

**SOAH DOCKET NO. 582-15-2082
TCEQ DOCKET NO. 2015-0069-MSW**

APPLICATION BY 130 ENVIRONMENTAL PARK, LLC FOR PROPOSED PERMIT NO. 2383 §
 § **BEFORE THE STATE OFFICE**
 § **OF**
 § **ADMINISTRATIVE HEARINGS**

EXECUTIVE DIRECTOR'S CLOSING ARGUMENTS

INTRODUCTION

130 Environmental Park, LLC applied to the Texas Commission on Environmental Quality (TCEQ) for an MSW permit to authorize the construction and operation of 130 Environmental Park, a new Type I MSW landfill in Caldwell County, Texas. The proposed facility would be located north of Farm-to-Market Road (FM) 1185 between U.S. Highway 183 and Homannville Trail, about two miles north of Lockhart. The proposed facility boundary encompasses 520 acres, but waste disposal would only occur within the landfill footprint comprising approximately 202 out of the 520 acres. The maximum elevation of waste placement would be 731.5 feet above mean sea level (msl), and the final cover shall not exceed 736 feet above msl. The total disposal capacity of the landfill, including daily cover, would be 33.1 million cubic yards. Authorized wastes would be accepted at an anticipated, initial rate of approximately 1,500 tons per day and may increase to a maximum of 2,943 tons per day. These acceptance rates, however, are not limiting parameters of the draft permit.

Under the draft permit, the Applicant would be authorized to dispose of certain municipal and industrial solid wastes. Authorized municipal solid wastes would be those resulting from, or incidental to, municipal, community, commercial, institutional, recreational, and industrial activities, including garbage, putrescible wastes, rubbish, ashes, brush, street cleanings, construction and demolition waste, and yard waste. Authorized industrial solid wastes would be Class 2 industrial solid waste, Class 3 industrial solid waste, and certain special waste as described in Part II, Section 2.1 of the Application. The Applicant would not be authorized to accept

Class 1 nonhazardous industrial solid waste, unless that waste is classified as Class 1 due only to the presence of asbestos content.

The Applicant would be prohibited from accepting medical waste, sewage, dead animals, slaughterhouse waste, sludge, grease trap waste, grit trap waste, liquid waste from municipal sources, municipal hazardous waste from conditionally exempt small quantity generators, and out-of-state waste.

On February 4, 2015, the Chief Clerk referred the Application directly to State Office of Administrative Hearings (SOAH) for a hearing on whether the Application complies with all applicable statutory and regulatory requirements.

SUFFICIENCY OF PROPERTY RIGHTS

The Protestants raised the issue of whether 130 Environmental Park obtained sufficient property rights for the proposed landfill. Title 30 Texas Administrative Code (TAC) § 330.59(d) requires an applicant for a Municipal Solid Waste permit to submit documentation of the facility location and property owner information. By complying with the requirements of Section 330.59(d), the Applicant sufficiently demonstrated it obtained property rights for the proposed landfill.

Facility Location

To show the facility location, the owner or operator must submit three items: (1) a description of the facility location with respect to known or easily identifiable landmarks; (2) detail of the access routes from the nearest U.S. or state highway; and (3) a list of the longitudinal and latitudinal geographic coordinates of the facility. (30 TAC § 330.59(d)). The Applicant's application contained all three items: it (1) described the location of facility; (2) detailed the access routes; and (3) listed the geographic coordinates of the facility. (App. Ex. 130EP-1, p. 20).

Property Owner Information

To adequately demonstrate the property owner information, the Applicant is required to submit a legal description of the facility and a property owner affidavit. (30 TAC § 330.59(d)). A legal description must contain the following four items: (1) the legal description of the property and the identifying reference of the current

ownership record; (2) for property that is platted, the identifying reference of the final plat record that includes the acreage encompassed in the application, a copy of the final plat, and a written legal description; (3) a boundary metes and bounds description of the facility signed and sealed by a registered professional land surveyor; and (4) drawings of the boundary metes and bounds description. (*Id.*). The application contained: (1) a legal description; (2) the final plat and reference; (3) a signed and sealed metes and bounds description; and (4) a drawing of the metes and bounds description. (App. Ex. 130EP-1, pp. 69-72 and 131).

A property owner affidavit must contain the following three items: (1) acknowledgement that the State of Texas may hold the property owner of record either jointly or severally responsible for the facility; (2) for facilities where waste will remain after closure, acknowledgment that the owner has a responsibility to file with the county deed records an affidavit to the public advising that the land will be used for a solid waste facility prior to the time that the facility actually begins operating as a municipal solid waste landfill facility; and (3) acknowledgment that the facility owner or operator and the State of Texas shall have access to the property during the active life and post-closure care period, if required, after closure for the purpose of inspection and maintenance. (30 TAC § 330.59(d)). The application contained (1) the acknowledgement of liability; (2) an affidavit filed with the county deeds records advising the public of the land use; and (3) acknowledgment of access rights. (App. Ex. 130EP-1, pp. 26-32).

Based on the documentation submitted in the Application, the Executive Director (ED) concludes that 130 Environmental Park has sufficient property rights in all of the property within the proposed permitted facility boundary.

EVIDENCE OF COMPETENCY

In accordance with 30 TAC § 330.59(f), the Applicant must list all Texas solid waste sites that the Applicant has owned or operated within the last ten years; list all solid waste sites in all states, territories, or countries in which the Applicant has a direct financial interest; state that a licensed solid waste facility supervisor shall be employed before commencing facility operation; list the names of the principals and supervisors of the owner's or operator's organizations together with previous

affiliations with other organizations engaged in solid waste activities; and show landfilling and earthmoving experience, and other pertinent experience or licenses possessed by key personnel as well as list the number and size of each type of equipment to be dedicated to facility operation. (Ex. App. 130EP-1, pp. 050-051). 130 Environmental Park does not own or operate any other solid waste facilities in Texas. 130 Environmental Park states that a properly licensed solid waste facility supervisor will be hired, and the supervisor will have experience in earthmoving operations as well as a minimum of one year of landfill operational experience.

