

June 6, 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: Response to Second Technical Notice of Deficiency
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. This submittal is in response to the Second Technical Notice of Deficiency letter from TCEQ dated May 7, 2012 requesting additional information. This response letter provides the additional information requested, and the attached forms, text and attachments have been revised as appropriate. For ease of review, TCEQ questions are reproduced below in *italics* with the associated response non-italicized:

General

- In our first NOD we stated that "as per 30 TAC §330.57(i)(1), the owner or operator shall provide a complete copy of any application, including all revisions and supplements to the application, on a publicly accessible internet Web site. We are unable to locate revisions to the application on the internet Web site where the application is provided." It appears that this requirement has not yet been met as only a small percentage of revisions were available for viewing at the URL provided in the NOD response (<http://www.nexusdisposal.com/nc.html>). Please fully comply with the rule.*

All current revisions and supplements have been added to the website for viewing at the URL posted.

Part II

- We received your detailed response to our comment 4 of Part II in the first NOD, however, the request to be authorized to dispose of waste at the Altair Landfill is denied based on that landfill being located more than 50 miles from the proposed facility. Rule 30 TAC 330.7 requires facilities that store or process solid waste to obtain a permit unless another type of authorization is provided by the rules. A registration tier authorization is provided in 30 TAC 330.9(f) for facilities subject to the restrictions of having to recycle 10 percent and*

transfer of waste to landfills within 50 miles. The rules do not authorize the Executive Director to waive the distance limitation. Please remove all references to the variance request in the application.

Denial of variance request is noted. All references to the variance request have been removed from Part I and Part II of the application.

2. *In response to Part II comment 6 it was stated that a coordination letter was sent to the Texas Historical Commission (THC) requesting documentation of compliance. A copy of the letter sent to the THC was included in your response. Per our previous request and per 30 TAC §330.61(o), the owner or operator shall submit a review letter from the Texas Historical Commission documenting compliance with the Natural Resources Code, Chapter 191, Texas Antiquities Code. This rule requirement does not appear to have been met. Please revise the application to include the response letter from the THC.*

Part II Attachment D has been updated to include a review letter received from the THC on April 20, 2012. Note the THC stamp on page 2 of the letter stating, "No Survey Required" and "Project May Proceed."

Clarification

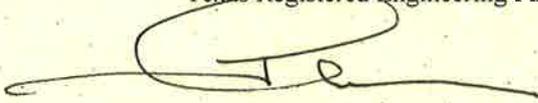
In Nexus' April 11, 2012 Response to the First Technical Notice of Deficiency, we stated both in the response letter (Part III, comment 3 and Part IV, comment 10) and application text that extremely odorous wastes, including putrescible waste, would not be accepted at the facility. These statements were intended to address the Executive Director's concerns relating to the type of "pre-engineered" partially open metal building that Nexus has chosen for its transfer station structure. Specifically, we stated that, "[t]ext has been updated throughout the application to state that extremely odorous, liquid, sludge, grit trap, and putrescible wastes will not be accepted at the facility. . ." While it is true that Nexus does not intend to accept extremely odorous waste, including some *types* of putrescible waste like sludge and grease trap waste, it will in fact accept other types of putrescible waste such as typical household garbage which does not rise to the level of "extremely odorous." As we discussed during a meeting with TCEQ staff on March 7, 2012 and consistent with that discussion, Nexus will not recover any portion of the putrescible waste stream and proposes no special design criteria (i.e., fully enclosed buildings) to accommodate the putrescible material that it will accept in compliance with 30 TAC §330.245(g). Nevertheless, specific parts of the application were previously revised to include additional ventilation, odor control, buffer zone details and emissions reporting and those revisions have not been changed in this submittal.

In support of this clarification, this submittal includes minor revisions to that application text which currently references the acceptance of putrescible wastes in the following sections:

- Part II, Section 2.1;
- Part III, Section 2.2 and Section 4.0; and
- Part IV, Section 6.1 and Section 23.0 (p. 41 and 43).

This registration application and associated additional information is being submitted under the provisions of 30 TAC Chapter 330.9(f). The application revisions attached have been edited and noted with footers as requested by TCEQ. Thank you 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



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

Signature Page

I, Efrain Gonzalez (Operator), President (Title)

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Efrain Gonzalez Date: 6/4/2012

TO BE COMPLETED BY THE OPERATOR IF THE APPLICATION IS SIGNED BY AN AUTHORIZED REPRESENTATIVE FOR THE OPERATOR

I, Efrain Gonzalez (Print or Type Operator Name), hereby designate Efrain Gonzalez Jr. (Print or Type Representative Name)

as my representative and hereby authorize said representative to sign any application, submit additional information as may be requested by the Commission; and/or appear for me at any hearing or before the Texas Commission on Environmental Quality in conjunction with this request for a Texas Water Code or Texas Solid Waste Disposal Act permit. I further understand that I am responsible for the contents of this application, for oral statements given by my authorized representative in support of the application, and for compliance with the terms and conditions of any permit which might be issued based upon this application.

Efrain Gonzalez Jr.
Printed or Typed Name of Operator or Principal Executive Officer
Efrain Gonzalez Jr.
Signature

SUBSCRIBED AND SWORN to before me by the said Efrain Gonzalez & Efrain Gonzalez Jr.

