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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 31, 2012

Mr. Thomas Funderburg, President
Post Oak Clean Green, Inc.
P.O. Box 1270
Seguin, TX 78155

Re: Post Oak Municipal Solid Waste Landfill – Guadalupe County
Municipal Solid Waste (MSW) – Permit Application No. 2378
Permit Application – Second Notice of Deficiency (NOD)
Tracking No. 15134774 (15821760); CN604018655/RN106314990

Dear Mr. Funderburg:

The MSW Permits Section has completed the review of your response, dated April 21, 2011, to our NOD letter dated February 27, 2012. Our NOD letter addressed the land use compatibility portions (Parts I and II) of your Post Oak Municipal Solid Waste Landfill MSW Permit Application No. 2378. The response was prepared by James Blackwell, P.E. with Blackwell Environmental, LLC, on behalf of Post Oak Clean Green, Inc. So that we may proceed with further review, please address and submit a response to the following comments. Comments are mine except comments 34 through 38 which are provided by David Dippel, P.G. Rule citations are from 30 Texas Administrative Code (30 TAC) Chapter 330 unless noted otherwise.

Please note the following in preparing your response to this letter. Your numbering of the NOD items was in error. The first two responses were not numbered. The references below are to our first NOD letter, not your response letter. When additional information or clarification is requested, the additional information should always be included in the application. Even when adequate supplemental information is provided, but only in the cover letter, the deficiency has not been addressed. Changes to figures must be red-lined, clouded, or explained somehow to clarify what has changed. Revision dates and descriptions should be provided in the revision block. Please provide for this in future submittals. In the future, please provide three clean (without redline/strikeout text) copies and one copy illustrating all changes from the previous version.

Part I

- 1) The first NOD confused an issue within the application related to the permit/facility boundary and the need for easements to provide access to appurtenances of the landfill. We apologize for the confusion we've created. After consulting with our legal staff, we have clarified that the facility must be within the permit/facility boundary. The facility includes, as noted in the definition in 30 TAC Section (§)330.3(52), the appurtenances of the landfill. Appurtenances include the drainage features, groundwater monitoring wells, landfill gas probes, and gate or scale houses. In accordance with 30 TAC §330.543(b)(2), buffer zones must be provided within and adjacent to the permit/facility boundary. Please shrink your facility to provide required features within the permit/facility boundary, or expand the boundary to enclose these features. If the proposed permit/facility boundary is expanded, an updated landowner list and map are required to address the requirements of 30 TAC §330.59(c)(3), which could potentially

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introduce new parties to notify. If the permit/facility boundary is expanded, information that is required within specified distances from the permit boundary, such as land use and structures, will need to be updated. Please address these concerns.