The ED has determined that the competency information provided in the Application meets the requirements of the rule cited above.

COMPLIANCE HISTORY

During the application review process, the TCEQ develops and reviews compliance history reports under Chapter 60 of the TCEQ rules. (See 30 TAC § 60.1(a)). The compliance history incorporates data from an applicant derived from numerical scores associated with enforcement events. The components of the report include enforcement information related to an applicant, specific to the site that is under review, as well as other sites that are owned or operated by the applicant. (30 TAC § 60.1(c)). The report will provide a compliance score, as well as a classification as a high performer, satisfactory performer, or unsatisfactory performer. Because this is a new site, there is no existing compliance history for this facility for the ED to consider. Furthermore, the TCEQ does not use compliance information from agencies in other states to develop a facility rating. (Ex ED-SO-8, p. 67). The Applicant's lack of history for operating this or any other site does not provide a basis for denying this application.

LAND USE COMPATIBILITY

The ED concludes that the Applicant included sufficient information to make a compatible land use determination.

TCEQ rules require an applicant to analyze the impact of the proposed landfill on the surrounding area. (30 TAC § 330.61(h)). An applicant must demonstrate that the proposed landfill is compatible with the surrounding land uses and provide

the following: (1) a published zoning map, if available; (2) information about the character of the surrounding land uses within one mile; (3) information about growth trends within five miles; (4) the proximity to residences and other uses within one mile; (5) a description and discussion of all known wells within 500 feet; and (6) any other information requested by the ED. (*Id.*). Mr. John Worrall prepared the land use compatibility information included in the application and testified on behalf of the Applicant. (*See Ex. Worrall-1*).

During the hearing, Mr. Worrall testified that he analyzed information about growth trends beyond five miles of the facility in excess of TCEQ rule requirements. (Tr. pp. 55-56). On multiple instances during cross examinations, opposing parties asked Mr. Worrall if he exceeded the rule requirements on other parts of his analysis by considering such information as: existing local governmental ordinances, proposed local governmental ordinances, proposed developments, issued permits, unlisted-sensitive land uses, land uses beyond the one mile rule requirement, flood plains, projected attendance zones for schools, impact of the facility on water wells, and high water dams. (*See, e.g., Id.* at p. 76 line 9 (asking Mr. Worrall if his analysis could include information in excess of TCEQ rule requirements)). Mr. Worrall offered a similar response in each instance, that in certain circumstances including information beyond TCEQ's requirements could be beneficial, but that he generally tried to limit his analysis to the rule's requirements. (*See, e.g., Id.* at p. 95 line 5 (stating that exceeding TCEQ rule requirements would be beneficial in the growth trend analysis, but not when looking at actual land uses resulting in close adherence to the rule)).

Based on the information included in the Application, the TCEQ rules, and the testimony during the hearing, the ED concludes that the information contained in the application is sufficient to demonstrate land use compatibility. During the technical review of an application, the ED must determine if the rule requirements have been met and if necessary may request any other information he requires. (30 TAC § 330.61). There is no provision in the rules that require an applicant who voluntarily submits additional information for one part of the land use analysis to submit additional information for the remaining parts, absent a request. In this case, the ED did not request any additional information. Therefore, the ED

recommends that the inclusion of additional information suggested by the Protestants be denied and the review of the Application be limited to the rule requirements. Based on the rule requirements, the ED determined the Application contained sufficient information to demonstrate the landfill is a compatible use.

TRANSPORTATION AND TRAFFIC

Steve Odil testified, on behalf of the ED, that in accordance with 30 TAC § 330.61(i), an application for an MSW landfill permit must include data on access roads for the proposed facility, including: availability and adequacy of roads that the owner or operator will use to access the site; volume of vehicular traffic on access roads within one mile of the proposed facility, both existing and expected, during the expected life of the facility; and projections on the volume of traffic expected to be generated by the facility on the access roads within one mile of the proposed facility. (Ex. ED-SO-1, pp. 18-19). Mr. Odil further testified that the required traffic data is provided in the Application in Part II, Section 9.1 and Part II, Appendix IIC. (Ex. App. 130EP-1, pp. 098 and 155-196).

The Applicant offered John P. Denholm, III, P.E., PTOE as an expert on traffic engineering and transportation planning activities. Mr. Denholm testified that the Application satisfies applicable TCEQ MSW regulatory requirements concerning roadways and traffic. (Ex. App. Denholm-1, p. 6). He also testified that US 183 is suitable for the predicted amount of 130 Environmental Park site traffic, and the proposed site driveway location will provide adequate site distance to the south. (*Id.* p. 2). When questioned about the intersection of FM 1185 and Highway 130 at the evidentiary hearing, Mr. Denholm testified that it is generally a “low to medium volume intersection. It’s not heavy enough yet to warrant traffic signals.” (Tr. p. 283).

As noted in the ED’s Response to Comments (RTC), when reviewing permit applications, the ED defers to the Texas Department of Transportation (TxDOT) for recommendations on roadway improvements needed to handle expected traffic. (Ex. ED-SO-9, pg. 14). Coordination documents with TxDOT, required under 30 TAC § 330.61(i)(4), are provided in Part II, Appendix IIC. (Ex. App. 130EP-1, pp. 155-196). The traffic study recommended a 660-foot deceleration lane (a 560-foot

deceleration length and a 100-foot storage length) on U.S. Highway 183 northbound and no acceleration lane. TxDOT responded that the proposed access mitigation is satisfactory and that no other issues remain. (*Id.*).

The ED has determined that the Application complies with all applicable requirements regarding availability and adequacy of roads and traffic impact and safety.

GEOLOGY AND SOILS

TCEQ rule at 30 TAC § 330.63(e)(4) requires that the geology report include the results of investigations of subsurface conditions at a site, with information derived from a sufficient number of borings that are deep enough to allow identification of the uppermost aquifer and underlying hydraulically interconnected aquifers, and to establish subsurface stratigraphy and geotechnical properties of the soils and rocks beneath the facility. 30 TAC §§ 330.63(e)(5)(C) through (F) require that an application include information about aquifers and groundwater beneath the facility. (Ex. SO-9, p. 26).