On this 4th day of June, 2012

My commission expires on the 26th day of February, 2013



[Signature]
Notary Public in and for
Harris County, Texas

(Note: Application Must Bear Signature & Seal of Notary Public)

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

Deleted: (unless specifically granted a variance).

1.2 Characteristics of Material

In general, material delivered to the Nexus facility will fall into two categories:

- 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). This is based on 1,000 tons per day (tpd) at an average incoming density of 400 pounds per cubic yard. A minimum of 10% (500 CY/day) will be recovered for beneficial use. 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

Deleted: NOD Response December 2011

Deleted: 1

Deleted: TCEQ Prelim-Review #1 November 18, 2011

Deleted: April

**Nexus Material Recovery and Transfer Station
Part II
Table of Contents**

1.0	EXISTING CONDITIONS SUMMARY	1	
2.0	WASTE ACCEPTANCE PLAN	3	
2.1	General.....	3	
2.2	Sources and Characteristics of Waste	4	
2.3	Quantity of Waste	5	
3.0	QUALIFICATION FOR REGISTRATION.....	7	
4.0	GENERAL LOCATION MAPS.....	8	Deleted: 9
5.0	FACILITY LAYOUT MAPS	10	Deleted: 11
6.0	GENERAL TOPOGRAPHIC MAPS	11	Deleted: 12
7.0	AERIAL PHOTOGRAPH.....	12	Deleted: 13
8.0	LAND-USE MAP.....	13	Deleted: 14
9.0	IMPACT ON SURROUNDING AREA.....	14	Deleted: 15
9.1	Potential Impact to the Human or Natural Environment	14	Deleted: 15
9.2	Compatibility with the Surrounding Area.....	14	Deleted: 15
10.0	TRANSPORTATION.....	17	Deleted: 18
11.0	GENERAL GEOLOGY AND SOILS STATEMENT	19	Deleted: 20
12.0	GROUNDWATER AND SURFACE WATER	20	Deleted: 21
13.0	ABANDONED OIL AND WATER WELLS	22	Deleted: 23
14.0	FLOODPLAINS AND WETLANDS STATEMENT.....	23	Deleted: 24
15.0	ENDANGERED OR THREATENED SPECIES.....	24	Deleted: 25
16.0	TEXAS HISTORICAL COMMISSION REVIEW.....	25	Deleted: 26
17.0	COUNCIL OF GOVERNMENTS AND LOCAL GOVERNMENT REVIEW	26	Deleted: 27

List of Figures

- Figure 1 – USGS Quadrangle Map
- Figure 2 – Facility Layout
- Figure 3 – General Topographic Map
- Figure 4 – Aerial Photograph
- Figure 5 – Land Use Map
- Figure 6 – FEMA 100-Year Floodplain Map
- Figure 7 – Water Well Locations

Deleted: October 2011
Deleted: 1
Deleted: April

Nexus Disposal has long seen the need for effective recycling of C&D material in the Houston metropolitan area, having provided service to this industry for over 15 years at the current location. The site is in a mostly industrial location, well suited for a material recovery and transfer station facility. Markets for recyclable materials and adequate landfill space for waste materials exist in the near vicinity (see Part I, Figure 1). The site has access, adequate separation and buffer distances from neighbors and is compatible with existing land use. This site is proposed for the Nexus Material Recovery and Transfer Station facility. As such, Nexus Continuum, LLC (Nexus) has prepared this registration application and will become the owner and operator of the processing activities at the Nexus facility.

Nexus is preparing this registration for a Material Recovery and Transfer Station (MRTS) Type V facility, and is eligible for a registration pursuant to 30 TAC 330.9(f) since Nexus will recover a minimum of 10% by weight or weight equivalent of the total incoming waste stream for reuse or recycling and the remaining will be transported to a landfill within 50 miles of the facility.

Deleted: (unless specifically granted a variance – see Part II Section 3.0 for variance request)

Deleted: October 2011

Deleted: 1

Deleted: April

closed or when collection vehicles are not full at the end of a route, consolidation of the partial load with other partial loads reduces the number of trips to the landfill. Should significant amounts of commercial waste be determined to be recyclable (paper, cardboard, etc.), it will be directed to temporary storage locations or the sorting area for recyclables. Municipal solid waste from residential sources will not be recovered or reused and will be consolidated and transferred directly to an area landfill for disposal.

One of the purposes of the material recovery and transfer station registration is to allow Nexus to consolidate and transfer to a landfill the non-recyclable portion of the material it receives. This waste will be placed in containers for transportation to a landfill. The facility will also allow Nexus to continue to remove recyclable materials prior to disposal.

Regulated hazardous waste and some types of extremely odorous putrescible waste will not be accepted at the facility, therefore there is not a waste characteristic or constituent that would be a limiting factor in the design of the facility based on the type of materials to be received.

2.2 Sources and Characteristics of Waste

Waste and recyclables delivered to the Nexus facility will be primarily from Harris County and the city of Houston, although minor amounts could be delivered from surrounding areas. C&D materials are generated from a wide range of events and activities including storm-related disaster relief and clean up, building fires, new construction of homes and buildings, and demolition, remodeling, reconstruction and roof replacement of existing infrastructure.

