, after review and due consideration of the Proposal for Decision and the findings of fact and conclusions of law contained therein, and any exceptions and replies thereto, declines to adopt the proposed findings of fact and conclusions of law in the Proposal for Decision. The Commission adopts the substitute findings of fact and conclusions of law as stated and fully set out below.

## **Findings of Fact**

- 1. HR Martin County Landfill, LLC ("Applicant" or "HR Martin"), Operator No. 407462, filed an application ("Application") for a permit to operate a commercial oil and gas waste stationary treatment facility (No. STF-0129) in Martin County, Texas under 16 Tex. Admin. Code § 3.8 ("Statewide Rule 8").
- 2. The Application includes separate pit applications for each of the following:
  - Fourteen landfill cells (Nos. P012602A, P012602B, P012602C, P012602D, P012602E, P012602F, P012602G, P012603A, P012603B, P012603C, P012603D, P012603E, P012603F, P012603G)
  - b. Three drying pads (Nos. P012655, P012656, P012657)
  - c. Two receiving pits (Nos. P012752, and P012753)
  - d. One truck washout pad (No. P012654), and
  - e. Two contact stormwater ponds (Nos. P012604, P012605).
- 3. The Application was published in the *Martin County Messenger* for two weeks.
- 4. Notice of the application was mailed to offsetting landowners on October 6, 2017. The initial application for the proposed facility was filed on October 9, 2017; and

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the initial application was administratively denied by the Commission on December 11, 2017.

- 5. HR Martin resubmitted the application in March 2018 with a revised facility design.
- 6. The application was deemed administratively complete on March 1, 2019, and a draft permit was issued on or around March 15, 2019.
- 7. The Application is protested by John W. Mabee and Joseph "Guy" Mabee ("Mabee Protestants"), landowners of the Mabee Ranch adjacent to the proposed facility.
- 8. The Application is also protested by Edward Kelton, Betty Kelton Howell, Jeffrey M. Johnston, and Sandra K. Johnston ("Kelton and Johnston Protestants"), landowners near the proposed facility.
- 9. On May 21, 2019, the Hearings Division of the Commission sent a Notice of Hearing for the Application via first-class mail setting hearing dates of October 1, 2019 through October 8, 2019. The notice contained (1) a statement of the time, place and nature of the hearing; (2) a statement of the legal authority and jurisdiction under which the hearing is to be held; (3) a reference to the particular sections of the statutes and rules involved; and (4) a short and plain statement of the matters asserted. The hearing was held on October 1, 2019 through October 8, 2019, as noticed. The hearing was recessed at the end of the day on October 8, 2019 and resumed at the agreed date of January 23, 2020. The hearing was recessed at the end of the day on January 23, 2020 and resumed at the agreed dates February 3, 2020 through February 11, 2020. Consequently, all parties received more than 10 days' notice. HR Martin, the Mabee Protestants, and the Kelton and Johnston Protestants appeared at the hearing and presented evidence.
- 10. HR Martin has an active organization report, Commission Form P-5, on file with the Commission.
- 11. The site of the facility is a 160.037-acre tract, located in the R.N. Grisham Survey No. 5, Section 5, Block OH in Martin County, Texas. The site is located approximately 15 miles north-north-west of Midland, on North State Highway 349.
- 12. HR Martin or one of its affiliate companies currently owns the 160.037-acre property in Martin County where the facility is to be located and has owned it for more than a year prior to filing the Application.
- 13. HR Martin plans to transfer the permit for the proposed facility to Milestone Environmental Services prior to construction and operation.
- 14. A pipeline easement across the tract will be relocated to the perimeter of the tract to allow construction of the disposal pits.