To characterize the geology and hydrogeology at the site the Applicant conducted a subsurface investigation following a soil boring plan that met the requirements of 30 TAC § 330.63(e)(4). The methods and results of the subsurface investigation are described in Section 4 of Attachment E, which includes a detailed discussion of the site stratigraphy. Boring logs are provided in Appendix E2, and geologic cross sections are provided in Appendix E3. Section 5 of Attachment E provides information about the geotechnical properties of the subsurface materials, and documents that nearly all of the material in the subsurface is silty clay with hydraulic conductivity in vertical and horizontal directions of less than 1×10^{-7} cm/sec, and that granular materials are present as a remnant veneer on the surface but not part of a continuous deposit. The boring logs in Attachment E, Appendix E2, cross sections in Appendix E3, and regional geologic map in Appendix E1 all indicate that the soils and strata are consistent beneath the proposed landfill footprint. Laboratory geotechnical test results are documented in Appendix E5. (*Id.*).

The rules in 30 TAC §§ 330.61(j) and (k), and 30 TAC §§ 330.63(e) and (f) require an application to include information about soils, geology, surface water, and groundwater. 30 TAC § 330.63(e)(5) requires the Application to include information about the suitability of the soils and strata for the uses for which they are intended, and 30 TAC § 330.63(e)(5)(A) requires that soil characteristics be determined from at least one sample from each soil layer or stratum that will form the bottom and side of the proposed excavation and from those that are less than 30 feet below the lowest elevation of the proposed excavation. Sections 10 and 11 in Part II of the Application describe the soils, geology, groundwater, and surface water conditions at the site in general terms; Section 4.2 of Part III, Attachment E describes the site stratigraphy, and indicates that nearly all of the material in the subsurface is silty clay. Section 1.1 of Part III, Attachment F (Groundwater Sampling and Analysis Plan) describes the site hydrogeology. Attachment D5 to Part III, Attachment D (Waste Management Unit Design) and Section 5 of Part III, Attachment E (Geology Report) summarize the geotechnical properties of the soils; geotechnical tests are documented in detail in Appendix E5 to Attachment E. (*Id.*).

The rules require the Applicant to provide a geology report that includes data describing the geotechnical properties of the subsurface materials and a discussion with conclusions about the suitability of the soils and strata for the uses for which they are intended. The geotechnical data are provided in Attachment E, Appendix E5, and discussed in Section 5 of Attachment E. (*Id.*).

John Michael Snyder, P.G., testified on behalf of the Applicant that he has never seen a site for a municipal solid waste landfill with better geology and hydrogeology than the proposed site. (App. Ex. Snyder-1, p. 4).

Mr. Snyder stated that the soils which will be excavated during construction of the landfill cells consists predominantly of silty fat clay which is well suited for use as compacted soil liner material for the liner system that will provide a barrier to potential groundwater contaminants leaving the landfill site. (*Id.*).

Mr. Snyder also testified that there is very little groundwater present in the silty clays and shales found in the geologic formations at the proposed site, down to a depth of several hundred feet below ground surface. According to his testimony

the site has less groundwater than any site which he has previously worked on. (App. Ex. Snyder-1, p. 26).

FAULTS AND UNSTABLE AREAS

The rule regarding the Fault Areas location restriction, at 30 TAC § 330.555, requires that new municipal solid waste landfill units and lateral expansions not be located within 200 feet of a fault that has had displacement in Holocene time (unless the owner or operator demonstrates that an alternative setback distance of less than 200 feet will prevent damage to the landfill unit and will be protective), and that applications for sites located within areas that may be subject to differential subsidence or active geological faulting include detailed fault studies. (Ex. ED-SO-1, pp. 21-22).

Section 2.1 in Part III, Attachment E (Geology Report) of the Application documents that the site and immediate area were investigated for evidence of features listed in 30 TAC § 330.555 that might indicate the presence of a fault. The discussion indicates that no evidence was found of active faulting or differential subsidence in the area, and no evidence was found of faults that have had displacement in Holocene time within 200 feet of the proposed landfill unit. There was no evidence of a fault under the proposed landfill footprint. The geologic map in Drawing E1-1 in Appendix E1 to Attachment E shows the known, mapped faults in the area; the discussion in Section 2.1 explains that the faults are farther than 200 feet from the proposed waste management unit boundary. Sections 2.4 and 3.3 of Part III, Attachment D6 (Leachate and Contaminated Water Management Plan) describes how the owner or operator will manage contaminated water in accordance with 30 TAC § 330.305(g), in a manner that will not cause surface water or groundwater pollution, and indicates leachate and contaminated water will be disposed offsite at a publicly owned treatment works (POTW) or other TCEQ approved treatment or disposal facility. The proposed facility also includes a groundwater monitoring system design that meets the requirements of Chapter 330, Subchapter J. The proposed groundwater monitor well locations are between the waste management unit and faults that are shown on Drawing E1-1; if

contaminants were released to groundwater they would be detected by the groundwater monitoring system before reaching the faults. (*Id.*).

The rule regarding the Unstable Areas location restriction, 30 TAC § 330.559, defines an unstable area as a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of a landfill's structural components responsible for preventing releases from the landfill. Unstable areas can include poor foundation conditions, areas susceptible to mass movement, and karst terrains. Section 2.3 in Attachment E explains that soil borings and laboratory tests did not indicate the presence of poor foundation conditions such as soft clay or loose sand beneath the proposed location for the landfill. Section 2.3 states further that evidence of karst terrain, or mass movement of natural formations of earthen material was not observed at the site, in the borings, or on the geologic maps. (*Id.*).

Michael Snyder testified on behalf of the Applicant that the proposed site complies with the TCEQ location restrictions regarding faulting, which requires engineering considerations for those landfills which are built within 200 feet of active faults. Mr. Snyder further testified that there are no mapped faults of any age within 200 feet of the proposed site. (App. Ex. Snyder-1, p. 4).

