



# CITY OF HOUSTON

Administration and Regulatory Affairs Department  
Strategic Purchasing Division

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July 27, 2009

**SUBJECT:** Letter of Clarification No. 2  
Biosolids Transportation and Land Disposal/Application  
for the Public Works & Engineering Department

**REFERENCE:** Bid #S37-L23341

**TO:** All Prospective Contractors

This Letter of Clarification is issued for the following reasons:

- To clarify the above referenced solicitation as follows:

The bid opening date for the subject contract is extended from July 30, 2009 until August 6, 2009

All page numbers correspond to the pages in the Bid document, unless otherwise indicated.

**1.0** On page 11, Table I, Change the name of LS 51 to: for "WCID No. 51 LS" and

Add the following address for "WCID No. 51 LS" to Table 1:  
4900 Gallagher (Key Map No. 471-R).

**2.0** Page 5. Section 2.1.5 currently reads as follows:

*Haul liquid sludge (unstabilized and/or stabilized) from a City-identified WWTP to another City WWTP or an offsite facility (See Table I).*

Section 2.1.5 shall be revised to read as follows:

"Haul liquid sludge (unstabilized or stabilized) from a City-identified WWTP to another City-identified WWTP (See Table I) or another City-owned wastewater handling facility (e.g., lift station or collection system)."

**3.0** Page 5. Add Section 2.1.12:

"Section 2.1.12 Obtain written approval from the City in advance of proposed modifications to the City-provided weekly inter-facility liquid sludge transfer schedule."

**4.0** Page 6. Add Section 3.1.8:

"Transport and landfill cake (unstabilized or stabilized) or non spec pellets from up to eight (8) Eastside WWTPs and up to five (5) Westside WWTPs (See Table II)."

**5.0** Page 6. Add Section 3.2.5:

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“Section 3.2.5 Pay for additional charges levied by the landfill operator for City-provided non-spec pellets or cake that did not pass paint filter testing. Payment will be at the discretion of the City upon completion of the City’s investigation of a Contractor’s claim for additional charges.”

**6.0** Page 6. Add Section 3.2.6:

“Section 3.2.6 Provide non-hazardous, non-spec pellets or cake that passes the paint filter test.”

**7.0** Page 6. Section 4.2.4 currently reads as follows:

*Sample and analyze soil from new land application sites for all the constituents regulated under the EPA 40 CFR 503 regulations in order to provide information on existing site conditions. The sampling and analyses plans shall be approved by the City prior to conducting. Analytical results shall be provided to the City.*

Section 4.2.4 shall be revised to read as follows:

Sample and analyze soil from new land application sites for all the constituents regulated under EPA 40 CFR 503 and TAC Chapter 312 regulations in order to provide information on existing site conditions. The sampling and analyses plans shall be approved by the City prior to conducting. Analytical results shall be provided to the City.

**8.0** Page 7. Add Section 4.2.13:

“Section 4.2.13 Submit a monthly summary of the anticipated number of land application and landfill loads for each WWTP, as well as an accounting of the land applied and land filled loads to date for each WWTP at least five (5) working days before the start of each month.”

**9.0** Page 7. Add Section 4.2.14:

“Section 4.2.14 Notify the City in writing of significant changes in biosolids land application or landfill plans in advance such that the City will be able to adjust its related biosolids stabilization/management operations and sampling and analyses procedures accordingly.”

**10.0** Page 8. Add Section 6.1.7:

“At the City’s discretion, the Almeda Sims WWTP yard tractor shall be equipped with a hydraulic power take-off pump and be capable of unloading end-dump trailers (i.e., lifting all of the Contractor-provided trailers to the recommended dump angle).”

**11.0** Page 9. Section 8.2.6 currently reads as follows:

*Utilize road tractors and watertight end-dump trailers for cake transportation. These rigs shall be capable of hauling at a filled gross weight of 79,000 pounds plus or minus 1,000 pounds.*

Section 8.2.6 shall be revised to read as follows:

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"Utilize road tractors and watertight end-dump trailers for cake transportation (frameless, frame, or quarter-frame type). The trailer splash guards or nose and tail caps shall not interfere with the point discharge loading of these trailers. These rigs shall be capable of hauling at a filled gross weight of 79,000 pounds plus or minus 1,000 pounds."

**12.0** Page 9. Section 8.2.8 currently reads as follows:

*Be available to perform the specified services 24 hours per day, 7 days per week, 365 days per year (366 days in a leap year). However, the majority of the services shall be performed during daytime work hours on normal City work days.*

Section 8.2.8 shall be revised to read as follows:

Be available to perform the specified services 24 hours per day, 7 days per week, 365 days per year (366 days in a leap year). Unless specifically requested by the City, the services shall be performed during daytime work hours on normal City work days.

**13.0** Page 9. Section 8.2.12 currently reads as follows:

*Make any modification(s) of City equipment required to load the Contractor's trailers, with prior approval of the City.*

Section 8.2.12 shall be revised to read as follows:

"Provide details of all modifications to City equipment required in order to safely load the Contractor's trailers."

**14.0** Page 10. Section 8.3.6 currently reads as follows:

*Notify the Contractor's dispatcher of the need for an empty end-dump trailer at least ninety minutes before it is needed.*

Section 8.3.6 shall be revised to read as follows:

As required, notify the Contractor's dispatcher of the need for an empty end-dump trailer at least ninety minutes before it is needed.

**15.0** Page 10. Section 8.3.9 currently reads as follows:

*Pay for light-loaded end-dump trailer loads on a prorated basis (ratio of the actual net weight and a normal net weight of 24.5 tons).*

Section 8.3.9 shall be revised to read as follows:

"Pay for excessively under loaded road tractor/trailer rigs (gross weight < 74,000 lb) and excessively overloaded road tractor/trailer rigs (gross weight > 84,000 lb) on a prorated basis (ratio of the measured gross weight and the normal gross weight of 79,000 lbs times contract cost per load)."

**16.0** Page 10. Section 8.3.10 currently reads as follows:

*Not pay additional funds for overfilled trailers.*

Section 8.3.10 shall be revised to read as follows:

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"For delivered trailers containing an excessive amount of material (measured tare weight >6,000 lb over the actual tare weight), reduce load payment on a prorated basis (ratio of the difference between the measured tare weight and actual tare weight and the normal gross weight of 79,000 lbs times contract cost per load)."