- 2) Some figures in the application appear to have been reduced. This has resulted in figures that indicate, for example (Appendix 1, Figure 1), that $\frac{1}{2}$ " = 1 mile, but the bar scale, which has presumably been reduced with the figure, indicates that 0.45" = 1 mile. The survey figure appears to have been enlarged. It indicates that 1" = 400' but the bar scale indicates that 1" = approximately 350 feet. In accordance with 30 TAC §330.57(h)(3), please correct all figures, as necessary, to a standard scale, such as $\frac{1}{2}$ " = 1 mile rather than $\frac{1}{2}$ " = 1.11 mile, and be certain that the scale description matches the corresponding bar scale.
- 3) Comment 1 of the first NOD requested clarification of your relationship to the land owner, K-4 Ranches. The response indicates that K-4 Ranches is a Texas General Partnership owned by you, your wife and your two sons, and that they have authorized you to act on behalf of K-4. Please provide an authorization letter authorizing you to sign on behalf of K-4 Ranches.
- 4) Comment 4 of the first NOD requested that Part I be updated to provide the applicant's business in accordance with 30 TAC §305.45(a)(4). The response appears to provide a mission statement, not a business description. Presumably the applicant seeks to be in the business of waste management and Part I should indicate this. This information is a requirement for Part 1 that is not requested on the Part I form. Please provide this information in Part 1 of the application.
- 5) Comment 7 of the first NOD requested clarification that all known springs within one mile of the permit boundary have been illustrated in accordance with 30 TAC §305.45(a)(6)(A). The response indicates that there are no known springs and that a note has been added to Appendix 1, Figure 2. The cited figure has not been updated and does not include the note addressing springs within one mile. Please address the requirements of this rule.
- 6) Comment 8 of the first NOD requested greater detail regarding land use to meet the requirements of 30 TAC §305.45(a)(6)(B). Specifically, the application should include a figure that illustrates the character of adjacent land and development within one mile of the permit boundary as residential, commercial, agricultural, recreational, undeveloped, oil and gas exploration, etc. This is typically provided with hatching defined in a legend with a percentage breakdown for each land use (e.g., 85% undeveloped, 10% residential and 5% industrial). The response includes a new Appendix 1, Figure 4 that indicates that land use is 1.4% residential and 98.6% "agricultural use rangeland and oil/gas production." Please provide a breakdown of agricultural and oil and gas production areas and designate these areas on Figure 4 to meet this requirement.
- 7) Comment 10 of the first NOD included a request for clarification of the 80-foot right of way abutting the permit boundary along FM 1150, as illustrated on the survey plat provided as Appendix 2. Please illustrate the extent of the right-of-way nearest the permit boundary to clarify whether this right-of-way abuts or extends beyond the permit boundary.
- 8) Comment 11 of the first NOD requested complete descriptions of all easements and rights of way on or adjacent to the property, including but not limited to the three buffer easements, the access easement, utility easements, drainage easements and pipeline easements. As noted in comment 1 of this NOD letter, my indication that easements are required to provide access to appurtenances of the landfill was incorrect. Appurtenances must be located within the permit boundary, so information concerning access easements (other than between the public road

and the gatehouse, unless the permit/facility boundary encompasses it), buffer easements, and drainage easements may be removed from the application. Information regarding the utility and pipeline easement must remain unless the easements are released to the property before submittal of your response. Again, we regret any confusion or inconvenience this has caused.

- 9) In further consideration of comment 11 of the first NOD, the description for Grading and Drainage Easements indicates that these easements are "for construction and maintenance of permanent side slopes not to exceed 4:1 to accommodate the final grades established on the perimeter of the MSW facility boundary." This description seems to imply that side slopes of the waste unit will be constructed in this easement. As noted, the easement may be deleted, as this area must be within the permit boundary, but side slopes of the waste unit may not occur outside the indicated waste footprint. If this area may be used as a borrow source, please state this and delete the existing text. Otherwise, please explain what activities are planned in these easements.
- 10) In response to comments 11 and 57, the descriptions for Utility Easements and Pipeline Easements indicate that easements have been abandoned and that "K-4 is in the process of vacating the easements." This language is open-ended and may not remain in the application. Furthermore, we may not accept site figures that illustrate waste disposal units within easements. If the waste disposal unit design is not altered to avoid existing easements, the easements must be vacated and demonstrations of the vacating must be provided in the application before the figures may be accepted. Please address these concerns.
- 11) Comment 13 of the first NOD requested a list of persons with 20% ownership in the facility. The response cover letter provides this information, and the names of the persons with 20% ownership in the facility have been added to the Part I form, the Part I form does not note that these are the persons with 20% ownership. This information is a requirement for Part 1 that is not requested on the Part 1 form. Please provide this information in Part I of the application in accordance with 30 TAC §330.59(e).

Part II

- 12) Comment 19 of the first NOD requested clarification in the Waste Acceptance Plan (WAP) of any and all processing that will occur at the facility. For each processing activity, specify the maximum and average daily acceptance rates, the annual waste acceptance rate projected for five years beyond permit issuance, the maximum and average storage times, and intended destinations for processed materials in accordance with 30 TAC §330.61(b)(1)(B). The response indicates that the WAP was modified to address this item. It is not apparent what has been changed to address these concerns. Please address these requirements or direct staff to the location of the changes.
- 13) Comment 21 of the first NOD requested clarification of what wastes would and would not be disposed at the proposed facility. The WAP has been greatly expanded to address this, but now contains numerous confusing or contradictory provisions. The first sentence of the WAP indicates that special wastes identified in 30 TAC §330.171 will be accepted. Many of the wastes specified in 30 TAC §330.171 are listed as prohibited on pages 7-9. The first bullet on page 7 under "The facility will not accept the following wastes" lists special waste. The bullets that follow address some but not all of the special wastes defined in 30 TAC §330.3(148). Please specifically clarify your desire in the WAP to accept or prohibit all special waste, including but not limited to the following.

