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VIA ELECTRONIC MAIL, ORIGINAL US POST

April 30, 2012

Harold Singer
Executive Officer
California Regional Water Quality Control Board
14440 Civic Drive, Suite 200
Victorville, CA 9239

CRWQCB REG6 5/30

REC'D	RECEIVED MAY 7 - 2012
BB.	
FILE	

63360903006

RE: Corrective Action Cost Estimate, Known or Reasonably Foreseeable Release Plan
Nursery Products Hawes Composting Facility

Dear Mr. Singer;

On October 19, 2011 Nursery Products received a letter from the California Regional Water Quality Control Board, Lahontan Region (Water Board) requesting clarification in regard to the Corrective Action Cost Estimate, Known or Reasonably Foreseeable Release Plan (KRFR Plan) for the Nursery Products Hawes Composting Facility (HCF). As in the past, the latest Water Board letter included comments on topics not addressed in the previous set of written comment letters and on items not altered in the revised KRFR Plan submitted August 29, 2011. Enclosed please find the fifth revised KRFR Plan and, below, specific responses to the comments in the October 19th Water Board letter.

To provide some perspective, the following lists the dates of each submittal of the KRFR Plan by Nursery Products with the corresponding date of the Water Board's response. Two points are particularly notable: the Water Board has raised new issues with each successive comment letter and, secondly, Nursery Products first submitted the KRFR Plan two months after receipt of the Water Discharge permit on May 5, 2010, two years ago. At this point the delays in approval have gone on for almost two years in spite of the fact that Nursery Products has complied with all of the Water Board comments. Nursery Products submitted KRFR Plan's on the following dates: May 5, 2010, August 13, 2010, February 1, 2011 and August 29, 2011. The enclosed constitutes the fifth amended KRFR. The Water Board responded to respective KRFR Plan submittals as follows: July 2, 2010, December 8, 2010, April 7, 2011, and October 19, 2011.

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The enclosed KFRF Plan was updated to address the two comments from the Water Board in the October 19, 2011 letter. The Water Board comment or a synopsis of the comment from the referenced letter is presented below in italics, followed by a response to the comment in plain text.

Comment: Compositing of samples is inappropriate as compositing samples can either dilute a sample with elevated concentrations or give a false elevated concentration of a sample. The KFRF Plan does not propose sample spacing (lateral or vertical) nor rationale for the subsequent iterations for delineating the reasonable release scenario.

Response: Compositing of samples is no longer being proposed. Lateral and vertical spacing for the subsequent iterations for delineating the reasonable release scenario is provided. The rationale was based on the site-specific geologic and hydrogeologic factors and incorporates the annual monitoring requirements.

Comment: The KFRF Plan should account for the costs associated with the extra soil that would be needed to be imported to account for the impacted soil that would need to be excavated.

Response: The updated KFRF Plan accounts for the costs associated with the extra soil.

Thank you for your prompt attention to the enclosed. As you know, Nursery Products Hawes Composting Facility is under construction.

Sincerely yours,



L Brothers Law
Lynda L. Brothers

Enclosure
CC Chris Seney

CRWQCB REG6 5/

REC'D	
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FILE	



Prepared for
Nursery Products, LLC
12277 Apple Valley Road, Suite 131
Apple Valley, CA 92308

**CORRECTIVE ACTION COST ESTIMATE
KNOWN OR REASONABLY FORESEEABLE
RELEASES
HAWES COMPOSTING FACILITY**

Prepared by
Geosyntec 
consultants

engineers | scientists | innovators

10875 Rancho Bernardo Rd, Suite 200
San Diego, California 92127

Project Number SC0554

January 2012

11 January 2012

Mr. Chris Seney
Nursery Products, LLC
12277 Apple Valley Road, Suite 131
Apple Valley, California 92308

**Subject: Corrective Action Cost Estimate
Known or Reasonable Foreseeable Releases
Nursery Products Hawes Composting Facility
San Bernardino County, California**

Dear Mr. Seney:

Geosyntec Consultants Inc., (Geosyntec) has reviewed and revised the attached Corrective Action Cost Estimate (CACE) for Known or Reasonably Foreseeable Releases. This document was revised in response to comments made by the Lahontan Regional Water Quality Control Board as presented in their letter dated 19 October 2011 on the CACE prepared Geosyntec dated 26 August 2011.

I certify under penalty of perjury that I have personally examined and am familiar with the information submitted in this CACE for the Nursery Products Hawes Composting Facility and all attachments and, based on my inquiry of those individuals immediately responsible for obtaining the information; I believe the information is true, accurate, and complete. My seal as a registered professional engineer licensed in the State of California is affixed below.

Please contact me at (858) 705-5273 if you have any questions.