The ED has determined that the proposed landfill location complies with the location restrictions of 30 TAC §§ 330.555 and 330.559.

GROUNDWATER MONITORING

TCEQ rules in 30 TAC §§ 330.61(j) and (k), and 30 TAC § 330.63(e) and (f) require an application to include information about soils, geology, surface water, and groundwater, and to include a groundwater sampling and analysis plan. To characterize the soils and geology at the site, the Applicant conducted a subsurface investigation following a soil boring plan that met the requirements of 30 TAC § 330.63(e)(4) regarding number and depth of borings. The soil boring plan was approved by the TCEQ in a letter dated October 10, 2013, and consisted of 32 borings in a project area of approximately 208 acres. (ED-SO-9, p. 37).

The regional geologic map presented as Drawing E1-1 in Attachment E shows an area labeled as Leona Formation at the location of the proposed landfill. Information in Attachment E indicates that nearly all of the material in the subsurface at the proposed location is silty clay with hydraulic conductivity less than 1×10^{-7} cm/sec, and that granular materials that were mapped as Leona Formation (cobbles, pebbles, and some gravel mentioned in Sections 10 and 11 in Part II of the Application, and in the Geology Report in Attachment E to Part III of the Application) are present as a remnant veneer mixed with clayey soil on the surface, and not part of a continuous deposit or aquifer. The ED has not been provided any evidence that pollutants from previous oil and gas production in the area are present in the unit labeled as Leona Formation at the location of the proposed landfill. (*Id.*).

The information in the Application indicates that no part of the proposed landfill overlies the Leona aquifer or Carrizo-Wilcox aquifer, or any other major or minor aquifer. Part III of the Application, Attachment E (Geology Report) and Attachment F (Groundwater Sampling and Analysis Plan) indicates that the site is located on an outcrop of strata of the Midway Group, with a layer of clayey soil 2 to 6 feet thick (Stratum I) overlying dense, silty clay more than 50 feet thick (Stratum II and Stratum III) beneath the proposed landfill excavation. Section 1.1 of Attachment F indicates that groundwater occurs beneath the site in Stratum II, in which the clay is variously weathered, and that Stratum III is unweathered and is an aquitard to groundwater in overlying Stratum II. Geotechnical test results documented in Appendix E5 indicate that hydraulic conductivities of Stratum II and Stratum III are less than 1×10^{-7} cm/sec, and estimated groundwater flow velocity in Stratum II is approximately 0.02 feet per year. If a release from the landfill were to occur and if contaminants were to impact groundwater, impacted groundwater would move slowly. The Application includes a groundwater monitoring system design and groundwater sampling and analysis plan that meet the requirements of 30 TAC §§ 330.63(f), 330.403, and 330.405. (ED-SO-9, p. 38).

Mr. Arten Avakian testified that he reviewed portions of Part II of the application that addressed requirements related to groundwater and surface water,

as well as Part II, attachments E and F relating to groundwater sampling and analysis plan. (Ex. ED-AA-1, p. 3). Mr. Avakian stated that he reviewed the prefiled testimony of Michael Snyder and the Applicant's Supplemental Submittal of May, 2016 (Ex. 130-EP-7) (Ex. ED-AA-1 p. 6). Mr. Avakian testified that his conclusion is that the application contains complete and accurate information about geology and groundwater as required by 30 TAC § 330.63 (e). (Ex ED-AA-1, p. 9).

GENERAL FACILITY DESIGN

Chapter 330 of the TCEQ rules does not place any limitations on the general design of the facility or landfill. Landfills are most commonly designed in a rectangular shape. The proposed landfill, however, contains many curves and an irregular footprint, being described as "amoeba shaped" (Tr. Vol. 1, p. 85). Despite the irregularity of the design, the TCEQ does not have the authority to restrict the general facility design of a proposed landfill or to consider the design when deciding whether to issue a permit. The TCEQ's only requirement concerning the general landfill design is that an applicant submit the following information in accordance with 30 TAC § 330.63(b): (1) facility access; (2) waste movement; (3) sanitation; (4) water pollution control; and (5) endangered species protection. (30 TAC § 330.63(b)). Mr. Kerry Maroney prepared the General Facility Design portion of the application and testified for the Applicant. (App. Ex. 130EP-2). The ED reviewed the application and relevant testimony and determined that the application included sufficient information to satisfy the requirements in § 330.63(b).

WASTE MANAGEMENT UNIT DESIGN

Chapter 330 of the TCEQ rules does not place any limitations on the waste management unit design of the landfill. The TCEQ does not have the authority to restrict the waste management unit design or to consider the design when deciding whether to issue the permit. The TCEQ's only requirement concerning the waste management unit design is that an applicant submit the following information in accordance with 30 TAC § 330.63(d): information about (1) the storage and transfer units; (2) incineration units; (3) surface impoundments; (4) landfill units;

(5) arid exemption landfill application information; (6) Type V mobile liquid waste processing units; (7) Type IX energy, material, gas recovery for beneficial use, or landfill mining waste processing units; (8) compost units; and (9) Type VI waste processing demonstration facilities. (30 TAC § 330.63(d)). Mr. Gregory Adams prepared the waste management unit design portion of the application and testified for the Applicant. The ED reviewed the application and the relevant testimony and determined that the application included sufficient information to satisfy the requirements in Section 330.63(d).

LANDFILL GAS MONITORING

The Applicant offered J. Heath Parker, P.E. as an expert on landfill gases. Mr. Parker testified that he prepared and/or supervised the Landfill Gas Management Plan (LGMP), which is Part III, Attachment G of the Application. Mr. Parker also testified that the LGMP met all TCEQ rules regarding landfill gas management plan, and that if 130 Environmental Park is developed and operated as described in Attachment G, it will meet all requisite TCEQ landfill gas management rules. (Ex. App. Parker-1, p. 6)

As noted in the ED's RTC, 30 TAC § 330.159 requires the owner or operator of a landfill unit to monitor landfill gases in accordance with Chapter 330, Subchapter I (30 TAC § 330.371) (Ex. ED-SO-9, p. 46). 30 TAC § 330.371 requires the owner or operator to monitor and control landfill gas because landfill gas contains methane, which can create an explosive hazard if it were to migrate into buildings, subsurface vaults, utilities, or any other areas where potential gas buildup would be of concern.