**17.0** Page 10. Add Section 8.3.11:

"Deduct the sum of five hundred dollars (\$500) per day, not as a penalty, but as a service fee credit for each day during which the Contractor refuses, either voluntarily or involuntarily, to provide the City-requested service(s)."

**18.0** Page 10. Add Section 8.3.12:

"Modify City-owned equipment as required to safely load Contractor-owned standard trailers."

**19.0** Page 10. Add Section 8.3.13:

"Not pay demurrage charges."

• **The following questions and City of Houston responses are hereby incorporated and made a part of the Invitation to Bid:**

**20.0** Is the City of Houston going to correct Table 1's load count (page 11)?

**ANSWER:** Table 1 quantities should read as follows:

WWTP	Estimated Loads/Year
Cedar Bayou	50
Forest Cove	200
HCMUD #203	225
Intercontinental Airport	750
Kingwood West	200
Northbelt	1,225
Park Ten	450
Tidwell Timbers	25
WCID #76	75
West Lake Houston	25
Westway	250
Willowbrook	550
Willow Run	150
<b>TOTAL =</b>	<b>4,175 load</b>

**21.0** On the Liquid Sludge Haul, what size tanker is considered a load? by the Gallon or BBL, please.

**ANSWER:** A tanker load is the net weight (gross weight minus tare weight) hauled by a road tractor/tanker trailer rig loaded to a gross weight of 79,000 lb plus or minus 1,000 lb. A tanker's load/size in gallons, when hauling liquid sludge containing 1% to 5% solids, can be estimated by dividing the rig's net weight by 8.34 lb/gallon (i.e., [79,000 – rig tare weight in lbs]/8.34)."

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**22.0** Would the City be willing to prorate payment on all loads (whether overfilled or underfilled) if the contractor hauled all loads to the landfill and provided certified weight tickets for each and every load?

**ANSWER:** Please refer to revised Section 8.3.9 in this letter at number 15.

**23.0** Will the City allow the selected contractor to provide the liquid transfer services outside of normal business hours?

**ANSWER:** Liquid transfer outside of normal business hours will only be allowed as requested by the City. Please refer to the modified wording of Section 8.2.8 provided in this letter and other applicable portions of the contract.

**24.0** Please provide the specific requirements for contractor-supplied equipment to be used at the Almeda Sims Heat Drying Cake Receiving facility.

**ANSWER:** Please refer to the modified wording of Section 8.2.6 contained in this letter at number 11 and other applicable portions of the contract.

**25.0** Will the City provide a weekly cake haul schedule for non-emergency loads similar to the weekly liquid haul schedule noted in Section 2.2.2?

**ANSWER:** The City will not provide a weekly cake haul schedule. Cake haul services shall be provided on an as-needed basis; however, cake preparation has been relatively consistent from year-to-year at each of the identified plants. Please refer to Section 8.3.2, modified Section 8.3.6 contained in this letter at number 14 and other applicable portions of the contract.

**26.0** Are there any cake plants listed in Table II that the City will never direct to land application due to inability of the plant to produce Class B biosolids?

**ANSWER:** Future biosolids management plans at the Kingwood area WWTPs (i.e., Kingwood Central cake preparer plant and Kingwood West and Forest Cove liquid sludge transfer plants) are dependent on the outcome of a Request for Proposals regarding the operation and maintenance of these facilities. In the event that the City takes over operation of these plants, it is anticipated that Kingwood Central cake will not meet Class A or B requirements and will be landfilled. If these facilities remain under contract operation, biosolids transportation and disposal at these facilities will not be part of this contract except on an emergency basis. The remaining cake preparer plants listed in Table II are capable of producing stabilized biosolids that are suitable for land application.

**27.0** It was stated in the pre-bid meeting that the current contractor maintains a fleet of 50 end-dump trailers to service the City's contract. Is this a sufficient number of trailers to provide the storage required in Section 4.2.6 and the supply of empty standby trailers required in Section 5.1.3?

**ANSWER:** The Contractor shall determine the number of trailers required to perform the specified services. Please refer to Section 8.2.9, Section 8.2.20, and Section 8.3.6 and other applicable portions of the contract.

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**28.0** In addition to the pre-performance conference, will the City consider regular monthly meetings with the successful bidder throughout the term of the contract?

**ANSWER:** Regular monthly meetings and/or as-needed meetings are an option.

**29.0** Please provide the contact information for the appropriate person in the event there are problems or questions regarding the electronic bid form.

**ANSWER:** You may call or email: Ashish Govil at T: 832-393-8714;  
ashish.govil@cityofhouston.net

**30.0** During our solicitation of landfill pricing for this Contract, it has become apparent that the City will be negatively impacted by the proposed landfill rates from multiple landfill providers. Specifically, the rates that are being quoted are substantially in excess of current market tip rates in the Houston metropolitan area. We feel that it would be in the City's best interest to amend the bid to offset the unusual and non-customary pricing impact of quoted landfill rates associated with this project. As a result, would the City consider the following:

- a. Excluding landfill pricing from the bid and soliciting landfill pricing directly in a separate bid;
- b. Show landfill fees as a separate line item;
- c. Show landfill fees as a separate pass-through line item, so the City can clearly see any difference in quoted rates between the bidders.

**ANSWER:** Cake/Non-Spec Pellet Transportation and Landfill Disposal shall be bid on a cost per load basis.

**31.0** Please confirm that the bidder will not be required to provide a bid security or, in the event awarded a contract, a performance bond in connection with the referenced Bid Invitation and that no costs for such securities should be included in any bid.

**ANSWER:** That is correct. The bidder will not be required to provide a bid security or, in the event awarded a contract, a performance bond will not be required in connection with the referenced Bid Invitation and no costs for such securities should be included in any bid.

**32.0** It was stated at the Pre-Bid Conference that the bid will be awarded to one bidder. Will the City confirm that it intends to award a contract for either the Group A or Group B bid items? Therefore, will references to the City's ability to select a "combination of bids" or "award by line item" be deleted from the Bid Invitation?

**ANSWER:** The intent is to award to one bidder; however, the City reserves the rights outlined in the Bid Invitation. The City will award a contract for either the Group A or Group B bid items but not for both. No, references to the City's ability to select a "combination of bids" or "award by line item" will not be deleted from the Bid Invitation.