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- 15. The site consists of relatively flat land that slopes gently to the east. The surface elevation at the Site ranges from 2,840' above mean sea level (amsl) at the southeast corner, to 2,885' amsl at the southwest corner.
- 16. The proposed facility is located on an outcrop of the southern part of the Ogallala Aquifer, an aquifer that is widely used throughout the region. The Ogallala Aquifer underlies the site.
- 17. The Ogallala Aquifer has a total dissolved solids concentration of 300 to 1,000 parts per million ("ppm") in the area near the proposed facility.
- 18. The Ogallala Aquifer contains usable quality groundwater.
- 19. Water levels in the Ogallala Aquifer have been tracked and are declining over time. US Geological Society data for a water well adjacent to the proposed landfill show the depths from surface to groundwater from 35 feet in 1952 to 48 feet in 1982.
- 20. Groundwater gradient is consistently west to east.
- 21. Static water levels in the seven groundwater monitor wells on the proposed facilities range 57.00-64.83 feet bgs in March 2017 to 57.78-66.45 feet August 2019. The variation in water level between the two sampling periods ranged from 0.44-2.20 feet bgs.
- 22. The Ogallala Aquifer will be a minimum of at least 35' below the base of all pits being permitted.
- 23. Playas are closed, shallow basins that accumulate water. The water does not have an outlet from the playa. Playas are recharge features.
- 24. Playas require clays in soils and topographic depressions to form. If there is an insufficient amount of clay in soil or no topographic depressions, the conditions are unfavorable for playas to form.
- 25. The site has Midessa and Amarillo soils that the USDA describes as well-draining, fine sandy loam.
- 26. The lack of clay in the soil and lack of topographic depressions on site make the formation of playas unlikely.
- 27. The proposed facility is in the recharge zone for the Ogallala Aquifer.
- 28. Seven soil borings were installed around the perimeter of the site and three soil borings were installed in the central part of the site. The seven soil borings around the perimeter of the site were converted to groundwater monitor wells.

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- 29. Each monitor well will be sampled after installation and at least quarterly thereafter for static water level, total depth, benzene, TPH, TDS, pH, Soluble Cations (Calcium, Magnesium, Potassium and Sodium) and Anions (Bromides, Carbonates, Chlorides, Nitrates and Sulfates) through post-closure monitoring.
- 30. HR Martin used hollow stem auger drilling methods for five of the borings. The sixth boring was started with the hollow stem auger, but due to difficulties drilling through the caliche, it was completed with air rotary drilling. The remaining four borings were performed with air rotary drilling.
- 31. Soil thickness was approximately 0-10 feet below ground surface ("bgs") followed by caliche down to the termination of its soil borings at depths ranging from 70-80 feet bgs.
- 32. Dr. Darrell Brownlow, on behalf of the Mabee Protestants, performed two soil borings near the boundary of the proposed facility location using the sonic drilling method.
- 33. The caliche is very hard and dense.
- 34. The hollow stem auger and air rotary samples had low sample recovery.
- 35. Sonic drilling method samples had close to 100 percent sample recovery.
- 36. Larger scale fractures, fissures, solutions cavities, and variations in caliche characteristics such as size of rocks and cementation were observed at a quarry 2.5 miles from the proposed landfill site on the Mabee Ranch.
- 37. The caliche is not a naturally impermeable layer below the site, but a layer that contains fractures, fissures, cracks, and solutions cavities that allows the migration of fluids from the surface to groundwater.
- 38. The hard caliche is vulnerable to cracks, fractures, and fissures, and that the caliche fractures can act as conduits for fluid migration from the site to groundwater.
- 39. In the Application, the Applicant originally proposed a liner system for each pit in the proposed facility will be constructed as follows (from bottom to top):
  - a. The drying pads are proposed to be constructed with prepared subgrade, washed rock and an eight-inch concrete liner;
  - b. The receiving pits are proposed to be constructed with prepared subgrade, a geosynthetic clay liner ("GCL"), a 60-mil high density polyethylene ("HDPE") liner, a 200-mil geonet, and a 60-mil HDPE liner;

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- c. The truck wash pad is proposed to be constructed with prepared subgrade, a GCL, a 60-mil HDPE liner, an 8-ounce geotextile, and an eight-inch concrete liner:
- d. The contact stormwater ponds are proposed to be constructed with prepared subgrade, a GCL, an HDPE liner, a 200-mil geonet, and a 60-mil HDPE liner; and
- e. The landfill cells are proposed to be constructed with prepared subgrade, a GCL, a 60-mil HDPE liner, a 200-mil geonet, and a 60-mil HDPE liner.
- 40. Before waste can be accepted at the facility, HR Martin must:
  - a. File financial security in the amount of \$6,043,677.00 to cover the cost of closure of the facility, as well as post-closer monitoring expenses.
  - b. Record in Martin County and file with Environmental Permits and Support in Austin a restrictive covenant, executed by the landowner of the Site, stating that any soil necessary for closure can be used by the permittee or the Commission to close the facility.
  - c. Install and have groundwater monitor wells required by the permit approved by Environmental Permits and Support in Austin.
  - d. Complete a Spill Control Plan and make it available to the Commission for review.
  - e. Complete a Stormwater Management Plan and make it available to the Commission for review.
  - f. Pass an inspection by the Midland District Office confirming that the facility has been constructed as represented in compliance with the permit.
  - g. Obtain any necessary air emission permits from the TCEQ.
- 41. The facility will accept only non-hazardous oil and gas waste subject to the jurisdiction of the Commission, specifically:
  - a. RCRA-exempt non-hazardous oil and gas waste; and
  - b. RCRA non-exempt oil and gas waste (or international waste) with non-hazardous characteristics based on analytical results from testing for corrosivity, ignitability, reactivity, toxicity, benzene and specified metals.
- 42. Authorized waste from commercial oil and gas facilities and reclamation plants will be tested for TOX (Total Organic Halides) and/or EOX (Extractable Organic