The ED has determined that the proposed LGMP meets the requirements of 30 TAC § 330.371.

ENDANGERED OR THREATENED SPECIES

Mr. Odil testified that in accordance with 30 TAC § 330.61(n)(2), 130 Environmental Park had a biological assessment prepared by a qualified biologist, Russell Marusak. (Ex. ED-SO-1, pp. 19-20). This assessment can be found in Part II, Appendix IIE of the Application. The assessment concluded that the proposed

landfill will not “result in the destruction or adverse modification of the critical habitat of endangered or threatened species, or cause or contribute to the taking of any endangered or threatened species.” (*Id.* at p. 20).

As discussed in the RTC, an application for a landfill located in the range of endangered or threatened species must include a biological assessment prepared by a qualified biologist pursuant to 30 TAC § 330.61(n)(2). (Ex. ED-SO-9, p. 9). The Applicant offered Mr. Marusak as an expert on endangered and threatened species. Mr. Marusak testified that he prepared and/or supervised the preparation of the requisite Application documents regarding endangered or threatened species. (Ex. App. Marusak-1, p. 6). Texas Parks and & Wildlife Department (TPWD) made three recommendations regarding vegetation impacts: the Migratory Treaty Act, revegetation, and rare species. (Ex. App. 130EP-1, pp. 683-686). Mr. Marusak testified that the first recommendation has already been implemented, and the other two will be implemented pursuant to the Species Protection Plan in the Application. (Ex. App. Marusak-1, pg.11). Mr. Marusak further testified that if 130 Environmental Park is developed and operated as described in the Application, it will meet all TCEQ rules regarding protection of endangered and threatened species. (*Id.* at pp. 13-14).

The ED has determined that the Application complies with all applicable requirements regarding endangered or threatened species.

WETLANDS

Mr. Odil testified that the TCEQ rules require applicants for MSW landfills to provide a wetlands determination in Part II of the Application to meet the requirements of 30 TAC § 330.61(m). (Ex. ED-SO-1, pp. 20-21). The Applicant offered Russell Marusak as its expert witness on wetlands, and Mr. Marusak testified that he prepared and/or supervised the preparation of portions of the Wetlands Documentation, which can be found in Part II, Appendix IID of the Application. (Ex. App. Marusak-1, p. 5). The Wetlands Documentation contained the following: Waters of the United States Delineation Report and Wetland Determination and Identification; Summary of Wetlands Determination and Identification for 130 Environmental Park Facility Boundary Areas; and Wetlands

Demonstrations. Mr. Marusak further testified that the Wetlands Documentation complied with all TCEQ wetlands rules, and that if 130 Environmental Park is developed and operated as described in the Application, it will meet all requisite TCEQ wetlands rules. (*Id.* at p. 9).

As stated in the RTC, TCEQ rules require applicants for MSW landfills to provide a wetlands determination in Part II to meet the requirements of 30 TAC § 330.61(m). (Ex. ED-SO-9, p. 7). Halff Associates, Inc. assessed the wetlands and waters of the United States within the 1,229-acre property that includes the proposed facility boundary, and identified approximately 1.46 acres of wetland areas within the proposed facility boundary, 0.49 acre of which are jurisdictional. (*Id.* at pp. 17-18). Within the proposed waste footprint there is approximately 0.68 acre of wetlands, none of which is jurisdictional. (*Id.*). Mr. Marusek explained that jurisdictional wetlands are those wetlands which the US Corps of Engineers has determined are not isolated wetlands. (Tr. pp. 1022-1023). Furthermore, the Application includes information demonstrating that the waste disposal unit and other storage and processing units at the facility are not located within jurisdictional wetlands. Non-jurisdictional wetlands would be affected by the proposed design, but the TCEQ does not have authority to regulate and protect non-jurisdictional wetlands under MSW rules. Therefore, the demonstrations under 30 TAC § 330.553(b)(1) through (5) are not required. The ED has determined that the Application contains sufficient information regarding wetlands.

SURFACE WATER AND DRAINAGE

In accordance with 30 TAC §§ 330.63(c)(1), 330.303, and 330.305, an applicant must provide a Surface Water Drainage Report that demonstrates that the owner or operator will design, construct, maintain and operate the landfill to manage run-on and runoff during the peak discharge from at least a 25-year storm and prevent the off-site discharge of waste and contaminated storm water; ensure erosional stability of the landfill during all phases of landfill operation, closure, and post-closure care; provide structures to collect and control at least the water volume resulting from a 24-hour, 25-year storm; and ensure that the existing drainage pattern is not adversely altered. The drainage pattern evaluation is

performed at points where storm water is discharged from the permit boundary. Part III, Attachment C of the application, Facility Surface Water Drainage Report, provides discussions and detailed designs, calculations, and operational considerations for the collection, control, and discharge of storm water from the landfill as required by the cited rules. (Ex ED-SO-1, p. 23).

According to Section 5.2 of Part III, Attachment C1, storm water runoff will be collected in swales located near the upper grade break on the landfill and on the 4:1 (horizontal to vertical) side slopes, leading to drainage letdown structures or chutes and to the perimeter drainage system. The perimeter drainage system will be constructed as each sector is developed. The perimeter drainage system is designed to convey the 25-year peak flow rate from the developed landfill consistent with TCEQ regulations. In addition, the perimeter channels are designed to convey the runoff from a 100-year rainfall event. Detention ponds are designed in accordance with MSW rules to provide the necessary storage and outlet control to mitigate impacts to the receiving channels downstream of the landfill. A demonstration that existing permitted drainage patterns will not be adversely altered is provided under Part III, Attachment C1, Section 7 as required. The details of this demonstration are provided in the Appendices of Attachment C1. (Ex ED-SO-1, p. 25).