Sincerely,

Jennifer L. Nevius

Jennifer L. Nevius, R.C.E. 64932
Project Engineer



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**Table 1 Corrective Action Cost Estimate for Known or Reasonably
Foreseeable Releases**

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Appendix A Reference Information

1. INTRODUCTION

This Corrective Action Cost Estimate (CACE) has been prepared for the Nursery Products Hawes Composting Facility (HCF) in San Bernardino County, California (Site). This CACE has been prepared in accordance with California Code of Regulations Title 27 (27 CCR) §22101 to provide a budgetary cost that responds to Known or Reasonably Foreseeable Releases (KRFR) from the HCF. This estimate was prepared to address the requirements of the Lahontan Regional Water Quality Control Board (RWQCB) Order No. R6V-2010-0010 (Board Order) (RWQCB, 2010).

1.1 Background

This updated CACE revises the 26 August 2011 CACE prepared by Geosyntec Consultants, Inc. (Geosyntec). Revisions were made to the CACE to address review comments made by the RWQCB transmitted in their letters dated 7 April 2011 (RWQCB, 2011a) and 19 October 2011 (RWQCB, 2011b). Additionally, this CACE has been simplified and refers the reader to the facility Report of Waste Discharge (ROWD) (URS, 2009), and the Board Order for a detailed description of the Site features.

This CACE was prepared by Geosyntec for the use of Nursery Products. Specifically, this plan was prepared by Jennifer Nevius, P.E., and reviewed by Mr. Veryl Wittig, P.G., C.Hg., of Geosyntec in accordance with the peer review policy of the firm.

1.2 Purpose

The purpose of this CACE is to identify KRFR from the HCF and prepare cost estimates pursuant to 27 CCR §22101(c)-(f) for the KRFR to establish financial assurance for potential corrective action. Implementation of activities in response to an actual release would be conducted following confirmation of a release and under the direction of the RWQCB. The cost estimate associated with financial assurance for closure of the facility has been provided separately in the approved Preliminary Closure and Post-Closure Maintenance Plan for the facility (Nursery Products, 2011).

2. REASONABLY FORESEEABLE RELEASE SCENARIOS

Based on the facility design, regional environmental conditions, site-specific geologic and hydrogeologic characteristics, regulatory guidance, and planned operational activities, the following reasonably foreseeable release scenarios have been developed for the surface impoundments and the waste pile to develop estimated costs for third party corrective action at the site.

2.1 Surface Impoundment Release Scenario

Under this reasonably foreseeable release scenario, soil sampling at the time of closure indicates one leak in each surface impoundment which has affected soil in the vadose zone. This closure scenario is reasonably foreseeable because the impoundment liners must be inspected regularly and repaired or replaced as necessary. In addition, the liners are underlain by leak detection monitoring sumps and the vadose zone monitoring system (lysimeters) below the lowest point of the surface impoundments.

Unsaturated flow modeling using the computer program HYDRUS was performed for the surface impoundments, incorporating the site's natural climatic and geologic conditions, the significant depth to groundwater, and the proposed facilities as presented in the ROWD (URS, 2009).

The unsaturated flow modeling referenced for the surface impoundments included the following extremely conservative assumptions:

- A subsurface profile consisting of silty sand – (which neglects the presence of low permeability clayey lenses).
- Continuously full and completely full impoundments – (which neglects evaporation, potential removal of water for use as dust control at the site, and required removal of any water within 30 days as set forth in numerous permits).
- Impoundments leaking continuously (which neglects monitoring and maintenance of the engineered liner).

The modeling in the ROWD indicated that infiltration to groundwater from a potential leak in the lined surface impoundment would take in excess of 1,300 years. Based on the modeling results, it is reasonable to assume that if the surface impoundment were to leak, the leak would be identified long before the release reached groundwater.

Therefore, impacts to groundwater are not considered reasonably foreseeable and this scenario only considers corrective action for the unsaturated zone.

2.1.1 Extent of Impacts

To evaluate the extent of impacts of a release scenario identified at closure, it is important to consider the operational surface impoundment monitoring requirements. Routine monitoring during operations will be performed to identify and evaluate releases that may be discovered. The operational monitoring requirements will result in an increased frequency of liner repair and reduced potential for ongoing leakage.

2.1.1.1 Monitoring Requirements

The following monitoring activities are required by the Board Order in association with the surface impoundments:

- The surface impoundment dikes and liners must be visually monitored monthly to determine if there are indications of loss of integrity.
- The leak detection monitoring sumps, located below the lowest point of each surface impoundment must be monitored weekly for the presence of liquids.
- The unsaturated zone beneath the surface impoundments is proposed to be monitored by lysimeters located below the lowest point of each surface impoundment. The unsaturated zone is required to be monitored quarterly for the presence of liquids.

The potential leak scenario would require simultaneous or overlapping damage to both the Geosynthetic Clay Liner (GCL) and the High Density Polyethylene (HDPE) geomembrane. Because the GCL is “self repairing” for small holes (the bentonite clay within the GCL hydrates to seal small holes), the damage would need to be large enough to result in leakage through the geomembrane and GCL. Holes up to 75 millimeters in diameter in GCL will repair themselves (EPA, 2001); therefore, the potential hole diameter is assumed to be 76 millimeters (3 inches).