- municipal wastewater treatment plant sludges, other types of domestic sewage treatment plant sludges, and water-supply treatment plant sludges [30 TAC §330.3(148)(D)]
 - septic tank pumping [30 TAC §330.3(148)(E)]
 - grease and grit trap wastes [30 TAC §330.3(148)(F)]
 - dead animals [30 TAC §330.3(148)(I)];
 - drugs, contaminated foods, or contaminated beverages, other than those contained in normal household waste [30 TAC §330.3(148)(J)]
 - waste from oil, gas and geothermal activities subject to regulation by the Texas Railroad Commission of Texas [30 TAC §330.3(148)(P)]
 - waste generated outside the boundaries of Texas that are industrial or listed as a special waste under §330.3(148) [30 TAC §330.3(148)(Q)].
- 14) In further consideration of comment 21, the prohibited waste list includes discarded materials containing asbestos [30 TAC §330.3(148)(L)] and then regulated asbestos-containing materials (RACM) but does not include non-RACM. Please clarify whether RACM and non-RACM will be accepted or prohibited.
- 15) In further consideration of comment 21, the prohibited waste list includes soil contaminated by petroleum products, crude oils or chemicals. If the contaminated soil is Class 1, this list indicates that it will not be accepted for disposal, but this prohibition would also disallow disposal of contaminated soil that is Class 2 or Class 3 industrial solid waste, which the WAP indicates will be accepted. Please clarify whether all contaminated soil will be prohibited.
- 16) In further consideration of comment 21, the last sentence on page 4 indicates that the facility will be authorized to accept waste generated *within the state of Texas*. Please clarify whether the facility will prohibit all waste generated outside the state of Texas.
- 17) In further consideration of comment 21, it is confusing to have two areas (page 4 and pages 7-9) with prohibited waste lists. Please consider combining these into one list to avoid potential confusion and address these concerns.
- 18) Comment 24 of the first NOD noted that to meet the requirements of 30 TAC §330.61(b)(1), the WAP must discuss all applicable limiting parameters for waste. The response indicates that revisions to pages 7-9 address this requirement. Staff is unable to determine what additions are intended to address this rule. Again, the statement on page 4 that the site "will not accept any waste for disposal that contributes a constituent or characteristic that could be a limiting parameter ..." is not adequate to address this rule. Please provide a description of all appropriate limiting parameters for wastes to be accepted or prohibited at the facility. These would include, but are not limited to: parameters indicating that industrial wastes are characteristically hazardous, parameters indicating that industrial wastes are Class 1 for appropriate constituents and for total petroleum hydrocarbons, and the presence of free liquids.
- 19) Comment 25 of the first NOD noted that the first paragraph of the WAP includes a reference to "§330.S." The response changes the reference to §330.5, but this citation does not appear to be appropriate in context. Please correct this typographical error or add text to the WAP to clarify its purpose.