MSW rules are protective of surface water features, even when those features and the 100-year floodplain are proximate to the waste disposal unit. Only uncontaminated storm water will be discharged at the various discharge points at the landfill boundary. The Application indicates in Section 8.24 of Part IV that the landfill will not discharge contaminated water without specific written authorization from the TCEQ before any discharge. All water coming in contact with waste or contaminated soils will be treated as contaminated water. Run-on and runoff for the 25-year/24-hour storm event will be controlled following the procedures set forth in Part III, Attachment D6, Section 3. Best management practices will be used to minimize contaminated water generation. Temporary diversion berms will be constructed around the active face, where waste is exposed, to divert uncontaminated storm water from the active face, while containment berms will be constructed to collect and contain surface water that has come into contact with

waste. Contaminated water will be transported to an authorized wastewater treatment facility for treatment and disposal. No adverse impact on the existing receptors is expected, since contaminated water will not be discharged. (Ex ED-SO-1, p. 26).

A discussion of the comparison of pre- and post-development drainage is provided in Part III, Attachment C7, Section 7 to address the requirements of 30 TAC § 330.305(a). The demonstration of no adverse change to drainage patterns indicates that the landfill would reduce peak discharges and increase discharge volume. The increase in volume represents less than 1% of the capacity of the Site 21 reservoir during the 25-year storm event. MSW staff contacted the Dam Safety Program about the Site 21 Reservoir and Dam. They indicated: the 1% increase in volume is insignificant; Site 21 is proposed for rehabilitation and if it is, the land use upstream will be included in the new hydrology; and if the dam and spillway are rehabilitated, there will be changes to the dam and possibly the emergency spillway. (Ex. ED-SO-1, p. 26).

During the hearing, Mr. Tyson Traw testified as the Applicant's expert witness on the issue of drainage. Mr. Traw testified that TCEQ regulations require that sample calculations must be provided to verify that existing drainage patterns will not be adversely altered. (Tr. p. 552). Mr. Traw further testified that 30 TAC 330.305 describes the drainage requirements for landfills and generally prescribes what models should be used to calculate drainage analysis. (Tr. p. 553).

Mr. Traw identified 130EP-2 as an exhibit which summarizes the differences in existing and post-development drainage patterns. Tr. 519. Mr. Traw explained that three factors which he looked at are "peak discharge, run off volume, and velocity. Mr. Traw also testified that both the 100 year and 25 year storm events were modeled in an effort to go above and beyond the rule requirements. (Tr. pp. 519-521).

Tracey Allen Bratton testified on behalf of Caldwell County. Mr. Bratton explained that his firm reviewed the Applicant's plat application to Caldwell County and the Applicant submitted a preliminary plat application to the County which included the same drainage conditions analysis that was supplied to TCEQ. (Tr. p.

1820). Mr. Bratton explained that that he asked for changes with respect to which portions of flow were shallow concentrated flow versus open channel flow. (Tr. p. 1837).

Mr. Bratton testified that the Applicant mischaracterized certain watersheds in their drainage analysis by using shallow concentrated flow instead of open channel flow. Mr. Bratton testified that the overestimation of time of concentration leads to an underestimation of the rainfall event to be characterized and it also decreases the peak flow being generated by the calculations, which would in turn increase the peak discharge on-site. (Tr. p. 1821). Mr. Bratton also agreed that when determining whether there is an adverse change to drainage patterns a case by case analysis is necessary depending on such factors as the receiving body and the size of the basin. (Tr. p. 1866).

Finally, Mr. Bratton also explained that his firm did not look at any post development conditions and that the Applicant would submit that information to the county at a later date, once a preliminary plat was completed. (Tr. p. 1865).

The ED has determined that the Application complies with all applicable requirements regarding surface water and drainage requirements.

FLOODPLAINS

Steve Odil testified on behalf of the ED that he reviewed the Application provisions regarding flood control and analysis to comply with 30 TAC § 330.63 (c)(2) and 30 TAC § 330.547. (Ex. ED-SO-1, p. 27). Mr. Odil explained that the Application proposes to construct the waste disposal unit near to but outside of the floodplain, which reduces the likelihood of flood damage. Under 30 TAC § 330.547(c), an application must include a demonstration that the facility is designed and will operate to prevent washout during a 100-year storm event only if solid waste storage and processing units are located within the 100-year floodplain. Under 30 TAC § 330.547(b), the same requirement applies to waste disposal units. The Application included a Flood Insurance Rate Map as Part III, Attachment C2, Appendix C2-A, Drawing C2-A-1 and a floodplain map based on modeling by the Applicant as Part III, Attachment C2, Appendix C2-A, Drawing C2-A-3. These

drawings illustrate that no solid waste storage, processing, or disposal units are located within the 100-year flood, and so no further demonstration is required under these rules. A certification that the facility will be in compliance with 30 TAC § 330.547 is provided on Part II, Appendix IIK, page IIK-3. (*Id.*).

LOCAL REGULATIONS/APPROVALS

During the hearing, the Applicant's witnesses answered several questions regarding compliance with local regulations and approvals. The local regulations/approvals under scrutiny included (1) the county's ordinance prohibiting waste activities; (2) the Capital Council of Governments (CAPCOG) regional solid waste management plan; and (3) the floodplain development permits.

County Ordinance

Texas Health & Safety Code (THSC) § 363.112 authorizes a county to adopt an ordinance prohibiting the processing or disposal of solid waste in specific areas designated by the county. (THSC § 363.112). A county, however, may not prohibit activities involving solid waste in an area for which an application or permit or other authorization under Chapter 361 is pending before or has been granted by the commission. (*Id.*). The Applicant submitted Parts I and II of its application on September 4, 2013, and indicated that an ordinance did not exist. (See App. Ex. 130EP-1, p. 20 and Ex. ED-SO-7, p. 1A of 115 (found after p. 20 of 115)). On December 9, 2013, the Caldwell County Commissioners Court adopted an ordinance prohibiting activities involving solid waste at the same location the Applicant described for its proposed landfill. (Caldwell County Ex. 3). On February 24, 2014, the Applicant submitted the remaining Parts III and IV of the application. (Ex. ED-SO-7, p. 1A of 115 (found after p. 20 of 115)). Both before and after submitting Parts III and IV, the Applicant revised its application in response to Notices of Deficiency. (Ex. ED-SO-1, p. 11, line 11). The main issue raised during the hearing is whether the application was "pending" when the county passed the ordinance.