For the purposes of the scenario, one leak per surface impoundment has been assumed considering the following:

- Holes greater than three inches would be observed during the required routine visual inspections and repaired during operations.

- Leaks below the lowest part of each surface impoundment would be identified in either the leak detection monitoring sumps or the lysimeters during the required routine inspections and repaired during operations.

2.1.1.2 Scenario Impacts

Considering the results of the unsaturated flow modeling presented in Appendix F of the ROWD, and the comments provided in the 7 April 2011 RWQCB letter, the assumed infiltration depth of a leak from each of the surface impoundments is 7.5 feet (ft) with a commensurate lateral spread extending downward with an inclination of 1:1 from the point of origin.

Under the corrective action scenario, the affected soil would be delineated, characterized, and removed and replaced. To develop the costs for the corrective action, it was assumed that during closure, following removal of the liner system, soil samples would be collected in the vicinity of the potential leak at 5 ft and 7.5 ft below the liner of each surface impoundment. It is further assumed that subsequent sampling could be performed if needed, during the same mobilization. During sampling, the excavated materials would be logged in accordance with American Society for Testing and Materials (ASTM) Test Standard D2488.

In this scenario, analytical testing would be performed on the soil samples for the analytes presented in Table 3 of the Board Order for the annual soil monitoring. The results of the analytical testing on the soil samples would be compared to background soil analyte concentrations to determine if there was a measurably significant release and the depth of impacts. For the purposes of this CACE, it is assumed impacts are detected in samples collected from 5 ft below the liner, and a non-impacted sample is collected at 7.5 feet below the liner. Therefore, the excavation would extend to a depth of 7.5 ft below the surface impoundment in the area of the leak. For the cost estimate, 8 samples will be tested for the annual monitoring parameters and 2 samples will be tested for the five year constituents of concern. The scenario rationale for analytes and testing frequency is based on the monitoring program outlined in Table 3 of the Board Order. More samples are tested for the annual monitoring parameters, as those are more likely constituents to be detected, and some of those samples are also tested for the full suite of constituents of concern. In our experience, the analysis conducted to delineate the area of soil affected by a release would be sufficient for disposal characterization at a Class II landfill.

2.1.2 Corrective Action

The corrective action scenario would remove and replace the affected soil and the impacted soil would be disposed offsite at an appropriate waste management unit. A total excavation volume of 250 cubic yards (cy) of soil is assumed based on excavating a 15 ft square base at a depth of 7.5 ft with 1:1 excavation side slopes beneath each surface impoundment. For the purposes of this cost estimate, it is assumed that the impacted soils would be transported to and disposed of at the Class II South Yuma County Landfill in Yuma, Arizona. Non-impacted soil would be replaced and compacted in the excavation. The soil replacement would be documented in accordance with an approved Construction Quality Assurance (CQA) Plan for closure, and similar to the CQA procedures for facility construction outlined in the ROWD (URS, 2009). Additional cost for earthwork construction observation and reporting has been included in the cost estimate.

2.2 Waste Pile Release Scenario

Under this reasonably foreseeable release scenario, soil sampling at the time of closure would indicate releases from the waste pile at multiple locations which has affected soil in the vadose zone. This scenario is reasonably foreseeable because the upper soils in the waste pile area must be monitored regularly and replaced as necessary.

Unsaturated flow modeling using the computer program HYDRUS was performed for the waste pile, incorporating the site's natural climatic and geologic conditions, the significant depth to groundwater, and the proposed facilities as presented in the ROWD (URS, 2009).

The unsaturated flow modeling referenced for the waste pile included the following extremely conservative assumptions:

- A subsurface profile consisting of silty sand – (which neglects the presence of low permeability clayey lenses).
- A range of permeability and unsaturated hydraulic parameters for the silty sand (which again neglects the known areas of lesser permeability characteristics).

The modeling indicated that infiltration to groundwater which is located at greater than 300 feet below ground surface from the waste pile would take in excess of 450 years for the most conservative model evaluated. Based on the modeling results, it is reasonable to assume that a release would be identified long before the release reached

groundwater. Therefore, impacts to groundwater are not considered reasonably foreseeable and this scenario only considers corrective action for the unsaturated zone.

2.2.1 Extent of Impacts

To evaluate the extent of impacts of a release scenario identified at closure, it is important to consider the waste pile monitoring requirements during operations. Routine monitoring during operations will be performed to reduce the potential for releases by addressing issues on a much more frequent basis. The monitoring requirements during the operation of the facility will likely increase the frequency of liner repair and would reduce the potential for ongoing leakage.

2.2.1.1 Monitoring Requirements

Prior to operations, a statistically valid analytical data set will be developed for the native site soil to determine background concentrations and to provide a basis for comparison for determining whether a measurably significant release from the facility has occurred for the monitoring parameters and constituents of concern listed in Table 3 of the Board Order.