Customers generating C&D materials are typically serviced on a scheduled or on a demand basis. Once a container is loaded, it is picked up by the service company and delivered to the Nexus facility. Nexus will remove recyclable material, as that term is defined in 30 TAC 330.3(122), from construction and demolition loads and other loads with a high percentage of materials that can be reused or recycled.

Deleted: October 2011
Deleted: 1
Deleted: April

3.0 QUALIFICATION FOR REGISTRATION

30TAC §330.61(b)(2)

The Nexus facility will include a registered Type V municipal solid waste material recovery and transfer station that will receive, process, and transfer up to 5,000 cubic yards per day. The facility is qualified to be registered in accordance with provisions in 30 TAC 330.9(f)(1) by recovering a minimum of 10% by weight or weight equivalent for reuse or recycling. The facility is qualified to be registered in accordance with provisions in 30 TAC 330.9(f)(2) by disposing of municipal solid waste in a permitted landfill no more than 50 miles from the facility.

Deleted: Pursuant to this statement, Nexus requests the following variance for a specific landfill:¶
¶
Variance Request from the requirements of 30 TAC 330.9 (f)(2):¶
¶
Part I, Figure 1 shows the general location of the reuse/recycling markets and some of the permitted landfills in the Houston area. 30 TAC 330.9(f)(2) requires that material that will not be sent for reuse or recycling will be transported to a permitted landfill that is no more than 50 miles from the facility. In an effort to ensure flexibility and competitive business practices, Nexus hereby requests a minor variance to this requirement. Nexus requests specific authorization to dispose of municipal solid waste at the Altair Landfill (MSW 203A) near Columbus, Texas (in addition to any other permitted landfill within 50 miles). The Altair Landfill is located in Colorado County south of Interstate 10 and, at 56.7 miles away from the Nexus site, is only slightly further than the 50 mile radius. The following attributes make it a viable alternative for future disposal under this registration: Potential for a long-term disposal contract:¶
Remaining landfill capacity:¶
Eliminates the need to drive into neighborhoods in the greater Houston area:¶
Fuel-efficiency and logistics for waste hauling along interstate highway: ¶
Potential for future alternative (to closer landfills) for hurricane waste disposal¶
¶
As part of this registration, Nexus requests a minor variance to the requirement of 30 TAC 330.9(f)(2) requiring the disposal facility to be within 50 miles of the site.

Deleted: October 2011
Deleted: 1
Deleted: April

Attachment D:
Texas Historical Commission Review

Nexus Continuum, LLC
Material Recovery/Transfer Station
Part II Type V Registration

HDR Engineering, Inc.
~~TCEQ Tech Revision #2~~
~~June 2012~~

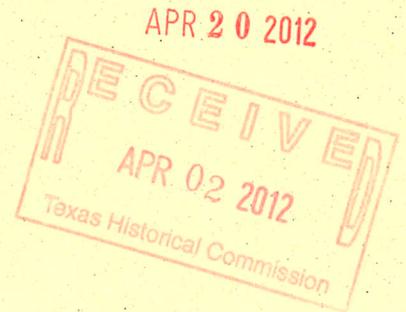
Deleted: October 2011

Deleted: 1

Deleted: April

March 29, 2012

Mr. Mark Denton
State Historic Preservation Officer
Department of Antiquities Protection
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711-2276



Re: Nexus Continuum, LLC
Proposed Type V Material Recovery and Transfer Station
Houston, Harris County, Texas

Dear Mr. Denton:

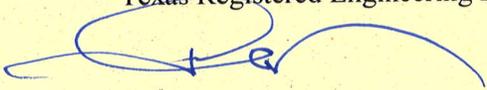
Nexus Continuum, LLC (Nexus) has applied to the Texas Commission on Environmental Quality (TCEQ) for registration of a Type V - Material Recovery and Transfer Station to be located at 6124 Cunningham Road, Houston, Texas. The proposed facility will receive municipal solid waste and recyclable material. The purpose of the registration application is to allow Nexus to receive and consolidate waste and recyclable materials and transfer to a landfill the non-recyclable portion of the incoming material that remains following processing. The waste will be placed in containers for transportation to a permitted landfill. The proposed facility will allow Nexus to remove recyclable materials from the waste stream so that these materials may be beneficially reused as commodities.

TCEQ regulations [30 TAC 330.61 (o)] require documentation of coordination with your agency documenting compliance with the Natural Resources Code, Chapter 191, Texas Antiquities Code. This letter is to inform you of the proposed facility and request your response indicating that the proposed facility will not conflict with any applicable restrictions.

The proposed facility will occupy approximately 5 acres of a 7.6 acre site. This site has been in use for approximately 15 years and has sustained significant disturbances from construction, maintenance, and operational activities. HDR archaeologist Marcus Grant, MA, RPA reviewed the project and on 27 August 2010 examined online maps at <http://atlas.thc.state.tx.com.us>. Mr. Grant determined that no historic sites, historic landmarks, architectural resources, or cemeteries existed within a one-mile radius of the subject property and concluded the proposed action would have no direct or indirect effect on historic properties. On 2 September 2010, Mr. Grant was advised by Mr. Ed Baker, Texas Center for Environmental Quality (TCEQ) Coordinator for the Texas Historical Commission (THC), via telephone, that submission of a "Request for SHPO Consultation Form" was not required.