Protestants argue that amending or revising an application should result in pending status from the date of amendment or revision, and not the date of original submittal. In this case, the Applicant submitted a partial or bifurcated application (parts I and II) before the county passed the ordinance. After the county passed

the ordinance, the Applicant incorporated Parts III and IV of the application through a major amendment and made several revisions to the application. Accordingly, the Protestants argue that pending status should begin from either the date a complete (Parts I through IV) application is submitted or the date of last revision.

TCEQ rules, however, allow an applicant to amend and revise its application without affecting its status as pending. (30 TAC § 281.23). Furthermore, Texas statutes (THSC § 361.069) and TCEQ rules (30 TAC § 330.57(a)) authorize an applicant to bifurcate their application by submitting the land-use determination portions (Part I and II) of the application separately from the technical portions (Part III and IV) of the application. Therefore, the bifurcation of the application and later revisions should not affect the Applicant's pending status. The ED determined that the application was pending when the ordinance took effect and the ordinance does not prevent the ED from granting the permit.

CAPCOG

TCEQ rules require an Applicant to demonstrate that the proposed facility complies with the applicable regional solid waste plans. (30 TAC § 330.61(p)). In this instance, the Applicant is required to comply with CAPCOG's regional solid waste management plan. The ED reviewed the application and determined that the Applicant properly demonstrated compliance with the CAPCOG regional solid waste management plan. (App. Ex. 130EP-21). In addition, Mr. Worrall testified that CAPCOG did a conformance review and determined that the proposed facility complied with its regional solid waste management plan. (Tr. p. 34).

Floodplains

TCEQ rules do not place restrictions on the location of a facility, but if the Applicant plans to construct improvements in a floodplain then the Applicant must obtain a floodplain development permit. (30 TAC § 330.63(c)(2)(D)(ii)). On February 24, 2014, the Applicant submitted Parts III and IV, consolidating the application. (Ex. ED-SO-7, p. 1A of 115 (found after p. 20 of 115)). A review of Parts III and IV revealed that the Applicant's entrance road would be constructed across a floodplain, requiring the Applicant to obtain a floodplain development permit. (Ex. ED-SO-4, Item 20. e.).

The Applicant received notice of its deficiency in two Notice of Deficiency (NOD) letters dated May 6 and June 27, 2014. (Ex. ED-SO-4, Item 20. e. and Ex. ED-SO-5, Item 4). After receiving the first NOD, the Applicant began the process of obtaining a floodplain development permit from the local regulating authority, Caldwell County. (Ex. ED-SO-4, Item 20. e.). By the time of the second NOD, the Applicant had begun the process, but still not obtained the permit. (Ex. ED-SO-5, Item 4). When the only remaining deficiency was obtaining a floodplain development permit, the TCEQ determined that the use of a special provision was appropriate in these circumstances. (Tr. p. 1984, ln. 7-19). Upon reviewing the application and the draft permit, the ED determined that the special provision is sufficient to ensure that the floodplain development permit would be acquired in accordance with TCEQ rules.

Based on the application, applicable testimony, and special provisions included in the permit the ED concludes that the Applicant satisfactorily complied with the local regulation and authorization requirements necessary.

WASTE ACCEPTANCE PLAN

Mr. Odil testified that the Waste Acceptance Plan (WAP) was included in Part II of the Application. (Ex. ED-SO-1, p. 9). The Applicant offered B. Jeffery Hobby, P.E. as its expert on Waste Acceptance. Mr. Hobby testified that the Application satisfied the TCEQ's rules regarding waste acceptance rates, and that in his opinion, the waste acceptance rate estimate and projections in the Application are reasonable. (Ex. App. Hobby-1, pp. 4-5). Mr. Hobby further testified that the rules only require estimates, rather than precise numbers, of waste acceptance rates. (*Id.* at pp. 5-6).

The Application characterizes wastes to be accepted at the facility as municipal solid waste, special waste, and Class 2 and 3 industrial wastes (as defined by 30 TAC § 330.3) (Ex. App. 130EP-1, p. 090). Special wastes that could be accepted include regulated asbestos-containing materials (RACM), nonregulated asbestos-containing materials (non-RACM), and empty containers. (*Id.*). The WAP also includes proposed storage and processing facilities such as a used/scrap tire storage area, wood waste processing area, and a citizens convenience center.

Materials accepted for such storage and processing include construction and demolition wastes, white goods, inert materials, asphalt pavement or asphaltic concrete, source-separated recyclable materials, used or scrap tires, brush, and yard waste. (*Id.*).

As noted in the RTC, a WAP is required under 30 TAC § 330.61(b). (Ex. ED-SO-9, p. 11). The ED has determined that the Applicant provided the information required pursuant to this rule.

SITE OPERATING PLAN

TCEQ's rules require that a site operating plan (SOP) include "provisions for site management and the site personal to meet the general and site specific requirements of this subchapter." (30 TAC § 330.127(a)). The subchapter includes requirements for: fire protection; access control; unloading of waste; facility operating hours; site sign; control of windblown solid waste and litter; easements and buffer zones; landfill markers and benchmark; material along the route to the site; disposal of large items; odor management plan; disease vector control; site access roads; salvaging and scavenging; endangered species protection; landfill gas control; oil, gas, and water wells; compaction; landfill cover; ponded water; waste in enclosed containers or enclosed vehicles accepted at type IV landfills; disposal of special waste; disposal of industrial wastes; visual screening of deposited waste, leachate and gas condensate recirculation and operational standards for Class 1 industrial solid waste management at a municipal solid waste Type I or Type IAE landfill facility. The Applicant's Site Operating Plan is included in the Application in Volume 5 of 5. (Ex. App. 130EP-5, pp. 099-159).