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**33.0** Will the City provide questions submitted by potential bidders to all other bidders?

**ANSWER:** Yes, all bidders' questions and the City's response are being provided to all bidders in this letter.

**34.0** In the event that information remains unclear, will the City allow time for follow up questions once responses to the potential bidder's initial questions has been received?

**ANSWER:** If any questions are received, a decision will be made based on the nature and substance of the inquiry. e.g. If you can find the answer in the ITB materials, no follow-up time will be given. Please remember that the bid closing date has been extended to Thursday, August 6, 2009 at 10:30 am.

**35.0** If the utilized landfill(s) increase their gate rates during any year of the contract, can those increased costs be passed thru to the City without Contractor mark-up? Binding landfill disposal costs in excess of three years are not available at this time due to concerns over change in environmental law, taxes/fees, and overall market uncertainty.

**ANSWER:** Cake/Non-Spec Pellet Transportation and Landfill Disposal will be paid at the bid cost per load for each contract year. Refer to Section III.6.0 of the General Conditions regarding proposed increases or decreases to the contract values.

**36.0** Are bidders required to supply pricing for all of the contract years in their bid? For example, if landfill pricing is not available for contract years 4 and 5, can the bidder elect "no bid" for those contract years?

**ANSWER:** Yes. No.

**37.0** Would the City please describe its anticipated method for dealing with loads that do not pass the paint filter test?

**ANSWER:** Refer to Section 3.1.6 and Section 3.1.7 and the addition of Section 3.2.5 contained in this letter and other applicable portions of the contract.

**38.0** The Bid Invitation requires lime stabilized biosolids loads to be held in trailers at the Sims Bayou wastewater treatment plant for a 24 hour period prior to removal and land application. No such holding period is required by USEPA or TCEQ regulations. Can the City describe its reasoning for the additional holding period? Is this holding period anticipated to be required for the full term of the contract? Will there be a similar holding period required for biosolids that have an odor-mitigation dose of lime added as may be required prior to landfill disposal?

**ANSWER:** The City reserved the right to identify the required holding period (up to 24 hours) for trailers hauling lime-stabilized cake in order to verify compliance with stabilization requirements prior to land application. Situations requiring an odor-mitigating dose of lime will be dealt with on a case-by-case basis. Odor-related

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lime dosing has not been standard practice at any of the historically utilized landfills.

**39.0** Liquid Sludge Transportation - Section 2.1.5 contemplates hauling liquid sludge to an "off site facility". Can the City be more specific regarding the location and intended haul frequency if there is a haul-to location other than those listed in Table I? What percentage of loads does the City expect will be hauled to locations other than the primary site listed for each haul-away plant? How will increased haul costs for alternate locations/longer hauls be compensated by the City?

**ANSWER:** Refer to the modified wording of Section 2.1.5 contained in this letter and other applicable portions of the contract.

**40.0** Is the City aware of any wastewater facilities where modifications (as discussed in Section 8.2.12) to load out equipment may be required to load standard end-dump trailers? If so, will the City allow additional time for the proper cost estimation of the required modifications? Will the City allow the Contractor to make any modifications it reasonably deems necessary and cost effective?

**ANSWER:** Please refer to the modified wording of Section 8.2.12 contained in this letter, the addition of Section 8.3.12, contained in this letter, and other applicable portions of the contract. If the City takes over operation of the Kingwood Central WWTP, modification of the plant's cake loading facilities may be required prior to hauling cake via the specified end-dump trailers. (Ref. Nos. 13 & 18)

**41.0** Please confirm whether the estimated number of cake loads produced annually by the plants listed in Table II is inclusive or exclusive of loads that may not be suitable for beneficial use (i.e. failed or pending SOUR tests).

**ANSWER:** The number of loads provided in Table II is an estimate of the total number of loads that will be hauled from each plant on an annual basis.

**42.0** Will the City please provide an example schedule for its SOUR sampling program and general historic pass/fail trends? Are there any planned changes to the SOUR testing frequency or plant operations that would impact the amount of biosolids suitable for land application?

**ANSWER:** The City's biosolids regulatory sampling and analysis program is consistent with TCEQ/EPA requirements. Historically, a significant portion of the City's stabilized cake that is suitable for land application has been landfilled.

**43.0** Will the City consider the use of on board scales for load weight verification thus enabling exact weight measures for each load? Detailed product specification, cost and accuracy information can be supplied if requested by the City.

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**ANSWER:** The use of onboard scales for load weight verification will be considered once the contract is awarded. However, only data from certified scales will be used for load cost proration calculations.

**44.0** Please describe the City's anticipated procedures for dealing with the situation of the Contractor being dispatched to remove trailers that it believes are over or under loaded Trailers. Is the Contractor's driver responsible for determining whether trailers are over or under loaded? Can the contractor refuse to haul such loads? Will the City accept legal liability for trailers that it over loads? Will demurrage charges be considered for time spent waiting for trailers to be properly filled?

**ANSWER:** The City has demonstrated that it is capable of loading end-dump trailers to within 1,000 to 2,000 lb of a visible load line. Historically, the City has had a tendency to under load marked and unmarked trailers. As a factor of safety, the City specified that the Contractor establish the load lines at 1,000 lb less than the expected legal capacity of the specified rigs (79,000 lb versus 80,000 lb). It will be the responsibility of both the City's plant operator and the Contractor's driver to visually ensure the excessively under loaded or excessively overloaded trailers are not filled/transported due to the resulting impacts on both parties. Furthermore, it is the responsibility of the City's management and the Contractor's management to ensure that its operators and drivers are trained on how to properly load and haul trailers. For loads that the City operator and Contract driver agree are visually under loaded, the City's Contract Administrator will decide whether or not to require that additional material be placed in the trailer or to allow the under loaded trailer to be hauled. For loads the City operator and Contract driver agree are overloaded, the Contractor's Project Manager will decide whether or not to allow the overloaded trailer to be hauled. The Contractor shall immediately contact the City's Contract Administrator when an overloaded trailer is identified. If the Contractor elected not to haul the overloaded trailer and the City verifies that the trailer is overloaded, the City will be responsible for reducing the trailer gross weight to within legal limits in a timely manner. To reiterate, the City believes that the number of excessively overloaded and under loaded trailers will be minimal. Refer to the addition of Section 8.3.13 in this letter and other applicable portions of the contract.