As required by the Board Order, soil samples will be collected annually at a minimum of 10 locations within the waste pile footprint to a depth of 18 inches at 6 inch intervals. These soil samples will be analyzed for eleven monitoring parameters annually and thirty-eight additional constituents of concern every five years. This analytical data will evaluate the potential impact of the waste pile on the native soil.

The quantity of analytical data will increase with the operational life of the facility and will help to establish a statistically valid data set for comparison of the closure testing results. For example, over an assumed 30-year operational period, at least 300 samples would be tested, equating to more than 4 samples per acre over the approximately 70-acre area of active composting (80-acre site, less the area of the surface impoundments, berms, and administrative areas).

In addition, the on going waste pile monitoring during operations would identify areas which require repair and remediation during the facility life. Per the Board Order, the annual waste pile monitoring requires repair when the soil sample from 12 inches below finished grade indicates a measurably significant release. Therefore, this CACE assumes that only a portion of the waste pile would be affected at the time of closure.

2.2.1.2 Scenario Impacts

The delineation of impacts proposed below for the assumed scenario was based on the site-specific geologic and hydrogeologic factors and annual routine monitoring requirements for the waste pile. The extent of impacts for this scenario concept will be determined with two rounds of sampling and testing throughout the entire waste pile.

During the first round of sampling and testing, the waste pile will be sampled on a grid and additional areas if visual evidence of a release is found. The first round of sampling and testing will consist of 71 total samples, 66 samples from a 200-foot lateral grid spacing and up to 5 samples in areas with visual evidence of a release. Two samples will be collected at each of the 71 lateral sampling locations at depths of 6- and 12 inches vertically. The vertical spacing of sampling increments parallels the operational sampling intervals. Only the 6-inch depth samples will be analyzed for the annual monitoring parameters and constituents of concern from Table 3 of the Board Order; the samples collected from the 12-inch depth will be archived. In addition, 14 of those 71 samples will be randomly selected and analyzed for the constituents of concern with a five year monitoring frequency listed in Table 3 of the Board Order.

A second round of sampling and testing will be conducted at six locations selected based on the first round of sampling results indicating that additional analyses are warranted. At each of the six locations, the 12-inch depth sample collected in the first round of sampling will be analyzed and four additional samples will be collected at a depth of 6 inches vertically over a 50-foot radius for delineation of the lateral extent of impacts. In addition, the scenario assumes that 5 additional sampling points may be necessary in the second round of sampling to further delineate the lateral or horizontal extent. The corresponding total samples for the second round of sampling and testing will be 35 (5 samples x 6 locations + 5 additional samples). The samples collected in the second round will be analyzed for the annual monitoring parameters and constituents of concern from Table 3 of the Board Order.

The scenario rationale for analytes and testing frequency is based on the monitoring requirements set forth in Table 3 of the Board Order. More samples are tested for the annual monitoring parameters, as those are more likely constituents to be detected above background for composting operations, and some of those samples are also tested for the full suite of other constituents of concern.

2.2.2 Corrective Action

The corrective action scenario outlined herein will remove the impacted soil from the waste pile and dispose it offsite at an appropriate waste management unit. The scenario assumes that routine monitoring of the facility and some portion of the waste pile would be affected at the time of closure.

This scenario relies upon an increased sampling frequency combined with the results of routine testing and as needed (on-going) repair during operations. These on-going requirements will reduce the amount of soil requiring disposal if a release is discovered at closure. The scenario assumes that the six locations identified for further study in the first round of sampling and testing are to be excavated 12-inches in depth and 50-feet in each lateral direction (100-foot x 100-foot x 1-foot x 6 locations / 27 feet per cubic yard). A total disposal volume of 2,222 cy of soil is assumed, with a commensurate amount of earthwork (grading and compaction) to refine site grades and a volume of 2,222 cy of soil will be imported to backfill the area where soils were removed for off-site disposal.

Although some affected soil materials removed could have potential beneficial reuses such as for agricultural purposes or for cover at a landfill, for the purposes of this cost estimate, the impacted soil materials are assumed to be transported to and disposed at the Class II South Yuma County Landfill in Yuma, Arizona. The excavated areas will be regraded, compacted, and documented in accordance with an approved CQA Plan for closure, and similar to the CQA procedures for facility construction outlined in the ROWD (URS, 2009). Additional cost for earthwork construction observation and reporting has been included in the cost estimate.

3. FINANCIAL ASSURANCE

Table 1 summarizes the corrective action cost estimates for the reasonably foreseeable release scenario described herein for the surface impoundments and the waste pile upon closure of the facility. The estimated costs are intended to serve as a conservative approximation of typical industry costs to address the presented theoretical reasonably foreseeable release scenario. Appendix A presents reference information used to develop the KRFR cost estimate.