- 20) Comment 27 of the first NOD requested clarification of all structures and inhabitable buildings within 500 feet of the proposed permit boundary in accordance with 30 TAC §330.61(c)(3). The response indicates that there are none, but the scale house, located outside your permit boundary, appears to be about 500 feet from the permit boundary. Please clarify whether your scale house is located within 500 feet of the permit boundary.
- 21) Comment 31 of the first NOD noted that Appendix 1, Figure 1 indicates that an airport near the Glen Becker Ranch is located approximately 5½ miles southwest of the proposed permit boundary. The response explains that this airport has closed. Please explain in the discussion on 30 TAC §330.61(c)(8) that even though this airport is shown on Figure 1 within six miles of the facility, it has ceased operations.
- 22) Comment 32 of the first NOD noted that 30 TAC §330.61(c)(10) requires that drainage, pipeline, and utility easements within and adjacent to the facility be illustrated on a general location map. Appendix 2, Figure 6 has been provided to illustrate the easements, but this figure does not show the pipeline or utility easements. As noted in comment 1 of this letter, the facility must be decreased in area to fit within the permit/facility boundary or the permit/facility boundary must be expanded to encircle the facility, which includes all appurtenances. You may delete buffer and drainage easements from this figure, but the figure should address the pipeline and utility easements. Your response to comment 9 indicates that these easements currently exist. Please illustrate these easements on Figure 6.
- 23) Comment 34 of the first NOD requested expansion of the permit boundary to include appurtenances of the landfill that are located outside the proposed permit boundary. The response indicates that the facility owner does not wish to encumber additional land within the permit boundary because the surrounding area will be used as a wildlife preserve and areas designated as easements can revert to use as wildlife area when post-closure care is completed. Once the post-closure care period is complete, the permit may be revoked and there will be no restriction against using these areas for a wildlife preserve. As noted previously, the permit/facility boundary must encircle the facility, which includes appurtenances. Please decreased the facility in area to fit within the permit/facility boundary or expand the permit/facility boundary to encircle the facility, which includes all appurtenances.
- 24) Comment 35 of the first NOD noted the presence of waste storage and processing within the 125-foot buffer zone required for Type I landfills under 30 TAC §330.543(b)(2)(A). The response has added additional buffer easements to address this concern. As noted previously, the permit/facility boundary must encircle the facility, which includes appurtenances. Please decreased the facility in area to fit within the permit/facility boundary or expand the permit/facility boundary to encircle the facility, which includes all appurtenances. Use Appendix 2, Figure 6 to illustrate required buffer within the permit boundary and include defined areas for all waste storage and processing areas.
- 25) Comment 38 of the first NOD noted that Appendix 2, Figure 2 is provided to illustrate the locations of monitor wells, as required by 30 TAC §330.61(d)(3) and requested clarification regarding what appeared to be groundwater monitoring wells. The response indicates that these wells are only piezometers for groundwater characterizations. This addresses concerns about the locations of what were suspected to be groundwater wells exceeding limits on spacing and distances of these wells from the waste unit, but it is now clear that the requirements of the rule have not been met. While the details of the groundwater monitoring system, including where the Point of Compliance is located, which wells are compliance wells and which wells are upgradient wells, well depths and screen intervals, will be provided in Part III of the

application, the locations of these wells should be known by now and are required by this rule. The first NOD should have noted that landfill gas probe locations should also be illustrated in accordance with this rule. Please delete the note in the waste area Appendix 2, Figure 2 and provide a figure that provides groundwater monitoring well and gas probe locations.

- 26) Comment 40 of the first NOD requested that fill directions on Appendix 2, Figure 3 in accordance with 30 TAC §330.61(d)(9)(C). The response adds a fill direction arrow, but this appears to be the direction of cell development, not fill direction. Please update this figure to provide an arrow in each cell to indicate fill direction.
- 27) Comment 41 of the first NOD identified apparent errors on the Landfill Completion Plan, provided as Appendix 2, Figure 4. The response clarifies that the maximum elevation of the final cover is actually 692 feet above mean sea level (ft msl). The maximum waste elevation is unchanged at 688 ft msl. Please confirm your intent to install a final cover, or some combination of daily, intermediate and final cover that is four feet thick.
- 28) Comments 42 and 44 of the first NOD requested greater detail regarding land use to meet the requirements of 30 TAC §330.61(g). Specifically, the application should include a figure that illustrates the character of adjacent land and development within one mile of the permit boundary as residential, commercial, agricultural, recreational, undeveloped, oil and gas exploration, etc. This is typically provided with hatching defined in a legend with a percentage breakdown for each land use (e.g., 85% undeveloped, 10% residential and 5% industrial). The response includes a new Appendix 4, Figure 1 that indicates that land use is 1.4% residential and 98.6% "agricultural use rangeland and oil/gas production." Please provide a breakdown of agricultural and oil and gas production areas and designate these areas on Figure 1 to meet this requirement.
- 29) Comment 45 of the first NOD requested clarification regarding a description of current growth trends within five miles of the permit boundary and directions of development, as required by 30 TAC §330.61(h)(3). The Guadalupe County Traffic Analysis Zone (TAZ) map is now provided and new text has been added on page 18 to address this deficiency. Please locate the facility, a designation of the area within five miles of the facility, a standard scale and north arrow on the TAZ map. The TAZ map appears to have been published in July 2004. Paragraph 30 TAC §330.61(h)(3) requires a description of *current* growth trends. It is not clear that projections based on an eight-year-old map, and older data, is adequate to address the requirement for current growth trends. Please provide a description of any growth trends within five miles of the permit boundary and directions of development to meet the requirements of this rule.
- 30) Comment 46 of the first NOD requested a discussion of the proximity to residences and other uses (e.g., schools, churches, cemeteries, historic structures and sites, archaeologically significant sites, sites having exceptional aesthetic quality, etc.) within one mile of the facility, including the approximate number of residences and commercial establishments within one mile of the proposed facility including the distances and directions to the nearest residences and commercial establishments. The response addresses most of these items; however, the response letter indicates that there are no commercial establishments within one mile of the facility and discusses archaeological sites. Please include this information in the application.
- 31) Comments 47, through 50 of the first NOD identified various issues regarding compliance with the requirements of 30 TAC §330.61(i)(1) through (3). The response has clarified that in addition to I-10 to FM 1104 to FM 1150, a second path is likely to be SH 80 to FM 1150. The response provides forecast traffic counts for landfill-related traffic, but this information is not