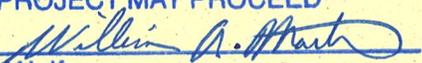
It has since come to HDR's attention that the application does require a review letter from the THC documenting compliance with the Natural Resources Code, Chapter 191, Texas Antiquities Code. We request the assistance of your office in providing the required review letter including any recommendations you may have. Please find enclosed a general topographic map showing the site location and boundaries to assist your review. As Nexus is under a time limit to respond to TCEQ comments, HDR would greatly appreciate a response within 30 days. If further information is needed or you wish to discuss project details, please feel free to contact Joel Miller at 512-498-4716 or Marcus Grant at 303-754-4259.

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



Joel Miller, P.E.
Project Manager

Enclosure

ANTIQUITIES CODE OF TEXAS REVIEW	
NO SURVEY REQUIRED	
PROJECT MAY PROCEED	
by	
for	Mark Wolfe
	Executive Director, THC
Date	4/19/12
Track#	

$$\frac{600,000 \text{ cubic feet}}{1 \text{ air change volume}} * \frac{8 \text{ air changes}}{1 \text{ hour}} * \frac{1 \text{ hour}}{60 \text{ minutes}} = 80,000 \text{ cubic feet per minute}$$

This could be accomplished with up to 6 commercially available ventilation fans rated at 13,500 cubic feet per minute. As stated, this is a conservative example and ventilation fans will be utilized if building design warrants their use.

The owner or operator will also employ the following measures for odor control:

- on-site buffer zones (minimum 50-ft – as shown on Part II, Figure 2 and related drawings) will separate the processing facility from the Registration boundary,
- building ventilation measures,
- extremely odorous or dusty material will not be accepted for processing, and
- liquid waste and some types of extremely odorous putrescible waste will not be accepted and solid waste will be stored in odor-retaining containers.

Roll-offs, transfer trailers, and other containers will be kept covered to the extent possible to minimize odors and contact with rain. On-site storage of recyclables and municipal solid waste will be in covered or closed odor-retaining containers constructed of metal and are leak proof, durable, and designed for safe handling and easy cleaning. Reusable containers will be maintained in a clean condition so that they do not constitute a nuisance and to retard the harborage, feeding, and propagation of vectors. Non-reusable containers will not be used. Containers will be covered by metal or plastic attached covers, or polyvinyl tarp covers. These covers will be water, weather and abrasion resistant and will provide coverage of the container contents to limit exposure to precipitation.

In addition, the site is surrounded by other industrial facilities, including other property owned by Nexus. Prevailing winds at the site are from the southeast (see wind rose – Part II Figure 1), which will direct potential odors into the exterior wall on the north side of the load out area, thereby keeping odor to the interior of the site. As noted previously, Nexus owns the properties directly to the north, west and east of the processing area. All odorous material will be processed

Deleted: 1
Deleted: April

4.0 WASTE MANAGEMENT UNIT DESIGN

30 TAC §330.63(d)

All incoming material brought to the facility will be off-loaded and processed rapidly on the tipping floor of the facility which will be covered and elevated. In accordance with 30 TAC §330.245(g), Nexus is not proposing to recover material from solid waste which contains putrescibles and therefore the building will not be totally enclosed. Rather, the building will be closed on three sides and ventilation, odor control, buffer zone and emission reporting will be as required and as discussed in other sections of the application document. Non-recyclable waste will be transferred to transfer trailers and hauled to a properly permitted landfill when the transfer trailer reaches capacity. If it is not possible to remove the non-recyclable waste at the end of the day, the waste will be covered to prevent the creation of nuisance conditions or public health concerns. The non-recyclable waste will be stored onsite for no more than 72 hours.

The tipping floor will be graded toward floor drains, and will not allow any contaminated water to run off of the tipping floor or transfer-trailer loading area. The processing area will be covered and elevated, and therefore will not be inundated by run-on resulting from the 25-year rainfall event except by blowing rain. Roll-offs, transfer trailers, and other containers will be covered when they contain waste or recyclable material. Contaminated water calculations for peak flow conditions include conservative assumptions for rainfall, wet waste, and wash-down water. The contaminated water system sump capacity will be a minimum of 170 gallons (total system) to handle the maximum contaminated water generated during the 25 year event due to rain water blowing into the side of processing building and thereby possibly becoming contaminated. All contaminated water will be collected and pipes will carry the contaminated water from the points of collection to the contaminated water storage tank or directly to the sewer system. The tank will be dual contained, and will have a minimum capacity of 5,000 gallons. The design of any tank will be such that contaminated water can be pumped through a force main to the sanitary sewer system. Nexus operators will be able to visually determine the level of the tank during daily operations. The tank will be emptied prior to reaching 70% capacity. Since the tank will be fully enclosed, it will not be required to accommodate a 25-year,

Deleted: 1

Deleted: April

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 of 5,375 cubic yards may be stored. Once this storage volume has been received, no additional material will be accepted until an equal volume is removed. If smaller trailers are utilized for storage, the maximum storage volume may be reduced.

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.