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Halides). All incoming waste other than oil-based mud and cuttings will be screened and, in necessary, tested for NORM (Naturally Occurring Radioactive Material). Any waste not meeting the required testing requirements set forth in the permit will not be accepted at the facility.

- 43. The facility will be prohibited from accepting EPA-defined hazardous waste and industrial waste.
- 44. If required, permittee must obtain a permit from EPA or TCEQ for any discharge of non-contact water from the facility. The permit does not authorize the discharge of waste from any pits to the land surface or surface water.
- 45. HR Martin has financial security in the form of a \$6,043,677.00 bond.
- 46. The mean annual precipitation in the Midland area is approximately 14.9 inches and the mean annual evaporation 70.84 inches.
- 47. Access to the facility will be restricted by a fence around the entire facility and a gate at the entrance that will be locked when the facility is not manned.
- 48. According to the Application, oil and gas waste that would be received by the proposed facility would be tested for free liquids by the Paint Filter Test.
- 49. Applicant proposes to use the drying pads and receiving pits for the temporary storage of oil and gas waste that does not pass the Paint Filer Test.
- 50. The landfill cells are proposed to be used only for the disposal of dry, solid waste that passes the Paint Filter Test.
- 51. According to HR Martin, the truck wash pad would be used to wash out trucks prior to leaving the facility.
- 52. Water will be managed as contact and non-contact water.
- 53. Applicant proposes that contact stormwater will be pumped from the cells or other pits (drying pads, receiving pits, or truck washout) and trucked or piped to lined contact stormwater ponds.
- 54. Contact stormwater will be contained within the waste management units until it evaporates, is moved to the collecting pit, or is removed from the facility for injection in a permitted disposal well.
- 55. The non-contact stormwater pond is unlined, and only designed for the storage of water that has not contacted waste in the facility.

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- 56. Under the permit requirements, no waste, treated or untreated, may be placed directly on the ground.
- 57. Under permit requirements, only one disposal pit will be active and accept waste at any time.
- 58. There is an estimated leakage rate for the bottom of the proposed landfill.
- 59. Upon facility closure, all waste will be removed from the tanks, vessels, washout pit, receiving pits, drying pits and properly disposed, either in an on-site disposal cell, or at an authorized off-site facility.
  - a. The collecting pits and drying pits must be dewatered, emptied, demolished, backfilled, compacted and properly closed. All waste, including liners, must be removed and disposed of in an authorized manner.
  - b. The concrete pads, collecting pits, drying pits, concrete unloading bays and concrete aprons must be cleaned and demolished, and the concrete rubble and associated wash-water must be disposed of in an authorized manner.
  - c. Excluding the disposal pits and stormwater management areas, the entire facility must be backfilled as necessary, contoured to original grade and revegetated as appropriate for the geographic region.
  - d. Once waste removal is completed, a soil sampling plan must be submitted to Environmental Permits and Support in Austin to characterize the scope of contamination (if any) at the facility. After the removal of all waste, composite soil samples must be taken and analyzed to ensure constituent concentrations are below levels specified in the permit.
  - e. Provisions must be taken to prevent erosion both during and following closure.
- 60. Post-closure monitoring will continue for at least five years after the facility is closed. The monitoring period will be extended thereafter until the Commission determines monitoring is no longer necessary.
- 61. After the facility has been closed, the permittee will be required to maintain financial security to cover the cost of post-closure monitoring requirements. The current cost estimate for post-closure monitoring requirements is \$384,912.00.
  - a. Any areas showing signs of erosion or instability must be repaired, contoured, backfilled and reseeded as necessary.
  - b. All groundwater monitoring wells must remain operational and monitoring requirements must continue as specified in Permit Condition XI.B until

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written approval from Environmental Permits and Support in Austin is granted for plugging and abandoning the wells.

