

August 17, 2012

Mr. Conrad J. Schaefer
Texas Commission on Environmental Quality
Waste Permits Division
Municipal Solid Waste Permits Section / MC 124
P.O. Box 13087
Austin, Texas 78711-3087

Reference: **TCEQ Requested Revisions**
 Application for New MSW Registration
 Nexus Continuum, LLC
 Type V Material Recovery and Transfer Station
 Harris County, Houston, Texas
 Application No. 40260
 Tracking Nos. 15035373, 15058216, 15098596, and 15730388
 RN104419460/CN603985979

Dear Mr. Schaefer:

On behalf of Nexus Continuum, LLC (Nexus), HDR is submitting an original, three unmarked copies, and three marked copies of application revisions to the referenced application per your request. This submittal is pursuant to recent email and phone conversations with TCEQ staff concerning conforming language changes in the following sections:

- Part I, Section 1.2 – Characteristics of Material
- Part II, Section 2.3 – Quantity of Waste
- Part III, Section 2.2 – Waste Movement
- Part IV, Section 6.0 – Waste Acceptance and Analysis

This registration application and associated additional information is being submitted under the provisions of 30 TAC Chapter 330.9(f). Thank you in advance for your review of these documents. If you have any questions or require additional information, please contact me at 512-498-4716.

Sincerely,
HDR Engineering, Inc.
Texas Registered Engineering Firm F-754


Joel Miller, P.E.
Project Manager



8.17.12

cc: Ms. Nicole Bealle, Waste Program Manager, TCEQ Region 12
 Mr. Efrain Gonzalez, Jr.
 Mr. Pierce L. Chandler, Jr., P.E.
 Ms. Helen S. Gilbert
 Mr. Charles S. Gregory, III

Part I Figure 1 shows the location of permitted landfills and end-use markets for recyclables near the facility.

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1.2 Characteristics of Material

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- 1) material that can be reused or recycled and
- 2) material that is considered waste and cannot be reused or recycled.

The non-recyclable material will consist of municipal solid waste as defined in 30 TAC 330.3(88). Material that can potentially be reused or recycled would include brush, yard and wood waste, C&D, and inert materials (including aggregates), white goods and other metals. The recovered commodities will meet the definition of recyclable material found at 30 TAC 330.3(122) and will not be considered solid waste. However, any material that is received will become solid waste at such time as it is determined that the material cannot be beneficially reused or recycled, and it is disposed of rather than recycled.

The characteristics of the recyclable material received will vary from load to load, but in general will include the following: scrap lumber and wood; concrete and masonry rubble; trees, brush and soil from land clearing and landscaping projects; gypsum board (sheet rock); plastic, paper and cardboard packaging materials; scrap ferrous and non-ferrous metal; and similar items resulting from the construction, renovation, deconstruction, and demolition of buildings.

Nexus proposes to receive up to 5,000 cubic yards (CY) of material per day for processing (consolidation and/or segregation). For purposes of determining weight equivalents to meet the 10% recycling requirement in accordance with 30 TAC §330.9(f)(1), incoming loads brought into the facility for sorting and/or transfer will be converted to weight equivalent values. The weight equivalent value for the incoming waste volume will be calculated based on the compaction condition (uncompacted, medium compacted, heavily compacted) of each incoming waste load. The weight equivalent value will be calculated using the conversion factors for waste transport vehicles/containers relative to waste volume and weight in vehicles/containers per Subchapter P of

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Material not able to be reused or recycled will be considered solid waste and will be accumulated in the designated waste storage areas and placed in approved containers (roll-off boxes) and/or transfer trailers. Waste material will then be removed and hauled to a properly permitted landfill for disposal. Records will be kept of the total number of loads accepted at the facility and the number of loads delivered to end-use markets or to landfills. Records will demonstrate the quantities of materials recovered and the amount of waste disposed. The quantity of material will be recorded and converted to a weight equivalent for reporting purposes.

1.3 Other Information

This registration application has been prepared to demonstrate compliance with the requirements established in 30 TAC 330.57 through 330.65 (Subchapter B). The application is formatted to include Parts I through IV as specified in the Municipal Solid Waste Management Regulations.