**45.0** What will be considered a full load for roll-off containers used to haul City biosolids or off-specification HouActinite?

**ANSWER:** Rolloff containers shall only be used to transport non-spec pellets. A full load is a container filled to the Contractor-defined load line (either at the top of the container or at a resulting gross weight of 79,000 lbs).

**46.0** In Section B, Part 5.1.3, the document states that, in the event the planned Almeda-Sims cake receiving station is not available, the Contractor will "drop the filled-trailers for City dumping and haul Contractor-provided empty stand-by trailers". What does the City envision as a limit to the number of stand-by trailers to be provided?

**ANSWER:** Refer to Section 8.2.9, Section 8.2.20, and Section 8.3.6 and other applicable portions of the contract.

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**47.0** Will the City: a) pay for periodic (as directed by the City) clean-out of trailers when biosolids are hauled to the landfill for disposal, or b) accept the cost for the use of plastic liners in trailers, or c) make a suitable location available for washing trailers at one of its wastewater treatment facilities?

**ANSWER:** Section 8.2.24 requires that the Contractor deliver clean end-dump trailers. While a function of the hauled material characteristics, the required cleaning frequency and cleaning method is also function of the trailer design and operation. The City will not define the means and methods by which the Contractor provides clean trailers.

**48.0** What volume of material is anticipated to be managed via landfill disposal or land application once the cake receiving facility is constructed and operational at City's Alameda-Sims drying facility? Will the City provide specific plants that it intends to divert to the Alameda-Sims facility? Can the City provide an anticipated schedule for the design and construction of the cake receiving facility to aid the Contractor's asset management efforts?

**ANSWER:** The Contract Year 2 thru 5 quantities are an estimate of the amount of biosolids that will be landfilled/applied and transported to the Alameda Sims drying facility. As indicated in the contract, it is currently estimated that the Sims Bayou WWTP and Greenridge WWTP biosolids will be transported to the Alameda Sims drying facility; the other affected WWTPs have not yet been identified. Notes on the cake receiving facility construction are provided in Section 8.1.

**49.0** Will the City Operator's improper loading of trailers (i.e. "light-loaded" or "overfilled") be considered a City Default under the contract? What remedies will be available to the Contractor? What procedures will be provided to remedy the loading deficiencies.

**ANSWER:** Refer to the City's response to Item No. 44.

**50.0** Will the City's inability to provide Biosolids that meet applicable standards for land application be a City Default under the contract and will relief be provided to Contractor for contractual minimum requirements for land application.

**ANSWER:** Refer to Section 8.3.8 and 10.0.

**51.0** Will the City consider inserting a fuel surcharge provision in the contract?

**ANSWER:** No.

**52.0** Will the City modify the agreement to make the contract option years (contract years four and five) mutual options?

**ANSWER:** No.

**53.0** Section III "Duties of the City", Part 5.4 states that the "Contractor must assure itself"

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that sufficient allocations have been made. In the Pre-Bid Meeting it appeared that the City intends to inform the Contractor whether sufficient funds have been allocated for the work to be performed. Please advise as to which approach is intended.

**ANSWER:** The Contractor must decide whether he wants to bid on this job.

**54.0** Will the City consider modifying the indemnification provisions of the proposed contract such that the Contractor is responsible to indemnify the City to the extent of the Contractor's fault or negligence as has previously been developed by the City's legal department? An example of such language previously approved by the City attorney would include the following:

Contractor agrees to and shall defend, indemnify, and hold the city, its agents, employees, officers, and legal representatives (collectively the city) harmless for all claims, causes of action, liabilities, fines, and expenses (including, without limitation, attorney's fees, court costs, and all other defense costs and interest) for injury, death, damage, or loss to persons or property sustained in connection with or incidental to performance under this agreement including, without limitation, to the extent caused by:

1. Contractor and/or its agents, employees, officers, directors, contractors, or subcontractors negligence or intentional acts or omissions; or
2. Contractor strict products liability or strict statutory liability, whether Synagro is immune from liability or not.

This indemnity provision shall have no application to any claim or demand (1) to the extent such bodily injury, death, damage, or monetary fine results from the negligence or willful misconduct of the city (2) where such bodily injury, death, damage or monetary fine results from the delivery of non-conforming bio-solids or hazardous waste by the city to Contractor.

Contractor shall defend, indemnify, and hold the city harmless during the term of this agreement and for four years after the agreement terminates. Contractor's indemnification is limited to \$1,000,000 per occurrence. Contractor shall not indemnify the city for the city's own negligence, gross negligence or willful misconduct. It is agreed that Contractor's indemnification and defense obligation shall be satisfied by and not extend beyond the coverage afforded by Contractor's liability policies and as described below.

**ANSWER:** The City's legal department will not negotiate the indemnification provisions of the proposed contract.

**55.0** What is the anticipated service commencement date for this contract?

**ANSWER:** The end of September.

**56.0** Will the City accept liability for damage to Contractor owned equipment caused by City

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employees (e.g. yard tractors and trailers moved by the City)?

**ANSWER:** No.

**57.0** Please confirm that Section 6.2.3 of the contract is not intended to require the Contractor to provide brand new original or replacement equipment.

**ANSWER:** Section 6.2.3 relates to replacement parts and goods furnished to the City by the Contractor. The Contractor will not be providing replacement parts and goods to the City under this contract.

**58.0** Will the City guarantee that no hazardous materials will be in the biosolids and, if present, accept legal and financial liability for disposal of same?

**ANSWER:** Refer to Section 4.3.1 and the addition of Section 3.2.6.

**59.0** Will the City consider adding a change in law provision to the contract or modifying the contract such that a material change in law becomes cause for Contractor termination?

**ANSWER:** No.

**60.0** Will the City consider adding a provision for the number of required acres to be permitted to satisfy the city?

**ANSWER:** Provisions regarding the required land application acreage will not be added.

**61.0** Please identify any City fees that the Contractor will be required to pay associated with the supply, and Health Department review, of manifests.

**ANSWER:** The City's Health Department should be contacted to identify their required fees.

**62.0** Would the City please provide an example calculation of the cost of complying with the City's Pay or Play policy?

**ANSWER:** The City's Affirmative Action Division should be contacted to obtain the requested example calculation. Please contact Bobby Qasim in the Affirmative Action Division 713-837-9028.