6.1 Authorized Wastes

The transfer station will receive the following materials for storage and processing:

- Residential or household municipal solid waste, including putrescible waste which does not include extremely odorous materials, and recyclable material
- Commercial municipal solid waste and recyclable material

The Nexus facility will receive both recyclable and non-recyclable materials, but will not recover any materials from the putrescible waste stream for the purposes of reuse or recycling. The materials that typically can be sent for reuse or recycling include brush, yard and wood waste, Construction and Demolition (C&D) debris, and inert materials (including aggregates), white goods and other metals. Non-recyclable materials could include MSW, tramp materials or any of the materials described above should a market not be available, the material deemed unacceptable and require disposal or reuse/recycling is not cost effective.

Deleted: 1

Deleted: April

23.0 VENTILATION AND AIR POLLUTION CONTROL

30 TAC §330.245

Air emissions from the facility will not cause or contribute to a condition of air pollution as defined in the Texas Clean Air Act. The facility will obtain authorization, under Subchapter U of 30 TAC 330 (relating to Standard Air Permits for Municipal Solid Waste Landfill Facilities and Transfer Stations).

No burning of wastes is proposed for this processing facility. This facility will be operated in a manner that includes routine waste removal and facility cleaning to avoid the generation of objectionable odors becoming a nuisance.

The facility will be designed and operated to provide adequate ventilation for odor control and employee safety. The operator will prevent nuisance odors from leaving the boundary of the facility. If nuisance odors are found to be passing the facility boundary, the facility operator will suspend operations until the nuisance is abated or immediately take action to abate the nuisance.

The owner or operator will employ the following measures for odor control:

- on-site buffer zones (minimum 50-ft – as shown on Part II, Figure 2 and related drawings) will separate the processing facility from the Registration boundary,
- building ventilation measures,
- extremely odorous or dusty material will not be accepted for processing, and
- liquid waste and some types of extremely odorous putrescible waste will not be accepted and solid waste will be stored in odor-retaining containers.

Ventilation of the proposed processing building will be accomplished by the fact that the building will not be a fully enclosed structure. The building will be open on the south side for truck access from the access ramp. In addition, the other three sides will have various doors, windows and ridge vents that will remain open during operations. The building will be a commercially produced metal building of the type sometimes referred to as "pre-engineered". If necessary, additional ventilation

Deleted: 1

Deleted: April

can be provided by ventilation fans designed and installed into the building walls. Building design will ensure a minimum of eight air changes per hour. As a conservative example, at maximum building size, with no other ventilation (not the case, as the structure will not be fully enclosed), the facility would require the following ventilation flow rate:

$$\frac{600,000 \text{ cubic feet}}{1 \text{ air change volume}} * \frac{8 \text{ air changes}}{1 \text{ hour}} * \frac{1 \text{ hour}}{60 \text{ minutes}} = 80,000 \text{ cubic feet per minute}$$

This could be accomplished with up to 6 commercially available ventilation fans rated at 13,500 cubic feet per minute. As stated, this is a conservative example and ventilation fans will be utilized if building design warrants their use.

Roll-offs, transfer trailers, and other containers will be kept covered to the extent possible to minimize odors. In addition, the site is surrounded by other industrial facilities. Prevailing winds at the site are from the southeast (see wind rose – Part II, Figure 1), which will direct odor into the barrier on the north side of the tipping floor, thereby keeping odor to the interior of the site. As noted previously, Nexus owns property directly to the north, west and east of the building. All odorous material will be processed quickly on the tipping floor to minimize the amount of time that the odorous material is exposed. The material will be stored onsite for a maximum period of 72 hours in storage bins, roll-offs, or trailers, which will be covered in order to minimize odor. Extremely odorous material including some types of extremely odorous putrescible waste will not be accepted for processing.

Deleted: and

Any ponded water at the facility will be controlled to avoid becoming a nuisance. In the event that objectionable odors do occur as a result of ponding, appropriate measures will be taken to alleviate the condition. These measures may include elimination of the ponded water and regrading of the area to prevent future ponding.

Other measures that will be taken to control air pollution at the facility include:

- No open burning will occur at the site except as approved by TCEQ.
- Accidental fires are controlled as outlined in the Fire Protection Plan.
- Weekly wash down of all surfaces that have come into contact with waste.

Deleted: 1

Deleted: April

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

1.2 Characteristics of Material

In general, material delivered to the Nexus facility will fall into two categories:

- 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). This is based on 1,000 tons per day (tpd) at an average incoming density of 400 pounds per cubic yard. A minimum of 10% (500 CY/day) will be recovered for beneficial use. 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

**Nexus Material Recovery and Transfer Station
Part II
Table of Contents**

1.0	EXISTING CONDITIONS SUMMARY	1
2.0	WASTE ACCEPTANCE PLAN	3
2.1	General	3
2.2	Sources and Characteristics of Waste	4
2.3	Quantity of Waste	5
3.0	QUALIFICATION FOR REGISTRATION.....	7
4.0	GENERAL LOCATION MAPS.....	8
5.0	FACILITY LAYOUT MAPS	10
6.0	GENERAL TOPOGRAPHIC MAPS	11
7.0	AERIAL PHOTOGRAPH	12
8.0	LAND-USE MAP	13
9.0	IMPACT ON SURROUNDING AREA.....	14
9.1	Potential Impact to the Human or Natural Environment	14
9.2	Compatibility with the Surrounding Area.....	14
10.0	TRANSPORTATION.....	17
11.0	GENERAL GEOLOGY AND SOILS STATEMENT	19
12.0	GROUNDWATER AND SURFACE WATER	20
13.0	ABANDONED OIL AND WATER WELLS	22
14.0	FLOODPLAINS AND WETLANDS STATEMENT.....	23
15.0	ENDANGERED OR THREATENED SPECIES.....	24
16.0	TEXAS HISTORICAL COMMISSION REVIEW	25
17.0	COUNCIL OF GOVERNMENTS AND LOCAL GOVERNMENT REVIEW	26