in the application and no forecasted traffic counts for non-landfill-related traffic are provided. Information must be provided in the application that these paths are adequate for anticipated landfill-related traffic. Data must be provided on the volume of vehicular traffic on access roads within one mile of the proposed facility, both existing and expected, during the expected life of the proposed facility. Data must be provided that projects the volume of traffic expected to be generated by the facility on access roads within one mile of the proposed facility during the expected life of the facility. Numbers and calculated values should be explained. The response to comment 48 in the cover letter should be placed in the application. Please provide information, such as a Traffic Study, to support the claim that the capacities of roads to be used by the proposed landfill over the lifetime of the facility will not be exceeded.

- 32) Comment 51 of the first NOD noted that inadequate information has been sent to the Texas Department of Transportation (TxDOT). The coordination letter and responses are provided in Part II, Appendix 5. The TxDOT response is requesting a Traffic Study. Presuming the adequacy of the Traffic Study to address the conditions discussed in the application (the access paths will be I-10 to FM 1104 to FM 1150, and SH 80 to FM 1150) we will need an acceptance of your design and an indication that you have addressed all concerns and questions from TxDOT before it is clear that the application meets the requirements of 30 TAC §330.61(i)(4).
- 33) Comment 56 of the first NOD requested response correspondence from the United States Army Corps of Engineers (USACE) to demonstrate their approval of proposed wetlands mitigation activities to address the requirements of 30 TAC §330.61(m)(2). We await documentation of a final decision from the USACE.
- 34) Comment 58 of the first NOD indicated that the applicant must identify and provide data on fault areas, seismic impact zones, and unstable areas located within the proposed site in accordance with 30 TAC 330.61(j)(2) through (4). The NOD response indicates that an ongoing fault study is currently being conducted under the supervision of licensed professional engineer experienced in geotechnical engineering or a licensed professional geoscientist qualified to evaluate conditions of differential subsidence or faulting. Results of this study will be used to determine suitable land use for an MSW facility. Please include the results of this study in Part II of the permit application.
- 35) Comment 60 of the first NOD indicated that on Part II, page 10, the application does not provide an adequate description regarding area hydrogeology. The NOD response does not adequately describe regional geology, specifically a description of geologic formation below the proposed facility at a minimum of 2000 feet below ground surface. Please include a discussion of the Midway Group Formation and any other formation within 2000 feet of ground surface at the proposed facility. It would also be helpful to include a regional geologic cross-section depicting regional geology of this area. Please provide reference(s) for the information provided.
- 36) Comment 65 of the first NOD indicated that many of the figures provided in Part II, Appendices 6, 7, and 8 show the project boundary and/or project area, but do not show the proposed permitted boundary in relation to project areas or project boundaries. The NOD response indicates that revised maps have been provided in Appendices 6, 7, and 8 that show the permit boundary in addition to the project area (affected area); however, none of the maps in Appendices 6, 7, and 8 have been revised. Please revise all applicable maps to include the proposed permitted boundary in Appendices 6, 7, and 8.