**63.0** Will the City please provide copies of the Stormwater Discharge Permits with which the Contractor is required to comply?

**ANSWER:** Copies of the City's stormwater discharge permits are available from the TCEQ. Bidder review of the City's copy of this permit will be allowed if a request to review is submitted two working days in advance. If requested, the City will provide a copy of these permits to the Contractor once the contract is executed.

**64.0** We have identified what we believe may be potential problems on the bid forms. Perhaps they are intended but regardless, I wanted to point them out. First: Line Item 5

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in group B and the total of line items 1-3 in Group A are equal to 5,300 loads. However, the totals from Table II add up to 5,500 loads. This inconsistency would seem to be a typo. Second: In Group A, the first contract year total for hauling is 5,300 loads (line item 5) while the second contract year total is 6,450 (line items 5-7). This too seems like an inconsistency that may be a typo.

**ANSWER:** There are no typos in the provided cake bid quantities. A summary of the procedures used to estimate the cake bid quantities is provided in the following paragraph; however, the Contractor shall refer to Section 8.3.8, Section 10.0, and other applicable portions of the contract.

As noted in the contract, Greenridge WWTP is a southside liquid haul plant in Contract Year 1 (1,225 loads/yr) and this plant is a cake haul plant in Contract Year 2 (200 loads/yr). Therefore, the estimated cake landfill/apply total loads in Contract Year 1 is the total loads from Table II less the Greenridge loads (5,500 - 200 = 5,300 loads). The cake transportation loads to the Almeda Sims dryer in Contract Year 2 were estimated to be 11 loads per day for 260 days/yr from Sims Bayou and Greenridge (11 x 260 = 2,860; used 2,900 loads/yr). If the dryers are able to handle 3 additional loads per day (3 x 260 = 780; used 800 loads/yr); then these loads will come from "Other WWTP(s)". If the dryers are not able to handle 3 additional loads per day, these loads will continue to go to the landfill/application. Therefore, the estimated landfill/application quantity in Contract Year 2 thru 5 is the total from Contract Year 1 (Table II loads less Greenridge) less the Sims Bayou loads (5,300 - 2,560 = 2,740; used 2,750)."

When issued, Letter(s) of Clarification shall automatically become a part of the solicitation documents and shall supersede any previous specification(s) and/or provision(s) in conflict with the Letter(s) of Clarification. It is the responsibility of the proposers to ensure that they have obtained any such previous Letter(s) associated with this solicitation. By submitting a proposal on this project, proposers shall be deemed to have received all Letter(s) of Clarification and to have incorporated them into this solicitation.

If you have any questions or if further clarification is needed regarding this Invitation to Bid, please contact me

Sincerely,



Joyce A. Hays  
Senior Procurement Specialist  
City of Houston, Strategic Purchasing Division  
T: 832-393-8723  
F: 713-247-3039

cc: L23341 Solicitation File

Attachments: Revised pages 5,6,7,8,9,10,11

End of Letter of Clarification 2

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**SECTION B  
SCOPE OF WORK/SPECIFICATIONS**

**BIOSOLIDS TRANSPORTATION AND LAND DISPOSAL/APPLICATION**

**1.0 Introduction**

- 1.1 The City of Houston, Department of Public Works and Engineering, Public Utilities Division, Wastewater Operations Branch (City) is seeking the services of a contractor experienced in the transportation of liquid sludge between municipal wastewater treatment plants (WWTPs) and the transportation and landfill disposal of municipal WWTP cake and non-specification pellets. These contract services can be generally grouped as follows:
  - 1.2 Liquid Sludge Transportation
    - 1.2.1 Cake/Non-Spec Pellet Transportation & Landfill Disposal
    - 1.2.2 Alternate Bid Item: Cake Transportation and Land Application
    - 1.2.3 Cake Transportation
    - 1.2.4 Yard Tractors/Mules Rental
    - 1.2.5 Non-Spec Pellet Transport Containers Rental
  - 1.3 Biosolids mean liquid sludge, cake, and non-spec pellets generated from the operation of the City's WWTPs. Liquid sludge means stabilized (aerobically digested) or unstabilized waste activated sludge containing approximately 1% to 5% solids by weight. Cake means dewatered stabilized (aerobically digested or lime-stabilized) or dewatered unstabilized waste activated sludge containing approximately 10% to 25% solids by weight. Non-spec pellets means thickened, dewatered, and heat-dried waste activated sludge cake containing approximately 80% to 95% solids by weight (commonly referred to as Hou-Actinite) that are not marketed under a separate contract.

**2.0 Liquid Sludge Transportation**

2.1 The Contractor shall:

- 2.1.1 Provide liquid sludge transfer rigs that consist of a road tractor and a vacuum tanker trailer. These rigs shall be capable of hauling at a gross weight of up to 80,000 lb.
- 2.1.2 Provide empty tanker trailers prior to filling (<100 gallons remaining).
- 2.1.3 Fill tractor/trailer rigs to a gross weight of 79,000 pounds plus or minus 1,000 pounds.
- 2.1.4 Clearly mark the filled liquid sludge level on an external level indicator and reference this level to a fixed point on top of the trailer.
- 2.1.5 Haul liquid sludge (unstabilized and/or stabilized) from a City-identified WWTP to another City-identified WWTP (See Table I) or another City-owned wastewater handling ~~on-site~~ facility (See Table I), (e.g., lift station or collection system).
- 2.1.6 Fill and empty the tanker trailers either by gravity flow or by using the trailer's vacuum system.
- 2.1.7 With the exception of City-identified valves, not operate City-owned equipment in order to fill the tanker trailers.
- 2.1.8 Provide all quick-connect hoses required to fill and empty the trailers.
- 2.1.9 Transport liquid sludge from Northside WWTPs (north of Interstate Highway 10) to one of three liquid sludge pump away WWTPs on the northside as indicated in Table I.
- 2.1.10 Transport liquid sludge from one Southside WWTP (Greenridge; south of Interstate Highway 10) to WCID No. 51 lift station or the Southwest WWTP on the southside as indicated in Table I.
- 2.1.11 Transport liquid sludge from one City WWTP to another City WWTP or wastewater facility on an emergency basis. Table II provides a summary of potential WWTPs where liquid sludge would be transferred from.
- 2.1.12 Obtain written approval from the City in advance of proposed modifications to the City-provided weekly inter-facility liquid sludge transfer schedule."