List of Figures

- Figure 1 – USGS Quadrangle Map
- Figure 2 – Facility Layout
- Figure 3 – General Topographic Map
- Figure 4 – Aerial Photograph
- Figure 5 – Land Use Map
- Figure 6 – FEMA 100-Year Floodplain Map
- Figure 7 – Water Well Locations

Nexus Disposal has long seen the need for effective recycling of C&D material in the Houston metropolitan area, having provided service to this industry for over 15 years at the current location. The site is in a mostly industrial location, well suited for a material recovery and transfer station facility. Markets for recyclable materials and adequate landfill space for waste materials exist in the near vicinity (see Part I, Figure 1). The site has access, adequate separation and buffer distances from neighbors and is compatible with existing land use. This site is proposed for the Nexus Material Recovery and Transfer Station facility. As such, Nexus Continuum, LLC (Nexus) has prepared this registration application and will become the owner and operator of the processing activities at the Nexus facility.

Nexus is preparing this registration for a Material Recovery and Transfer Station (MRTS) Type V facility, and is eligible for a registration pursuant to 30 TAC 330.9(f) since Nexus will recover a minimum of 10% by weight or weight equivalent of the total incoming waste stream for reuse or recycling and the remaining will be transported to a landfill within 50 miles of the facility.

closed or when collection vehicles are not full at the end of a route, consolidation of the partial load with other partial loads reduces the number of trips to the landfill. Should significant amounts of commercial waste be determined to be recyclable (paper, cardboard, etc.), it will be directed to temporary storage locations or the sorting area for recyclables. Municipal solid waste from residential sources will not be recovered or reused and will be consolidated and transferred directly to an area landfill for disposal.

One of the purposes of the material recovery and transfer station registration is to allow Nexus to consolidate and transfer to a landfill the non-recyclable portion of the material it receives. This waste will be placed in containers for transportation to a landfill. The facility will also allow Nexus to continue to remove recyclable materials prior to disposal.

Regulated hazardous waste and some types of extremely odorous putrescible waste will not be accepted at the facility, therefore there is not a waste characteristic or constituent that would be a limiting factor in the design of the facility based on the type of materials to be received.

2.2 Sources and Characteristics of Waste

Waste and recyclables delivered to the Nexus facility will be primarily from Harris County and the city of Houston, although minor amounts could be delivered from surrounding areas. C&D materials are generated from a wide range of events and activities including storm-related disaster relief and clean up, building fires, new construction of homes and buildings, and demolition, remodeling, reconstruction and roof replacement of existing infrastructure.

Customers generating C&D materials are typically serviced on a scheduled or on a demand basis. Once a container is loaded, it is picked up by the service company and delivered to the Nexus facility. Nexus will remove recyclable material, as that term is defined in 30 TAC 330.3(122), from construction and demolition loads and other loads with a high percentage of materials that can be reused or recycled.

3.0 QUALIFICATION FOR REGISTRATION

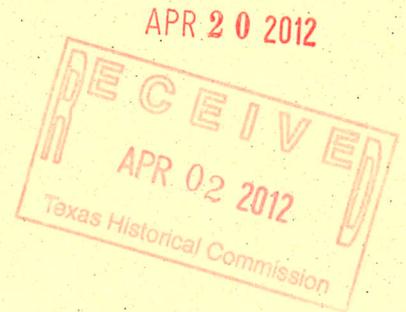
30TAC §330.61(b)(2)

The Nexus facility will include a registered Type V municipal solid waste material recovery and transfer station that will receive, process, and transfer up to 5,000 cubic yards per day. The facility is qualified to be registered in accordance with provisions in 30 TAC 330.9(f)(1) by recovering a minimum of 10% by weight or weight equivalent for reuse or recycling. The facility is qualified to be registered in accordance with provisions in 30 TAC 330.9(f)(2) by disposing of municipal solid waste in a permitted landfill no more than 50 miles from the facility.

Attachment D:
Texas Historical Commission Review

March 29, 2012

Mr. Mark Denton
State Historic Preservation Officer
Department of Antiquities Protection
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711-2276



Re: Nexus Continuum, LLC
Proposed Type V Material Recovery and Transfer Station
Houston, Harris County, Texas

Dear Mr. Denton:

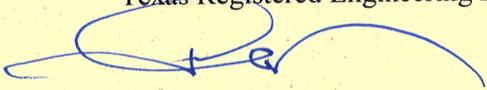
Nexus Continuum, LLC (Nexus) has applied to the Texas Commission on Environmental Quality (TCEQ) for registration of a Type V - Material Recovery and Transfer Station to be located at 6124 Cunningham Road, Houston, Texas. The proposed facility will receive municipal solid waste and recyclable material. The purpose of the registration application is to allow Nexus to receive and consolidate waste and recyclable materials and transfer to a landfill the non-recyclable portion of the incoming material that remains following processing. The waste will be placed in containers for transportation to a permitted landfill. The proposed facility will allow Nexus to remove recyclable materials from the waste stream so that these materials may be beneficially reused as commodities.