- 37) Comment 66 of the first NOD identified an oil or gas pipeline in Appendix 8, the Intensive Cultural Resource Survey conducted by SWCA Environmental Consultants; however, the pipeline was not indicated on any of the maps provided in Part II, Appendices 1 and 4, and no discussion of the existing pipeline was included in Part II, Section 2.0 (Existing Conditions Summary). The NOD response indicates that the pipeline will be removed before site activities commence. In accordance with 30 TAC 330.61(a), please include a discussion regarding this existing pipeline within the application in Part II, Section 2.0, and other locations within the application where applicable. Please include the existing pipeline in all applicable figures until the pipeline is removed and the pipeline easement is vacated.
- 38) Comment 67 of the first NOD, in accordance with 30 TAC 330.555 and 30 TAC 330.559, requested that areas experiencing withdrawal of crude oil must be investigated in detail for the possibility of differential subsidence or faulting that could adversely affect the integrity of the landfill liner system. The NOD response indicates that an ongoing fault study is currently being conducted under the supervision of licensed professional engineer experienced in geotechnical engineering or a licensed professional geoscientist qualified to evaluate conditions of differential subsidence or faulting, or provide substantial evidence that crude oil depletion of the Darst Creek oil field located in the northeastern portion of the permitted boundary. Results of this study will be used to determine suitable land use for a MSW facility. Please include the results of this study in Part II of the permit application.
- 39) Comments were provided at the public meeting to suggest that information regarding threatened and endangered species in the application is inadequate. Staff re-examined the Assessment of Potential for Occurrence of State and Federally Listed Threatened and Endangered Species for the Proposed Post Oak Clean Green Project, provided as Appendix 7 in Part II of the application. Section 6.0, Conclusions, of this report indicates that there is low potential for occurrence of the state threatened Texas horned lizard and Texas tortoise and that if they are present with the disturbance area, they may be negatively impacted by construction activities. Please explain how these comments are adequate to address 30 TAC §330.61(n)(1) and so ensure that the facility and the operation of the facility does 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.
- 40) Please determine whether the Old Kingsbury Aerodrome Airport, located southeast of Kingsbury on FM 1104, is located within six miles of the proposed facility. If it is, please address all requirements of §330.545.

The identified items of concern must be addressed prior to our determining the land use compatibility portions of the permit application to be technically complete. Paragraph, figure, and page number citations are from your MSW Permit Application No. 2378. It is recommended that the response to this First NOD be in the following format to ensure that the response to each and every item of concern is identified.

- 1) A dated cover letter transmitting the revised permit application should accompany the revised application.
- 2) Each item of concern should be addressed in the transmittal letter and the applicant's response to the item should be immediately following the item of concern.
- 3) The applicant should indicate where in the revised permit application the revisions have been made by reference to part, section, and page number.

Mr. Thomas Funderburg
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- 4) Please include an original certification statement with the revision, in accordance with 30 TAC §305.44. The certification statement should indicate the name, title, and address of the responsible official.

Please submit an original and three (3) copies of your application revisions within 54 days of the date of this letter. Your response must be in a form that allows for the replacement of application pages with the revised pages. According to 30 TAC §330.57(g)(6), revisions must have a revision date and note that the sheet is revised in the header or footer of each revised sheet or page and the revised text must be marked to highlight the revision. Failure to submit a satisfactory response to each of the noted deficiencies may result in the application being returned due to technical deficiencies.

Please note we do not anticipate granting an extension of time to fulfill this request. In addition, please be aware a third technical notice of deficiency will not be issued.

If you have any questions, please contact me at (512) 239-4568. When addressing written correspondence, please use mail code MC 124.

Sincerely,



Steve Odil, P.E.
Municipal Solid Waste Permits Section
Waste Permits Division
Texas Commission on Environmental Quality

SPO/sm