2.2 The City will:

- 2.2.1 Pay for inter-facility liquid sludge transportation services on a cost per load basis (See Table III, Items 1, 2, & 3).
- 2.2.2 Prepare a weekly inter-facility liquid sludge transfer schedule by the last work day of the preceding week and distribute this schedule to the Contractor. This schedule will identify each pickup WWTP and each discharge WWTP or facility and the required volume to be transferred by the scheduled dates.
- 2.2.3 Generally direct liquid sludge transportation loads to the nearest City wastewater facility with the available capacity to handle the transported loads.

**3.0 Cake/Non-Spec Pellet Transportation & Landfill Disposal**

3.1 The Contractor shall:

- 3.1.1 Submit weight tickets from a certified public scale for all loads. These tickets shall contain the actual gross, tare, and net weights. Stored/memory tare weights shall not be submitted without written approval from the City.
- 3.1.2 Submit a landfill company invoice for each landfilled load.
- 3.1.3 Connect City-filled end-dump trailers, haul dewatered cake (unstabilized or stabilized) from City cake preparer WWTPs to a permitted landfill, empty the trailers, and haul the trailer to a Contractor-identified WWTP for re-filling
- 3.1.4 Provide these services as a fail-safe backup under emergency conditions (e.g., equipment failures).
- 3.1.5 As directed by the City, load City-filled rolloff containers, haul non-spec heat dried pellets in rolloff containers from the 69<sup>th</sup> Street WWTP to a permitted landfill, empty the containers, and return the containers to the 69<sup>th</sup> Street plant.
- 3.1.6 Submit additional charges relating to failed paint filter tests to the City for review and consideration of payment.
- 3.1.7 Notify the City within twenty-four hours of failed paint filter test results.
- 3.1.8 Transport and landfill cake (unstabilized or stabilized) or non spec pellets from up to eight (8) Eastside WWTPs and up to five (5) Westside WWTPs (See Table II).

3.2 The City will:

- 3.2.1 Fill end-dump trailers with dewatered cake and as necessary move the trailers to a staging area at each WWTP.
- 3.2.2 Fill rolloff containers with non-spec pellets.
- 3.2.3 Pay for Non-Spec Pellet Transportation and Landfill Disposal services on a cost per load basis (See Table III, Item 4).
- 3.2.4 Pay for Cake Transportation and Landfill Disposal services on a cost per load basis (See Table III, Item 5 and 5A)
- 3.2.5 Pay for additional charges levied by the landfill operator for City-provided non-spec pellets or cake that did not pass paint filter testing. Payment will be at the discretion of the City upon completion of the City's investigation of a Contractor's claim for additional charges.
- 3.2.6 Section 3.2.6 Provide non-hazardous, non-spec pellets or cake that passes the paint filter test.

**4.0 Cake Transportation and Land Application: Group A and Group B Pricing**

- 4.1 Group A - Cake Transportation and Landfill Disposal, Line Item 5 bids assume pricing for landfill disposal only. Group B - Cake Transportation and Landfill Disposal, Cake Transportation and Land Application – Eastside Cake, and Cake Transportation and Land Application – Westside Cake assume a combination of cake landfill disposal and cake land application.
- 4.2 For Group B Cake Transportation and Land Application – Eastside Cake and Cake Transportation and Land Application – Westside Cake services, the Contractor shall:
  - 4.2.1 Furnish the site name, permit holder name, permit number, site size in acres, locations and addresses of any intended contract use land application sites.
  - 4.2.2 Apply City biosolids only to site tracts reserved for the exclusive use of the City.
  - 4.2.3 Sample and analyze for any required nutrients.
  - 4.2.4 Sample and analyze soil from new land application sites for all the constituents regulated.

under ~~the~~ EPA 40 CFR 503 and TAC Chapter 312 regulations in order to provide information on existing site conditions. The sampling and analyses plans shall be approved by the City prior to conducting. Analytical results shall be provided to the City.

- 4.2.5 Assure that all processes utilized at the sites comply with all applicable laws, rules, and regulations.
  - 4.2.6 Provide an adequate supply of end-dump trailers at the Sims Bayou WWTP to allow for a 24 hour filled trailer hold time to allow pH measurement prior to transport.
  - 4.2.7 Dispose of related cake in a permitted landfill when City-conducted regulatory compliance test results are pending (between sample collection and laboratory reporting) and invoice these loads at landfill transportation and disposal prices.
  - 4.2.8 Transport and landfill dispose loads containing cake that failed recent regulatory compliance testing and invoice at transportation and landfill disposal prices.
  - 4.2.9 Transport and land apply stabilized, dewatered cake from up to seven Eastside WWTPs (east of an Interstate Highway 45/North Freeway and Highway 288/South Freeway line): Chocolate Bayou, Imperial Valley, Kingwood Central, Metro Central, Northgate, Sims Bayou, and Southeast (See Table II).
  - 4.2.10 Transport and land apply stabilized, dewatered cake from up to three Westside WWTPs (west of an Interstate Highway 45/North Freeway and Highway 288/South Freeway line): Beltway, Keegans Bayou, and Upper Brays (See Table II).
  - 4.2.11 Connect City-filled end-dump trailers, haul the trailers to a permitted land application site destination, empty the trailers, and haul the trailer to a Contractor-identified WWTP for re-filling.
  - 4.2.12 Submit a monthly log sheet of Contractor site operations.
  - 4.2.13 Section 4.2.13 Submit a monthly summary of the anticipated number of land application and landfill loads for each WWTP, as well as an accounting of the land applied and land filled loads to date for each WWTP at least five (5) working days before the start of each month.
  - 4.2.14 Section 4.2.14 Notify the City in writing of significant changes in biosolids land application or landfill plans in advance such that the City will be able to adjust its related biosolids stabilization/management operations and sampling and analyses procedures accordingly.
- 4.3 For Group B Cake Transportation and Land Application – Eastside Cake and Cake Transportation and Land Application – Westside Cake services, the City will:
- 4.3.1 Provide non-hazardous, Class B stabilized, dewatered cake (12 to 18% solids) that meets vector attraction requirements and EPA pollutant limits.
  - 4.3.2 Distribute a regulatory compliance testing schedule each month (SOUR and MPN).
  - 4.3.3 Pay for Cake Transportation and Land Application services (Eastside and Westside) on a cost per load basis (See Table III, Item 5A).
  - 4.3.4 Based on agreement with Contractor-identified unique circumstances, prepare written authorization to reduce the required minimum annual cake tonnage that shall be land applied.
  - 4.3.5 Fill the end-dump trailers with stabilized, dewatered cake and if necessary move the trailers to a staging area at each WWTP.
- 5.0 Cake Transportation**
- 5.1 The Contractor shall:
- 5.1.1 Connect City-filled end-dump trailers, haul dewatered cake (unstabilized or stabilized) from City cake preparer WWTPs (Sims Bayou, Greenridge, or other) to the City's Alameda Sims Heat Drying facility, empty the trailers(if the cake receiving facility is available), and haul the trailer to a Contractor-identified WWTP for re-filling
  - 5.1.2 Provide these services as a fail-safe backup to landfill disposal and as required by the City under emergency conditions (e.g., equipment failures).
  - 5.1.3 If the Alameda Sims Heat Drying Cake Receiving is not available for dumping, drop the filled-trailers for City dumping and haul Contractor-provided empty standby trailers.