The Applicant offered Kerry D. Maroney, P.E., R.P.L.S. as the engineer of record for the Application. (Ex. App. Maroney-1, p. 5). Mr. Maroney testified that he prepared and/or supervised the SOP. (*Id.* at p. 6). He further testified that the methods used to prepare the SOP were reasonable and appropriate, and complied with the applicable MSW rules. (*Id.* at p. 15). If the 130 Environmental Park landfill is developed and operated as set out in the SOP, Mr. Maroney testified that it will comply with the requisite rules. (*Id.*).

During the hearing the Protestants asked about various components of the SOP, including the noise and light from heavy equipment during operating hours, the adequacy of alternative daily cover, issues that could result from parts of the access road not being within the permit boundary, and the measures taken to prevent feral hogs from accessing the site. As Mr. Odil testified, the Application complied with the MSW rules, and as such, the ED has determined that the SOP meets the requirements of these rules. (Ex. ED-SO-1, pp. 36-37).

ODOR

In accordance with 30 TAC § 330.149, an application must include an odor management plan that must identify wastes and activities that are more likely to cause odors and how odors will be mitigated. Mr. Odil testified that this information was provided in Part IV, Section 8.10 of the Application. (Ex. ED-SO-1, pp. 32-33).

The Applicant offered Martha A. O'Brien as its expert on odors. Ms. O'Brien testified that the Application satisfies all requirements regarding odors, odor control, and avoidance of odors. (Ex. App. O'Brien-1, p. 2). She also testified that if the 130 Park Environmental Landfill is developed and operated as set out in the Application, it will control odors so that nuisance odors will not be released from the facility. (*Id.* at p. 4). Furthermore, Ms. O'Brien testified that odors from the proposed landfill will not interfere with nearby landowners' normal use of their properties. (Tr. p. 971).

As discussed in the RTC, MSW rules do not require a calculation of the degree to which odors will be controlled or any details beyond those required under 30 TAC § 330.149. (Ex. ED-SO-9, p. 50). The ED has concluded that the odor management plan provided by the Applicant satisfies this rule.

WATER SUPPLY

30 TAC § 330.221 states that "an adequate supply of water under pressure must be available for firefighting purposes." Mr. Odil testified that the final SOP states that such a supply of water will be provided. (Tr. p. 1928). Mr. Maroney testified that water for the truck tire wash, as well as water for washing of the leachate collection system tanks, would be provided by Polonia Water Supply

Corporation. (*Id.* at 146-147). Furthermore, Mr. Welch testified that the bottled water that will be made available for potable water purposes would be sufficient for site operations. (*Id.* at 1231).

The ED has determined that the Application contains the required information for water supply set forth in 30 TAC § 330.221.

BUFFER ZONES

TCEQ rules prohibit solid waste unloading, storage, disposal, or processing from occurring within any buffer zone. (30 TAC § 330.543(a)). A new Type I landfill must have a minimum buffer zone of at least 125 feet. (*Id.* at § 330.543(b)(2)(A)). The Applicant submitted maps and information in its application demonstrating its buffer zone. (See App. Ex. 130EP-1, p. 13 (maps) and App. Ex. 130EP-5, p. 140 (information)). The ED determined that the application met the TCEQ's 125 feet requirement and relevant testimony during the hearing did not change that determination.

SCREENING

In accordance with 30 TAC § 330.175, visual screening must be provided where the ED determines that screening is necessary or required by the permit. (30 TAC § 330.175). The Applicant included information and a map demonstrating its proposed screening in Parts II and IV of the application. (App. Ex. 130EP-1, p. 143 (map) and Ex. 130EP-5, p. 152 (information)). Mr. Worrall testified on behalf of the Applicant and prepared the information and map within the application. (Ex. Worrall-1, p. 14, In. 38). In his prefiled testimony, Mr. Worrall attached a proposed visual screening berm not included in the application and stated that this proposed berm would be incorporated into the permit. (See Ex. Worrall-10 (proposed visual screening berm) and Ex. Worrall-1, p. 14, In. 38 (incorporating Ex. Worrall-10 in the permit)).

The ED reviewed the application, relevant testimony, and TCEQ rules and determined that the Application complied with the rules and no additional screening was necessary.

PERMIT SPECIAL PROVISIONS

Mr. Steve Odil testified at length regarding the use of special provisions in the draft permit. (See Tr. Vol.8, pp. 1983-87). The main issue raised during the hearing is whether the ED's reliance on special provisions to declare the application technically complete should be allowed. The Protestants argue that there is no specific rule authorizing the use of special provisions and that the rule requirements were not met. (*Id.*).

Mr. Odil testified that the use of special provisions is not uncommon. The Commissioners and staff have used special provisions to: (1) add things to the permit based on the specifics of the application; (2) remind regional enforcement teams of pending requirements or improvements; and (3) allow for coordination with other agencies to occur without effecting MSW Permits timelines. (*Id.*). Despite there being no specific authorization, special provisions help facilitate the permitting process and should be allowed.

In this case, Mr. Odil inserted two special provisions: (1) requiring the permittee provide a floodplain development permit before construction begins and (2) requiring implementation of roadway improvements prior to the acceptance of solid wastes. (See Ex. ED-SO-8, p. 11, IX. Special Provisions A. and B). The Protestants claim that the rule requirements were not met by Mr. Odil's reliance on special provisions. (Tr. pp. 1917 and 1987). Special provisions, like all of the terms of a permit, are final, but also conditional. Therefore, the special provisions must be met before construction of the facility or acceptance of wastes can occur. In other words, their conditional nature ensures that the rule requirements will be met or the permit will be ineffective.

The ED reviewed the application, the draft permit, and the relevant testimony and recommends that the special provisions be allowed to remain as part of the permit.

PRAYER

The ED has determined that the Application and Draft Permit comply with all applicable regulations. Therefore, the ED requests that the Judges issue a Proposal for Decision recommending issuance of the permit.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on October 24, 2016, the "Executive Director's Closing Arguments" was served electronically or via First Class Mail to the parties listed on the attached Mailing List.



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