Parkhill

October 17, 2023

Ms. Arin Anderson, Project Manager
Municipal Solid Waste Permits Section, MC 124
Texas Commission on Environmental Quality
Building A, Room 122
12100 Park 35 Circle
Austin, Texas 78753-1808

Re: SouthWaste San Antonio Facility
TCEQ MSW Permit No. 2317
Response to Administrative Notice of Deficiency
Tracking No. 28955913; RN101478071/ CN603436114

Dear Ms. Anderson:

The revisions made to SouthWaste San Antonio Facility Limited Scope Permit Amendment are enclosed with this letter. The revisions were made in response to the Technical Notice of Deficiency Letter from TCEQ dated October 10, 2023. We have included our responses to each of your comments in this letter.

1. Provide a description in the narrative for Tipping Process, Section 3.5.2 of the Permit, indicating how long feedstock materials will remain in the tipping area, pursuant to 332.47(6)(E)(ii).

   Response: *Section 3.5.2 is revised to indicate the duration feedstock will remain in the tipping area.*

2. Table 6 Equipment List specifies the use of a "Vacuum Truck w/ pressure hose." However, the proposed language to be removed from Section 3.5.3, Composting Process, specifically relates to the vacuum truck and hose equipment details used to apply feedstocks to windrows. Please review this information and revise the application for consistency.

   Response: *Section 3.5.3 is revised to indicate a vacuum truck equipped with a pressure hose will be used to apply feedstock to the windrows.*

3. Table 4 Energy and Mass Balance Calculations have typing mistakes in the word density. Please review the sections titled "Bulking Material Calculations" and "Product Calculations" within the table and make corrections.

   Response: *Table 4 is revised to remove typing errors.*

4. It appears there is a significant figures error reported for the acreage of post-processing area used in the Quantity Calculations table for closure cost estimates. Please review this information and revise the application for consistency.

   a. Please review the Closure Cost Estimate revision tables and make typographical corrections where necessary. For example, compliance is misspelled in the table titled Facility Conditions at Closure & Closure Assumptions.

      Response: *The Closure Cost Estimate is revised to remove typing errors.*

800 South Polk Street | Suite 200 | Amarillo, Texas 79101 | 806.376.8600 Parkhill.com

If you or your staff have any comments, questions, or need any further information, please do not hesitate to contact me at 806.378.8673 or SHarvey@Parkhill.com.

Sincerely,

PARKHILL

By _____
Spenser J. Harvey, PE
Civil Engineer

SJH/kt

cc: Ben Camacho, Director of Permitting & Compliance, SouthWaste LLC

Texas Commission on Environmental Quality

Waste Permits Division Correspondence Cover Sheet

Date: 10/12/2023
Facility Name: SOUTHWASTE DISPOSAL SAN ANTONIO FACILITY
Permit or Registration No.: 2317

Nature of Correspondence:
☐ Initial/New
☒ Response/Revision to TCEQ Tracking No.: 28955913 (from subject line of TCEQ letter regarding initial submission)

Affix this cover sheet to the front of your submission to the Waste Permits Division. Check appropriate box for type of correspondence. Contact WPD at (512) 239-2335 if you have questions regarding this form.

Table 1 - Municipal Solid Waste Correspondence

Applications	Reports and Notifications
☐ New Notice of Intent	☐ Alternative Daily Cover Report
☐ Notice of Intent Revision	☐ Closure Report
☐ New Permit (including Subchapter T)	☐ Compost Report
☐ New Registration (including Subchapter T)	☐ Groundwater Alternate Source Demonstration
☐ Major Amendment	☐ Groundwater Corrective Action
☐ Minor Amendment	☐ Groundwater Monitoring Report
☒ Limited Scope Major Amendment	☐ Groundwater Background Evaluation
☐ Notice Modification	☐ Landfill Gas Corrective Action
☐ Non-Notice Modification	☐ Landfill Gas Monitoring
☐ Transfer/Name Change Modification	☐ Liner Evaluation Report
☐ Temporary Authorization	☐ Soil Boring Plan
☐ Voluntary Revocation	☐ Special Waste Request
☐ Subchapter T Disturbance Non-Enclosed Structure	☐ Other:
☐ Other:	