The estimated cost for a third party to perform the corrective action in accordance with 27 CCR §22220 is \$292, 407 in 2012 dollars. Nursery Products is submitting a letter of credit to the RWQCB to cover the corrective action cost estimate. The cost estimate will be reviewed and updated every year or as necessary to reflect changing site and/or market conditions, and the RWQCB will be identified as the beneficiary of the corrective action funding mechanism.

4. REFERENCES

- EPA, 2001. "Geosynthetic Clay Liners Used in Municipal Solid Waste Landfills EPA530-F-97-002."
- Geosyntec, 2011a. "Corrective Action Cost Estimate, Known or Reasonably Foreseeable Releases, Hawes Composting Facility," dated 1 February.
- Geosyntec, 2011b. "Final Design Plan, Construction Quality Assurance Plan & Technical Specifications, Hawes Composting Facility," dated 25 May.
- Nursery Products, 2011. "Nursery Products Hawes Composting Facility, Preliminary Closure & Post-Closure Maintenance Plan, Third Revision," dated January.
- RWQCB, 2011a. "Comments on Revised Corrective Action Cost Estimate, Known or Reasonably Foreseeable Releases (February 2011), Nursery Products Hawes Composting Facility, San Bernardino County." RWQCB letter dated 7 April.
- RWQCB, 2011b. "Comments on Corrective Action Cost Estimate, Known or Reasonably Foreseeable Releases (August 2011), Nursery Products Hawes Composting Facility, San Bernardino County." RWQCB letter dated 19 October.
- RWQCB, 2010. "Board Order No. R6V-2010-0010, WDID No. 6B360903006, Waste Discharge Requirements and Monitoring and Reporting Program for Hawes Composting Facility." Adopted March 2010.
- URS, 2009. "Report of Waste Discharge, Nursery Products Hawes Composting Facility, San Bernardino County, California." April, Revised July 2009.

TABLES

Table 1 - Corrective Action Cost Estimate for Known or Reasonably Foreseeable Releases
Surface Impoundments and Waste Pile
Nursery Products Hawes Composting Facility

ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASURE	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)	NOTES
Surface Impoundments					
Soil sampling to identify potential releases at closure	0.5	DAYS	\$ 4,350	\$ 2,175	Includes time for sampling and field expenses. Unit cost assumes average environmental consulting hourly rate at \$100/hour and that the sampling will be performed with a direct push rig. Includes consultant and driller mobilization and per diem expenses.
Analytical testing of soil samples - 5 year monitoring parameters	2	EA	\$ 1,000	\$ 2,000	Cost estimate for the analytical testing for soil samples for the five year analytes in Table 3 of the Board Order.
Analytical testing of soil samples - annual parameters	8	EA	\$ 315	\$ 2,520	Cost estimate for the analytical testing for soil samples for the annual analytes in Table 3 of the Board Order.
Soil excavation	250	CY	\$ 1.25	\$ 313	Unit cost for grading of a small area with conventional earthmoving equipment. Excavating 7.5 ft depth, 15 ft by 15 ft width with 1:1 excavation side slopes below each surface impoundment.
Transportation and disposal of soil	410	TONS	\$ 50.00	\$ 20,500	Assumes a unit weight of soil of 120 pounds per cubic foot. Cost for transportation (\$27.50) and disposal (\$22.50) of excavated soil at the South Yuma County Class II Landfill in AZ, approximately 310 miles from HCF.
Import of fill materials	250	CY	\$ 2.00	\$ 500	Cost for transportation of soil fill material from other portions of the property. Assumed unit cost is 65% of transportation cost to local landfill. Material at no cost.
Grading and compaction	250	CY	\$ 2.25	\$ 563	Unit cost for grading and compacting of a small area with conventional earthmoving equipment.
Waste Pile					
First Round Soil sampling to identify potential releases at closure	2.5	DAYS	\$ 4,350	\$ 10,875	Includes time for consultant sampling and field expenses. Unit cost assumes average environmental consulting hourly rate at \$100/hour and that the sampling will be performed with a direct push rig. Quantity assumes an approximate 200-foot grid spacing for closure sampling. Includes consultant and driller mobilization and per diem expenses.
First Round Analytical testing of soil samples - 5 year monitoring parameters	14	EA	\$ 1,000	\$ 14,200	Cost estimate for the analytical testing for soil samples for the five year analytes in Table 3 of the Board Order. Quantity assumes 20 percent of the samples tested for the annual monitoring parameters.
First Round Analytical testing of soil samples - annual parameters	71	EA	\$ 315	\$ 22,365	Cost estimate for the analytical testing for soil samples for the annual analytes in Table 3 of the Board Order. Quantity assumes initial sampling on an approximate 200-foot grid spacing for closure sampling and subsequent monitoring for further delineation.
Second Round Soil sampling to identify potential releases at closure	1.0	DAYS	\$ 4,350	\$ 4,350	Includes time for consultant sampling and field expenses. Unit cost assumes average environmental consulting hourly rate at \$100/hour and that the sampling will be performed with a direct push rig. Quantity assumes additional locations sampled within one day. Includes consultant and driller mobilization and per diem expenses.
Second Round Analytical testing of soil samples - annual parameters	35	EA	\$ 315	\$ 11,025	Cost estimate for the analytical testing for soil samples for the annual analytes in Table 3 of the Board Order. Quantity assumes testing an additional sample from 6 locations (6), 4 lateral samples x 6 locations (24), and additional samples (5) for further delineation.
Soil excavation	2,222	CY	\$ 1.25	\$ 2,778	Unit cost for grading of a small area with conventional earthmoving equipment. Excavating 6 small areas 100-foot by 100-foot in plan dimensions to a depth of 12 inches.
Transportation and disposal of soil	3,600	TONS	\$ 50.00	\$ 180,000	Assumes a unit weight of soil of 120 pounds per cubic foot. Assumes the material classifies as Class II waste. Cost for transportation (\$27.50) and disposal (\$22.50) of excavated soil at the South Yuma County Class II Landfill in AZ, approximately 310 miles from HCF.
Import of fill materials	2,222	CY	\$ 2.00	\$ 4,444	Cost for transportation of soil fill material from other portions of the property. Assumed unit cost is 65% of transportation cost to local landfill. Material at no cost.
Grading and compaction	2,222	CY	\$ 2.25	\$ 5,000	Unit cost for grading and compacting of a small area with conventional earthmoving equipment.
General					
Additional earthwork observation and closure reporting	1	LS	\$ 8,800	\$ 8,800	Assumes 25 additional hours of soil technician at \$100/hour plus expenses and consultant time at an average environmental consulting hourly rate of \$150 for 40 hours. Additional earthwork observation and reporting costs are included in the closure financial assurance cost estimate.