- c. The LDS and LCS for the disposal pits must be maintained and monitored at least quarterly. Any leachate detected must be removed and disposed of in an authorized matter and the information as specified in Permit Condition IX.M must be reported within the appropriate quarterly report.
- d. Post-closure care must include quarterly inspections of the facility by a Texas registered Professional Engineer for signs of deterioration and erosion.
- 62. HR Martin will be required to update its closure cost estimate at least once every five years when the permit is renewed. Updates are also required when there is any significant change in the operations at the facility.
- 63. No waste of oil, gas or geothermal resources will result from the proposed disposal operations.
- 64. The proposed waste management and disposal operations will not result in the pollution of fresh surface or subsurface water.
- 65. The permit conditions contained in the Permit provide for the safe disposal of non-hazardous oil and gas waste.
- 66. After the Proposal for Decision was issued, the Applicant agreed that the following additional requirements in the permit would not be adverse:
  - a. For HR Martin to be required to use a substantially similar liner system that underlies the collecting/receiving pits (two HDPE liners, a GCL, and a leak detection system), underneath each of the drying pads as they are constructed.
  - b. For HR Martin to be required to obtain Commission staff's approval of the GCL specifications and type prior to installation.
  - c. For HR Martin to be required to extend the double HDPE liner to be installed on the interior faces of the temporary berms in an active disposal well, such that the double HDPE liner system is to be extended along the interior side of the temporary berms, so that it matches the liner system for the entire disposal cell.

#### Conclusions of Law

1. Resolution of the subject application is a matter committed to the jurisdiction of the Railroad Commission of Texas. Tex. Nat. Res. Code § 81.051.

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- 2. Proper notice of hearing was timely issued to persons entitled to notice. See, e.g., Tex. Gov't Code §§ 2001.051, .052; 16 Tex. Admin. Code §§ 1.41, 1.42, 1.45, 3.8(d)(6)(C), (D).
- 3. The application with the additional requirements HR Martin agrees it would not consider adverse demonstrates the proposed facilities will not result in the pollution of surface or subsurface water. See, e.g., 16 Texas Admin. Code § 3.8(b), (d)(6)(A).
- 4. The application meets the requirements of Statewide Rule 8. See, e.g., Tex. Admin. Code § 3.8.

# **Ordering Provisions**

IT IS ORDERED that HR Martin County Landfill, LLC's application for a permit to operate a commercial oil and gas waste stationary treatment facility (No. STF-0129) in Martin County, Texas is **APPROVED**.

It is **ORDERED** that when this Final Order becomes final, the Environmental Permits & Support Section shall prepare and issue a permit authorizing the acceptance, treatment and disposal of oil and gas wastes as reflected in the application, and include the following additional requirements:

- 1. A requirement that staff approve the geosynthetic clay liner specifications and type prior to installation.
- 2. A requirement that the liner system be extended along the interior side of the temporary berms so that the liner system for the temporary berms matches the liner system for the entire disposal cell. Staff is authorized to require a reasonable number of additional diagrams to accomplish this goal.
- 3. A requirement that underneath each drying pad there be constructed a substantially similar liner system to what underlies the collecting/receiving pits (two HDPE liners, a GCL, and a leak detection system).

It is further **ORDERED** by the Commission that this order shall not be final and effective until 25 days after the Commission's Order is signed, unless the time for filing a motion for rehearing has been extended under Tex. Gov't Code § 2001.142, by agreement under Tex. Gov't Code § 2001.147, or by written Commission Order issued pursuant to Tex. Gov't Code § 2001.146(e). If a timely motion for rehearing of an application is filed by any party at interest, this order shall not become final and effective until such motion is overruled, or if such motion is granted, this order shall be subject to further action by the Commission. Pursuant to Tex. Gov't Code § 2001.146(e) and 16 Tex. Admin. Code § 1.128(e), the time allotted for Commission action on a motion for

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rehearing in this case prior to its being overruled by operation of law is hereby extended until 100 days from the date the Commission Order is signed.

Each exception to the Proposal for Decision not expressly granted is overruled. All requested findings of fact and conclusions of law which are not expressly adopted are denied. All pending motions and requests for relief not previously granted or granted herein are denied.

SIGNED on December 8, 2020.

**RAILROAD COMMISSION OF TEXAS** 

CHAIRMAN CHRISTI CRADDICK

Pocusigned by:

**COMMISSIONER RYAN SITTON** 

Docusigned by:
Wayne Christian

**COMMISSIONER WAYNE CHRISTIAN** 

**ATTEST** 

—DocuSigned by: Callie Farrar

**SECRETARY** 