TCEQ regulations [30 TAC 330.61 (o)] require documentation of coordination with your agency documenting compliance with the Natural Resources Code, Chapter 191, Texas Antiquities Code. This letter is to inform you of the proposed facility and request your response indicating that the proposed facility will not conflict with any applicable restrictions.

The proposed facility will occupy approximately 5 acres of a 7.6 acre site. This site has been in use for approximately 15 years and has sustained significant disturbances from construction, maintenance, and operational activities. HDR archaeologist Marcus Grant, MA, RPA reviewed the project and on 27 August 2010 examined online maps at <http://atlas.thc.state.tx.com.us>. Mr. Grant determined that no historic sites, historic landmarks, architectural resources, or cemeteries existed within a one-mile radius of the subject property and concluded the proposed action would have no direct or indirect effect on historic properties. On 2 September 2010, Mr. Grant was advised by Mr. Ed Baker, Texas Center for Environmental Quality (TCEQ) Coordinator for the Texas Historical Commission (THC), via telephone, that submission of a "Request for SHPO Consultation Form" was not required.

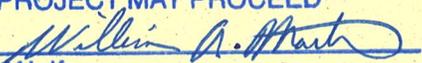
It has since come to HDR's attention that the application does require a review letter from the THC documenting compliance with the Natural Resources Code, Chapter 191, Texas Antiquities Code. We request the assistance of your office in providing the required review letter including any recommendations you may have. Please find enclosed a general topographic map showing the site location and boundaries to assist your review. As Nexus is under a time limit to respond to TCEQ comments, HDR would greatly appreciate a response within 30 days. If further information is needed or you wish to discuss project details, please feel free to contact Joel Miller at 512-498-4716 or Marcus Grant at 303-754-4259.

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



Joel Miller, P.E.
Project Manager

Enclosure

ANTIQUITIES CODE OF TEXAS REVIEW	
NO SURVEY REQUIRED	
PROJECT MAY PROCEED	
by	
for	Mark Wolfe
	Executive Director, THC
Date	4/19/12
Track#	

$$\frac{600,000 \text{ cubic feet}}{1 \text{ air change volume}} * \frac{8 \text{ air changes}}{1 \text{ hour}} * \frac{1 \text{ hour}}{60 \text{ minutes}} = 80,000 \text{ cubic feet per minute}$$

This could be accomplished with up to 6 commercially available ventilation fans rated at 13,500 cubic feet per minute. As stated, this is a conservative example and ventilation fans will be utilized if building design warrants their use.

The owner or operator will also employ the following measures for odor control:

- on-site buffer zones (minimum 50-ft – as shown on Part II, Figure 2 and related drawings) will separate the processing facility from the Registration boundary,
- building ventilation measures,
- extremely odorous or dusty material will not be accepted for processing, and
- liquid waste and some types of extremely odorous putrescible waste will not be accepted and solid waste will be stored in odor-retaining containers.

Roll-offs, transfer trailers, and other containers will be kept covered to the extent possible to minimize odors and contact with rain. On-site storage of recyclables and municipal solid waste will be in covered or closed odor-retaining containers constructed of metal and are leak proof, durable, and designed for safe handling and easy cleaning. Reusable containers will be maintained in a clean condition so that they do not constitute a nuisance and to retard the harborage, feeding, and propagation of vectors. Non-reusable containers will not be used. Containers will be covered by metal or plastic attached covers, or polyvinyl tarp covers. These covers will be water, weather and abrasion resistant and will provide coverage of the container contents to limit exposure to precipitation.

In addition, the site is surrounded by other industrial facilities, including other property owned by Nexus. Prevailing winds at the site are from the southeast (see wind rose – Part II Figure 1), which will direct potential odors into the exterior wall on the north side of the load out area, thereby keeping odor to the interior of the site. As noted previously, Nexus owns the properties directly to the north, west and east of the processing area. All odorous material will be processed

4.0 WASTE MANAGEMENT UNIT DESIGN

30 TAC §330.63(d)

All incoming material brought to the facility will be off-loaded and processed rapidly on the tipping floor of the facility which will be covered and elevated. In accordance with 30 TAC §330.245(g), Nexus is not proposing to recover material from solid waste which contains putrescibles and therefore the building will not be totally enclosed. Rather, the building will be closed on three sides and ventilation, odor control, buffer zone and emission reporting will be as required and as discussed in other sections of the application document. Non-recyclable waste will be transferred to transfer trailers and hauled to a properly permitted landfill when the transfer trailer reaches capacity. If it is not possible to remove the non-recyclable waste at the end of the day, the waste will be covered to prevent the creation of nuisance conditions or public health concerns. The non-recyclable waste will be stored onsite for no more than 72 hours.