Table 2 - Industrial & Hazardous Waste Correspondence

Applications	Reports and Responses
☐ New	☐ Annual/Biennial Site Activity Report
☐ Renewal	☐ CPT Plan/Result
☐ Post-Closure Order	☐ Closure Certification/Report
☐ Major Amendment	☐ Construction Certification/Report
☐ Minor Amendment	☐ CPT Plan/Result
☐ CCR Registration	☐ Extension Request
☐ CCR Registration Major Amendment	☐ Groundwater Monitoring Report
☐ CCR Registration Minor Amendment	☐ Interim Status Change
☐ Class 3 Modification	☐ Interim Status Closure Plan
☐ Class 2 Modification	☐ Soil Core Monitoring Report
☐ Class 1 ED Modification	☐ Treatability Study
☐ Class 1 Modification	☐ Trial Burn Plan/Result
☐ Endorsement	☐ Unsaturated Zone Monitoring Report
☐ Temporary Authorization	☐ Waste Minimization Report
☐ Voluntary Revocation	☐ Other:
☐ 335.6 Notification	
☐ Other:	

Applicant's Certification

I 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 of Owner: _____ Date: 10-25-2023

Printed Name: Ben Camacho Title: Director of Compliance

Notary Public's Certification:

Subscribed and sworn to before me, by the said Ben Camacho

On this 25th day of October, 2023

My commission expires on the 12th day of October, 2025

_____

Notary Public in and for

TRAVIS County, Texas.

MARY E. WITT
Notary Public, State of Texas
Comm. Expires 10-12-2025
Notary ID 7500778

Property Owner's Affidavit

The owner of the property must sign the following statement:

- I acknowledge that the State of Texas may hold the property owner of record either jointly or severally responsible for the operation, maintenance, and closure or post-closure care of the facility.
- I acknowledge that the facility owner or operator and the State of Texas shall have access to the property during the active life and post-closure care period, if required, after closure for the purpose of inspection and maintenance.

Signature of Owner: _____ Date: 10/24/2023

Printed Name: Tim Cox

Revised Pages of Permit
Final Version

Site Development Plan
for
Wholearth Organic Composting

20805 Lamm Road

Bexar County

Elmendorf, Texas

TCEQ Permit Approval: January 13, 2006

Prepared for:

Wholearth Organic Composting
20805 Lamm Road
Elmendorf, Texas 78112

Original Application Prepared by:

Geomatrix Consultants, Inc.
5725 Hwy 290 West, Suite 200B
Austin, Texas 78735
Robin D. Cosgrove, P.E. and Jerry Wick, P.G.

Revision by:
Cook-Joyce, Inc.
812 W. 11th St.
Austin, Texas 78701

Revision history:
Revised October 12, 2023
Revised August 18, 2023
Revised July 31, 2023
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Revised December 23, 2004
Revised December 20, 2004
Revised December 1, 2004
Revised August 8, 2004
Prepared January 22, 2004

PARKHILL SMITH & COOPER, INC. F-560
STATE OF TEXAS
SPENSER J. HARVEY
138737
LICENSED PROFESSIONAL ENGINEER

10/12/2023
For the July 2023, August 2023, and October 2023 Revisions Only

STATE OF TEXAS
J. BRIAN DUDLEY
59831
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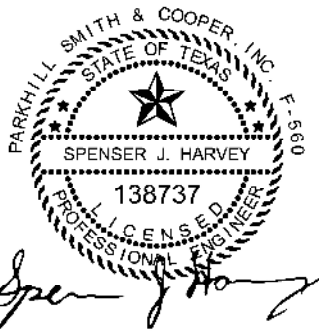
9/26/06

SOUTHWASTE\FINAL\06060.02\
R060926_SITE DEVELOPMENT PLAN.DOC

REVISED
26 SEPTEMBER 2006
31 July 2023
18 August 2023
12 October 2023



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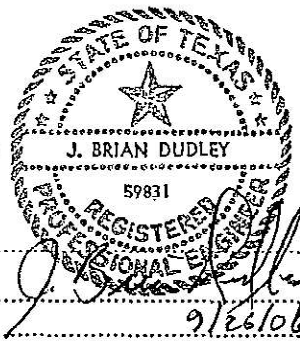