**5.2 The City will:**

- 5.2.1 Fill end-dump trailers with dewatered cake and as necessary move the trailers to a staging area at each WWTP.
- 5.2.2 Pay for cake transportation service between Sims Bayou WWTP and the Alameda Sims Heat Drying facility on a cost per load basis (See Table III, Item 6).
- 5.2.3 Pay for cake transportation service between Greenridge WWTP and the Alameda Sims Heat Drying facility on a cost per load basis (See Table III, Item 6).
- 5.2.4 Pay for cake transportation service between any other City WWTP and the Alameda Sims Heat Drying facility on a cost per load basis (See Table III, Item 7).

## 6.0 Yard Tractors/Mules Rental

### 6.1 The Contractor shall:

- 6.1.1 Provide up to twelve (12) yard tractors/mules at City-identified cake/pellet preparer plants.
- 6.1.2 Maintain and fuel these rented yard tractors such that they are available for continuous use.
- 6.1.3 Provide a replacement tractor within 2 hours, if the rented tractor is out-of-service for more than 4 hours after notification.
- 6.1.4 Provide yard tractors/mules that can handle at least a 70,000 pound loaded trailer, have a minimum 50-inch wide insulated cab, air ride seat, two (2) batteries, comply with all Federal air pollution regulations and the State Implementation Plan (SIP) for the Houston Non-Attainment Area and have a hydraulically activated fifth wheel.
- 6.1.5 Provide four (4) continuous hours of training to City personnel regarding the proper and safe operation of the yard tractors/mules. This training shall be conducted on three separate occasions in the first month of Contract Year No. 1 and annually in Contract Years 2 and 3.
- 6.1.6 Issue written training certification to each City employee upon successful completion of yard tractor/mule operations training.
- 6.1.7 At the City's discretion, the Alameda Sims WWTP yard tractor shall be equipped with a hydraulic power take-off pump and be capable of unloading end-dump trailers (i.e., lifting all of the Contractor-provided trailers to the recommended dump angle).

### 6.2 The City will:

- 6.2.1 Operate Contractor-provided yard tractors/mules in order to move end-dump trailers while filling (to create multiple piles) and to move empty and filled trailers within the plant grounds.
- 6.2.2 Pay for yard tractor/mule rental on a cost per mule per month basis (See Table III, Item 9).

## 7.0 Non-Spec Pellet Transport Containers Rental

### 7.1 The Contractor shall:

- 7.1.1 Provide up to eight (8) watertight 40 cubic yard rolloff containers at the 69<sup>th</sup> Street WWTP to capture and store non-spec heat dried pellets for transportation and landfill disposal.
- 7.1.2 Position containers as directed by the City.
- 7.1.3 Mark and maintain a continuous, uniform fill line around the inside of each rolloff container indicating the fill level that will result in a legal loaded gross weight for transportation.

### 7.2 The City will:

- 7.2.1 Schedule transportation and landfill disposal of the non-spec pellets in each container.
- 7.2.2 Pay for non-spec transport container rental on a cost per container per month basis (See Table III, Item 10).

## 8.0 General

- 8.1 Although subject to change due to a variety of circumstances, it is anticipated that the City's biosolids management plan will evolve over the term of this contract. With respect to the services outlined in this contract and depending on the completion of a cake receiving facility construction project at the Alameda Sims WWTP, the following plan changes are anticipated sometime between Contract Year 2 and 3:
- 8.1.1 Cake versus liquids sludge from the Greenridge WWTP will be transported to the Alameda Sims WWTP heat dryer facility.
  - 8.1.2 Dewatered, unstabilized cake from the Sims Bayou WWTP will be transported to the Alameda Sims WWTP heat dryer cake receiving facility, along with cake from other WWTPs.
- 8.2 The Contractor shall:
- 8.2.1 Provide all labor, equipment, and materials needed to complete the specified services.
  - 8.2.2 Operate and maintain the provided equipment.
  - 8.2.3 Provide the City with empty tractor/trailer weights and full tractor/trailer weights when these rigs are initially put into service.
  - 8.2.4 Prepare and submit a copy (original top copy) of a completely executed five-part paper manifest for all loads. Written approval of the manifest content and format shall be obtained from the City Health Department and the City Wastewater Operations Branch.
  - 8.2.5 Provide a driver(s) and tractor(s) ready to move a trailer anywhere within the City within ninety (90) minutes of notification.
  - 8.2.6 Utilize road tractors and watertight end-dump trailers for cake transportation (frameless, frame, or quarter-frame type). The trailer splash guards or nose and tail caps shall not interfere with the point discharge loading of these trailers. These rigs shall be capable of hauling at a filled gross weight of 79,000 pounds plus or minus 1,000 pounds.
  - 8.2.7 Subject to verification by the City, provide end-dump trailers with a continuous, uniform line around the inside of each trailer at the 79,000 pound gross weight plus or minus 1,000 pound fill level and, per the City's request, re-mark these lines within two working days.
  - 8.2.8 Be available to perform the specified services 24 hours per day, 7 days per week, 365 days per year (366 days in a leap year). ~~However, the majority of the services shall be performed during daytime work hours on normal City work days.~~ Unless specifically requested by the City, the services shall be performed during daytime work hours on normal City work days
  - 8.2.9 Not affect the continuous operation of any of the City's WWTPs.
  - 8.2.10 Not remove partially filled trailers, unless removal is authorized by the City.
  - 8.2.11 Make all reasonable efforts to cooperate with City construction, service, or supply contractors as well as City customers.
  - 8.2.12 ~~Make any modification(s) of City equipment required to load the Contractor's trailers, with prior approval of the City.~~ Provide details of all modifications to City equipment required in order to safely load the Contractor's trailers.
  - 8.2.13 Abide by all identified City security procedures.
  - 8.2.14 Be completely familiar with, and conduct all contract service activities in compliance with all applicable City, County, State of Texas and Federal regulations, codes, and standards.
  - 8.2.15 Pay the cost of all required permits and/or fees and provide copies of these permits to the City.
  - 8.2.16 Comply with the terms and conditions of Storm Water Discharge Permits issued to the City by the US Environmental Protection Agency (EPA)/Texas Commission on Environmental Quality (TCEQ).
  - 8.2.17 Develop a spill response plan(s) and respond in a timely manner to all spills and provide thorough cleanup and removal of the spilled material.
  - 8.2.18 Obtain and properly display TCEQ and City permits for all trailers used to transport