Total Cost: \$ 292,407

APPENDIX A
Reference Information

Terra Renewal

Greenology at Work

The world is more aware of "green" solutions than ever before. Greenology at Work describes our environmental leadership – and our ability to provide planet-friendly answers to organic waste questions.

Welcome to TERRA renewal

Our website is designed to quickly and easily get you the information you need to learn more about us. If you're a [food processor](#), a [municipal water or wastewater treatment facility](#), a [family-owned restaurant](#), or an [energy company](#) with a need to dispose of fluids and other waste, we have low-cost solutions for your liquid and semi-solid waste needs.

We collect, store, transport, recycle, reuse, dispose of fluids and other waste, we have low-cost solutions for your liquid and semi-solid waste needs.

- Commercially generated wastewater
- DAF skimmings
- Scrap food/condiment products
- Contents of municipal and industrial lagoons
- Yellow and brown cooking oil
- Grease trap waste
- Cuttings and fluids generated by energy exploration

We are exactly the partner your company requires – from offering 24-hour disposal services to working as part of your project team as needed. And, in every case, we'll develop the exactly-right methods to meet your specific needs.

Call us if we can serve you! **800-711-0637**.

From: [Chris Seney](#)
To: [Jennifer Nevius](#);
Subject: FW: Quote
Date: Monday, January 03, 2011 4:58:52 PM

-----Original Message-----

From: Chris Marks [mailto:Chris.Marks@terrarenewal.com]
Sent: Monday, January 3, 2011 4:22 PM
To: nurseryproducts@charter.net
Subject: Quote

Chris,

The price for transportation of 5,000 tons from Hinkley to Yuma is \$27.50/ton.

Thx

Chris Marks
714.799.0801
Terra Renewal Services
<http://www.terrarenewal.com/>



SOUTH YUMA COUNTY LANDFILL
 EPA#AZR000508880 A CERCLA APPROVED FACILITY
 19536 S AVE 1E, YUMA, AZ 85366
 (928) 341-9300

WASTE PROFILE #
C-373

GENERATOR WASTE PROFILE SHEET

I. GENERATOR INFORMATION				DATE: 12/9/10
GENERATOR NAME: NURSERY PRODUCTS COMPOST FACILITY				
GENERATOR SITE ADDRESS: 14479 COUGAR RD				
CITY: HELENDALE	COUNTY: SAN BERNARDINO	STATE: CA	ZIP: 92342	
GENERATOR MAILING ADDRESS: 647 CAMINO DE LOS MARES, #108-174				
CITY: SAN CLEMENTE	COUNTY: ORANGE	STATE: CA	ZIP: 92673	
GENERATOR CONTACT NAME: CHRIS SENEY				
PHONE NUMBER: 760-272-1224			FAX NUMBER: 949-366-2117	

II. TRANSPORTER INFORMATION				
TRANSPORTER NAME: TERRA				
TRANSPORTER ADDRESS: 12812 VALLEY VIEW				
CITY: GARDEN GROVE	COUNTY: ORANGE	STATE: CA	ZIP: 92645	
TRANSPORTER CONTACT NAME: JOEL SANTOS				
PHONE NUMBER: 310-466-8115			FAX NUMBER: 714-799-0140	