The tipping floor will be graded toward floor drains, and will not allow any contaminated water to run off of the tipping floor or transfer-trailer loading area. The processing area will be covered and elevated, and therefore will not be inundated by run-on resulting from the 25-year rainfall event except by blowing rain. Roll-offs, transfer trailers, and other containers will be covered when they contain waste or recyclable material. Contaminated water calculations for peak flow conditions include conservative assumptions for rainfall, wet waste, and wash-down water. The contaminated water system sump capacity will be a minimum of 170 gallons (total system) to handle the maximum contaminated water generated during the 25 year event due to rain water blowing into the side of processing building and thereby possibly becoming contaminated. All contaminated water will be collected and pipes will carry the contaminated water from the points of collection to the contaminated water storage tank or directly to the sewer system. The tank will be dual contained, and will have a minimum capacity of 5,000 gallons. The design of any tank will be such that contaminated water can be pumped through a force main to the sanitary sewer system. Nexus operators will be able to visually determine the level of the tank during daily operations. The tank will be emptied prior to reaching 70% capacity. Since the tank will be fully enclosed, it will not be required to accommodate a 25-year,

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 of 5,375 cubic yards may be stored. Once this storage volume has been received, no additional material will be accepted until an equal volume is removed. If smaller trailers are utilized for storage, the maximum storage volume may be reduced.

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.

6.1 Authorized Wastes

The transfer station will receive the following materials for storage and processing:

- Residential or household municipal solid waste, including putrescible waste which does not include extremely odorous materials, and recyclable material
- Commercial municipal solid waste and recyclable material

The Nexus facility will receive both recyclable and non-recyclable materials, but will not recover any materials from the putrescible waste stream for the purposes of reuse or recycling. The materials that typically can be sent for reuse or recycling include brush, yard and wood waste, Construction and Demolition (C&D) debris, and inert materials (including aggregates), white goods and other metals. Non-recyclable materials could include MSW, tramp materials or any of the materials described above should a market not be available, the material deemed unacceptable and require disposal or reuse/recycling is not cost effective.

23.0 VENTILATION AND AIR POLLUTION CONTROL

30 TAC §330.245

Air emissions from the facility will not cause or contribute to a condition of air pollution as defined in the Texas Clean Air Act. The facility will obtain authorization, under Subchapter U of 30 TAC 330 (relating to Standard Air Permits for Municipal Solid Waste Landfill Facilities and Transfer Stations).

No burning of wastes is proposed for this processing facility. This facility will be operated in a manner that includes routine waste removal and facility cleaning to avoid the generation of objectionable odors becoming a nuisance.

The facility will be designed and operated to provide adequate ventilation for odor control and employee safety. The operator will prevent nuisance odors from leaving the boundary of the facility. If nuisance odors are found to be passing the facility boundary, the facility operator will suspend operations until the nuisance is abated or immediately take action to abate the nuisance.

The owner or operator will employ the following measures for odor control:

- on-site buffer zones (minimum 50-ft – as shown on Part II, Figure 2 and related drawings) will separate the processing facility from the Registration boundary,
- building ventilation measures,
- extremely odorous or dusty material will not be accepted for processing, and
- liquid waste and some types of extremely odorous putrescible waste will not be accepted and solid waste will be stored in odor-retaining containers.

Ventilation of the proposed processing building will be accomplished by the fact that the building will not be a fully enclosed structure. The building will be open on the south side for truck access from the access ramp. In addition, the other three sides will have various doors, windows and ridge vents that will remain open during operations. The building will be a commercially produced metal building of the type sometimes referred to as "pre-engineered". If necessary, additional ventilation

can be provided by ventilation fans designed and installed into the building walls. Building design will ensure a minimum of eight air changes per hour. As a conservative example, at maximum building size, with no other ventilation (not the case, as the structure will not be fully enclosed), the facility would require the following ventilation flow rate:

$$\frac{600,000 \text{ cubic feet}}{1 \text{ air change volume}} * \frac{8 \text{ air changes}}{1 \text{ hour}} * \frac{1 \text{ hour}}{60 \text{ minutes}} = 80,000 \text{ cubic feet per minute}$$

This could be accomplished with up to 6 commercially available ventilation fans rated at 13,500 cubic feet per minute. As stated, this is a conservative example and ventilation fans will be utilized if building design warrants their use.

Roll-offs, transfer trailers, and other containers will be kept covered to the extent possible to minimize odors. In addition, the site is surrounded by other industrial facilities. Prevailing winds at the site are from the southeast (see wind rose – Part II, Figure 1), which will direct odor into the barrier on the north side of the tipping floor, thereby keeping odor to the interior of the site. As noted previously, Nexus owns property directly to the north, west and east of the building. All odorous material will be processed quickly on the tipping floor to minimize the amount of time that the odorous material is exposed. The material will be stored onsite for a maximum period of 72 hours in storage bins, roll-offs, or trailers, which will be covered in order to minimize odor. Extremely odorous material including some types of extremely odorous putrescible waste will not be accepted for processing.

Any ponded water at the facility will be controlled to avoid becoming a nuisance. In the event that objectionable odors do occur as a result of ponding, appropriate measures will be taken to alleviate the condition. These measures may include elimination of the ponded water and regrading of the area to prevent future ponding.

Other measures that will be taken to control air pollution at the facility include:

- No open burning will occur at the site except as approved by TCEQ.
- Accidental fires are controlled as outlined in the Fire Protection Plan.
- Weekly wash down of all surfaces that have come into contact with waste.