biosolids.

- 8.2.19 Ensure that all required equipment licenses and inspections are current.
- 8.2.20 Provide timely transfer of all trailers and provide empty trailers in a timely manner to ensure continuous processing of biosolids at each WWTP.
- 8.2.21 Handle liquid sludge, cake, and pellets in a manner that minimizes odor complaints.
- 8.2.22 Find, arrange for, and continue the use of permitted land application sites and permitted landfill disposal sites associated with the services provided in this contract.
- 8.2.23 Cover all end-dump trailers and rolloff containers with tarpaulins while on public thoroughfares.
- 8.2.24 Deliver clean end-dump trailers (material covering less than one third of trailer bed and less than 3 inches in thickness) to the City's WWTPs for filling.
- 8.2.25 Be liable to the City for any damage caused to City property or employee injuries.
- 8.2.26 Provide monitoring and record keeping suitable for presenting related information for regulatory purposes.

### 8.3 The City will:

- 8.3.1 Only pay the Contractor for full loads unless otherwise authorized by the City.
- 8.3.2 As required, request the movement of a trailer/rolloff and/or the disposal of the trailer/rolloff contents before the contents are completely full.
- 8.3.3 Allow the Contractor access to City sites during non-routine operating hours.
- 8.3.4 Complete and sign the Generator portion of all load manifests and, as appropriate, the destination portion of the manifests.
- 8.3.5 Sample and analyze dewatered cake in compliance with regulatory requirements for Toxicity Characteristic Leaching Procedure (TCLP), polychlorinated biphenyls (PCB's), pathogens, vector attraction (SOURS), and metals.
- 8.3.6 As required, notify the Contractor's dispatcher of the need for an empty end-dump trailer at least ninety minutes before it is needed.
- 8.3.7 Designate a Contract Administrator.
- 8.3.8 Not guarantee minimum/maximum quantities of services handled under this contract.
- 8.3.9 Pay for excessively under light-loaded road tractor/trailer rigs (gross weight <74,000 lb) and excessively overloaded road tractor and end-dump trailer rigs (gross weight >84,000 lb) on a prorated basis (ratio of the actual measured gross weight and the normal gross weight of 79,000 lbs times contract cost per load 24.5 tons).
- 8.3.10 Not pay additional funds for overfilled trailers. "For delivered trailers containing an excessive amount of material (measured tare weight >6,000 lb over the actual tare weight), reduce load payment on a prorated basis (ratio of the difference between the measured tare weight and actual tare weight and the normal gross weight of 79,000 lbs times contract cost per load)."
- 8.3.11 Deduct the sum of five hundred dollars (\$500) per day, not as a penalty, but as a service fee credit for each day during which the Contractor refuses, either voluntarily or involuntarily, to provide the City-requested service(s).
- 8.3.12 Modify City-owned equipment as required to safely load Contractor-owned standard trailers.
- 8.3.13 Not pay demurrage charges.

**TABLE I**

**LIQUID SLUDGE TANKER HAUL WWTPs**

Northside				
From WWTP Plant Address	Key Map	Primary To WWTP Plant Address	Key Map	(Estimated Loads/Year)
Cedar Bayou 2804 Huffman Eastgate	339-G	Homestead 5565 Kirkpatrick	455-N	50
Forest Cove 21951 Trail Tree Lane	336-E	Kingwood Central 3928 Kingwood Drive	337-F	200
H.C.M.U.D. #203 1215 Gears Road	372-P	Northwest 5423 Mangum Road	451-C	225
Intercontinental Airport 2450 Rankin Road	373-M	Homestead 5565 Kirkpatrick	455-N	750
Kingwood West 5900 Sorters Road	295-V	Kingwood Central 3928 Kingwood Drive	337-F	200
Northbelt 14506 Smith	375-Y	Homestead 5565 Kirkpatrick	455-N	1225
Park Ten 16500 Park Row	447-Y	Turkey Creek 1147 Enclave Parkway	488-G	450
Tidwell Timbers 10545 Tidwell Road	456-G	Homestead 5565 Kirkpatrick	455-N	25
W.C.I.D. #076 13535 River Trail Drive	415-A	Homestead 5565 Kirkpatrick	455-N	75
West Lake Houston 16702 West Lake Hosuton	377-G	Homestead 5565 Kirkpatrick	455-N	25
Westway 10273 Genard	450-A	Northwest 5423 Mangum Road	451-C	250
Willowbrook 7101 Greens Road West	370-K	Northwest 5423 Mangum Road	451-C	550
Willow Run 1818 ½ Mosher Lane	412-K	Northwest 5423 Mangum Road	451-C	150
<b>Total =</b>				<b>13 WWTPs (4,175 loads/year)</b>
Southside				
Greenridge 6301 Fuqua West	571-X	Southwest 4211 Beechnut or WCID No. 51 LS 4900 Gallagher	531-P 471-R	1,225
<b>Total =</b>				<b>1 WWTP (1,225 loads/year)</b>