III. WASTE STREAM INFORMATION				
NAME OF WASTE: BIOSOLIDS / BIOSOLIDS MIXED WITH GREEN WASTE				
PROCESS GENERATING WASTE: SECONDARY DIGESTED SLUDGE / COMPOST				
TYPE OF WASTE:	INDUSTRIAL WASTE	OR	POLLUTION CONTROL WASTE	
PHYSICAL STATE:	SOLID	SEMI-SOLID	LIQUID	OTHER:
METHOD OF SHIPMENT:	BULK	DRUM	BAGGED	OTHER:
ESTIMATED ANNUAL VOLUME:	CUBIC YARDS:		5000 TONS	
FREQUENCY:	ONE TIME ONLY	WEEKLY	MONTHLY	
SPECIAL HANDLING INSTRUCTIONS:				

IV. REPRESENTATIVE SAMPLE CERTIFICATION			
IS THE REPRESENTATIVE SAMPLE COLLECTED TO PREPARE THIS PROFILE AND LABORATORY ANALYSIS COLLECTED IN ACCORDANCE WITH U.S. EPA AND 40 CFR 261.2 (C) GUIDELINES OR EQUIVALENT RULES?			YES NO
SAMPLE DATE:	CHECK ONE:	COMPOSITE SAMPLE	GRAB SAMPLE
SAMPLERS EMPLOYER: NURSERY PRODUCTS			
SAMPLERS NAME (PRINTED): CHRIS SENEY	SIGNATURE: 		

WASTE PROFILE #

% BY WEIGHT (RANGE)

V. PHYSICAL CHARACTERISTICS OF WASTE

CHARACTERISTIC COMPONENTS

1. BIO-SOLIDS / GREEN MATERIAL 100
2. _____
3. _____
4. _____

Color	Odor (describe)	Frag Liquids	% Solid	Ph:	Flash Point:	Phenol
<u>BLACK</u>	<u>SLIGHT</u>	YES <input checked="" type="radio"/> NO	<u>15-80</u>	<u>6-9</u>	<u>NA</u>	<u>ND</u>
		Content: %				ppm

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) Including Required Parameters provided for this profile

Does this waste or generating process contain regulated concentrations of the following pesticides and/or herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Texaphene, 2,4-D, 2,4,5-TP Silvex as defined in 40 CFR 261.33?	YES	NO
Does this waste or generating process cause it to exceed OSHA exposure limits from high levels of Hydrogen Sulfide or Hydrogen Cyanide as defined in 40 CFR 261.23?	YES	NO
Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCB's) as defined in 40 CFR Part 761?	YES	NO
Does this waste contain regulated concentrations of 2,3,7,8- tetrachlorodioxin (2,3,7,8-TCDD) or any other dioxin as defined in 40 CFR 261.31?	YES	NO
Is this a hazardous waste as defined by 40 CFR Part 261 or ARS 49-921?	YES	NO
Is this radioactive waste as defined by federal or state regulations?	YES	NO
Is this a regulated medical or infectious waste as defined by federal or state regulations?	YES	NO
Is this waste generated at a Federal Superfund clean-up site?	YES	NO

VI. GENERATOR CERTIFICATION

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true and accurate description of the waste material being offered for disposal. I further certify that by utilizing this profile, neither myself or any other employees of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic, hazardous waste, medical or infectious waste, or any other waste material this facility is prohibited from accepting by law. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

CHRIS SEMEY OPS MGR
 AUTHORIZED REPRESENTATIVE NAME & TITLE (PRINTED)

NURSERY PRODUCTS
 COMPANY NAME

[Signature]
 AUTHORIZED REPRESENTATIVE SIGNATURE

12/10/10
 DATE

VII. SOUTH YUMA COUNTY LANDFILL DECISION

APPROVED FAC REJECTED

22⁵⁰ per ton

EXPIRATION 12/12/2011

CONDITIONS:

Remove air-cell pipe insulation with glove bags in semi-isolated work area (cont.)

7" to 12" pipe	af@.168	LF	2.91	9.34	.72	12.97
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Remove mag-block pipe insulation with glove bags in semi-isolated work area

Using two 2 HP electric HEPA vacuums, miscellaneous power tools and small tools.

1/2" to 4" pipe	af@.168	LF	2.18	9.34	.72	12.24
4" to 6" pipe	af@.194	LF	2.18	10.80	.83	13.81
7" to 12" pipe	af@.320	LF	2.91	17.80	1.38	22.09

Remove hand-packed asbestos plaster insulation from pipe fittings in semi-isolated work areas

Using glove bags, using two 2 HP electric HEPA vacuums, miscellaneous power tools and small tools.

1/2" to 4" pipe	af@1.00	Ea	6.84	55.60	4.30	66.74
4" to 6" pipe	af@1.07	Ea	6.84	59.50	4.60	70.94
7" to 12" pipe	af@1.60	Ea	10.30	89.00	6.88	106.18

Remove asbestos pipe and ductwork insulation in semi-isolated work areas

Removed by the "cut, wrap and take" method, using two 2 HP electric HEPA vacuums, miscellaneous power tools and small tools.