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2.2 Waste Movement

§330.63(b)(2)

The amount of waste and recyclable materials, both commingled and source separated, that will be received at the facility is estimated to be a maximum of 5,000 cubic yards per day (CY/d). The site capacity is discussed in more detail in Part II, Section 2.3 and outlined in Part II, Table II-1 (Projected Waste Acceptance). The facility will have the capacity to process and transfer a maximum of 5,000 CY/d of waste and recyclable material, of which a minimum of 10% will be recovered and sent for reuse or recycling. For purposes of determining weight equivalents to meet the 10% recycling requirement in accordance with 30 TAC §330.9(f)(1), incoming loads brought into the facility for sorting and/or transfer will be converted to weight equivalent values. The weight equivalent value for the incoming waste volume will be calculated based on the compaction condition (uncompacted, medium compacted, heavily compacted) of each incoming waste load. The weight equivalent value will be calculated using the conversion factors for waste transport vehicles/containers relative to waste volume and weight in vehicles/containers per Subchapter P of Chapter 330. The total aggregate weight equivalent for all incoming loads processed through the facility will be calculated from the weight estimates for each incoming load. Weight equivalents of outgoing loads of municipal solid waste being transferred to a permitted landfill will be calculated using the transfer trailer volume and a density of 400 #/CY (uncompacted) = total equivalent load weight. Total equivalent weight of municipal solid waste sent to the landfill will be less than 90% of the total aggregate incoming equivalent load weights.

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As shown on the Traffic Flow Diagram (Part III Figure 9), incoming material will be brought to the facility by roll-off trucks, front-end loaders and other collection vehicles and off-loaded

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Some portion of the material delivered to the facility from C&D projects will not be recyclable material, either because the material does not meet quality standards, no market exists or, if markets exist, their transportation and reuse/recycling is not economically feasible. When Nexus determines a material is not recyclable, they will collect and consolidate it with other non-recyclable materials and dispose of it offsite at appropriate permitted solid waste facilities.

Nexus proposes to operate a MSW Transfer Station, as well as a Material Recovery facility. The transfer station will enable Nexus to accumulate, consolidate and compact the residual solid waste from recyclable loads along with municipal solid waste delivered to the facility into roll-off containers or transfer trailers, allowing for temporary storage and subsequent transfer to a permitted landfill.

Nexus will remove at least 10 percent of the material it receives for reuse or recycling. However, Nexus intends to remove as much recyclable material as is reasonably and economically feasible. By increasing the amount of material recovered from the waste stream, Nexus is helping to reduce society's dependency on landfill disposal and preserving natural resources.

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The facility proposes to operate up to 24 hours per day seven days per week and expects to receive a maximum of about 365,000 tons per calendar year. The population equivalent (based on 5 pounds per capita per day) of 365,000 tons per year is 400,000. The following Table II-1 shows the maximum amount of solid waste to be received daily and annually for the next five years. These projections are not intended to limit the receipt to less than the maximum of 5,000 cubic yards per day.

Table II-1: Projected Waste Acceptance

Year	Daily (CY)	Annually (CY)
1	2,400	876,000
2	2,600	963,600
3	2,904	1,059,960
4	3,194	1,165,956
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Note: Increase is assumed at 10% per year.

The maximum amount of solid waste and recyclables to be stored at the facility is based on 43 transfer trailers loaded with an average of 125 cubic yards of material each. Therefore, a maximum

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of 5,375 cubic yards may be stored outside of the process building. Use of smaller capacity trailers may decrease the amount of available storage. Additional storage is available in the transfer trailer load out area and on the tipping floor. However, this storage volume availability is not intended to increase the maximum storage of 5,375 cubic yards. Once this storage volume has been received, no additional material will be accepted until an equal volume is removed.

The average length of time that solid waste will be stored at the facility is expected to be 24 hours with a maximum length of 72 hours. Solid waste will be delivered to a permitted area landfill. The average length of time that recyclable materials will be stored at the facility is expected to be two days with a maximum length of 180 days, depending on the market at the time. Recyclable material will be delivered to local commodity markets.

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6.0 WASTE ACCEPTANCE AND ANALYSIS

30 TAC §330.203

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