Pipe under 6" diameter	af@.085	LF	.47	4.73	.37	5.57
Metal duct under 12"	af@.107	LF	.38	5.95	.46	6.79

Remove asbestos board in semi-isolated work area

Using small tools.

Remove cement-asbestos transite board	ab@.015	SF	.03	.83	.01	.87
Remove asbestos millboard	ab@.020	SF	.02	1.11	.02	1.15

Remove asbestos siding in semi-isolated work area

Using 40-ton hydraulic crane with 84' boom and small tools.

Remove transite shingle siding	ah@.043	SF	.03	2.35	.94	3.32
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Remove asbestos roofing in semi-isolated work area

Using two 2 HP electric HEPA vacuums, miscellaneous power tools and small tools.

Remove asbestos shingle roofing	af@.021	SF	.01	1.17	.09	1.27
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CSI 02-210, Site grading

CSI 02-210	Craft@Hrs	Unit	Material	Labor	Equip	Total
Using a Cat 12-G motor grader.						
Rough roadway clearing with grader, general area grading.	jm@.572	MSY	--	22.80	11.00	33.80
Subgrade, fine grading to + or - .1'	jm@.925	MSY	--	36.80	17.80	54.60
Cut and grade embankment, ditch to 3' (1m), slopes to 1 vertical in 2 horizontal	jm@1.60	MSY	--	63.60	30.70	94.30

Grading and compacting

Based on 8" lifts and 3 passes at 5' wide, using a D-8L crawler tractor dozer with universal blade and a 25.5-ton towed vibrating sheepsfoot roller.

Grade and compact large area with 300 HP dozer	gr@.012	CY	--	.62	1.52	2.14
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Grading and compacting

Based on 6" lifts and 3 passes at 5' wide, using a D-4H crawler tractor dozer with angle tilt blade.

Grade and compact small area with 75 HP dozer	gk@.018	CY	--	.72	.44	1.16
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Table 3- UNSATURATED ZONE - WASTE PILE
Monitoring Parameters and Constituents of Concern

Field Parameters	Units	Monitoring Frequency
Composting Pad Thickness	Inches	Annually
Sample Locations	Northing and Easting	Annually
Monitoring Parameters	Units	Monitoring Frequency
Aluminum	mg/kg	Annually
Antimony	mg/kg	Annually
Arsenic	mg/kg	Annually
Copper	mg/kg	Annually
Iron	mg/kg	Annually
Manganese	mg/kg	Annually
MBAS	mg/kg	Annually
Nickel	mg/kg	Annually
Nitrate as Nitrogen	mg/kg	Annually
Sulfate	mg/kg	Annually
TDS	mg/kg	Annually
Constituents of Concern	Units	Monitoring Frequency
Barium	mg/kg	Five Year
Beryllium	mg/kg	Five Year
Bicarbonate	mg/kg	Five Year
Boron	mg/kg	Five Year
Bromide	mg/kg	Five Year
Cadmium	mg/kg	Five Year
Calcium	mg/kg	Five Year
Carbonate	mg/kg	Five Year
Chloride	mg/kg	Five Year
Chromium (hexavalent)	µg/kg	Five Year
Chromium (total)	µg/kg	Five Year
Cobalt	mg/kg	Five Year
Fluoride	mg/kg	Five Year
Total Kjeldahl Nitrogen	mg/kg	Five Year
Lead	mg/kg	Five Year
Magnesium	mg/kg	Five Year
Mercury	mg/kg	Five Year
Molybdenum	mg/kg	Five Year
Nitrite (as Nitrogen)	mg/kg	Five Year
Orthophosphate Phosphorous	mg/kg	Five Year
Phosphate	mg/kg	Five Year
Potassium	mg/kg	Five Year
Selenium	mg/kg	Five Year
Silver	mg/kg	Five Year
Sodium	mg/kg	Five Year
Thallium	mg/kg	Five Year
Total Alkalinity	mg/kg	Five Year
Total Anions	mg/kg	Five Year
Total Cations	mg/kg	Five Year

Table 3- UNSATURATED ZONE - WASTE PILE, Continued

Constituents of Concern	Units	Monitoring Frequency
Total Phosphorus	mg/kg	Five Year
Vanadium	mg/kg	Five Year
Zinc	mg/kg	Five Year
VOCs	µg/kg	Five Year
SVOCs	µg/kg	Five Year
Organochlorine Pesticides	µg/kg	Five Year
Organophosphorus Pesticides	µg/kg	Five Year
Chlorinated Herbicides	µg/kg	Five Year
CCR, Title 22 Metals	mg/kg	Five Year

CCR = California Code of Regulations
MBAS = Methylene Blue Active Substances
µg/kg = Micrograms per kilogram
mg/L = Milligrams per kilogram
SVOC = Semi-Volatile Organic Compound
TDS = Total Dissolved Solids
VOC = Volatile Organic Compound