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Revised August 18, 2023
Revised July 31, 2023
Revised September 26, 2006

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For the July 2023, August 2023
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Variance 1 Screening and storage of bulking material and finished compost outside the processing area composting pad as described in Section 3.5 [page 18]

Waiver 1 Deleting analysis for heavy metals from the groundwater monitoring program as described in Section 3.3.3 [page 16]

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will be equipped with low-velocity spray nozzles to minimize the generation of dust during operation. The chipped and shredded bulking material will be placed on the processing areas in windrows using a front-end loader.

The liquid feedstock will be either pumped into one of four 30,000-gallon above ground storage tanks for temporary storage, or may be pumped to the facility vacuum truck to be sprayed directly onto prepared windrows of bulking material located within the processing areas. Typically, only one of the four 30,000-gallon storage tank will contain feedstock. Liquid feedstock will typically be stored in the above ground tanks for a maximum of 10 days. The storage capacity of the above ground tanks will allow the liquid feedstocks to be applied in a consistent manner and provide additional feedstock storage capacity that can be used during periods of rainfall that limit feedstock application. In any event, no feedstock will be accepted in excess of the available capacity of the storage tanks.

Due to the way the liquid feedstocks are handled, the potential for spillage outside the lined processing area will be small. In the event liquid feedstock was spilled outside the composting pad, the feedstock and affected surface soils will be promptly recovered using the front end loader and incorporated into the composting process. Any bulking materials that spill onto the ground will be promptly recovered with a front-end loader and returned to the windrows. The front-end loader and shovels will be used to maintain the tipping area and windrows daily.

3.5.3 Composting Process

Feedstocks will be applied to the windrows using a vacuum truck equipped with a pressure hose. Once the feedstock is applied to a windrow, the windrow will be immediately turned, mixed, and rehomogenized using a self-propelled tiller to thoroughly mix feedstock and bulking material. This process allows the feedstocks to be evenly distributed through the windrows and prevents moisture or liquids from collecting at the base of the compost material.

Once tilled, the windrows will be monitored to ensure the moisture content and carbon to nitrogen ratio are consistent to maintaining adequate composting. Measurements of nitrogen and carbon ratios are monitored daily.

The desired initial moisture content of the compost is 40 to 60 percent by weight. Moisture content is evaluated and measured daily. Moisture content will be determined during the composting process using the "squeeze test." The squeeze test is performed by manually gathering and squeezing a handful of the compost material. If water drips out while the

Table 4

Energy and Mass Balance Calculations

Assumed Windrow Size

Knowns and Assumptions		
Width =	20	ft
Height =	8	ft
Linear Density* =	2.96	CY/ft
Length =	440	ft

*Linear density of Windrow based on recommendation by manufacturer of windrow turner.

Bulking Material Calculations

Knowns and Assumptions		
Assumed windrow quantity =	13	Windrows
Maturation Period =	60	Days
Maturation Period =	2	Months
Bulking Material Density =	750	lb/CY

Volume of Bulking Material on Pad:	
16,931	CY/ 60 days

Volume of Bulking Material Per Month:	
8,466	CY/ month

Tonnage of Bulking Material Per Month:	
3,175	Ton/month

Volume of Bulking Material Per Year:	
101,587	CY/ year

Tonnage of Bulking Material Per Year:	
38,095	Ton/year

Feedstock Calculations

Knowns and Assumptions		
Feedstock Density =	7.44	lb/gal
Working Days Per Month =	20	days
Ratio by Weight, Feedstock to Bulking Material =	1.92	ton/ton

Tonnage of Feedstock per month:	
6,095	ton/month

Tonnage of Feedstock per year:	
73,143	ton/year

Volume of Feedstock Applied Per Working Day:	
81,925	gal/day

Table 4

Energy and Mass Balance Calculations

Product Calculations

Knowns and Assumptions		
Density of Mature Compost =	1,500	lb/CY
Maturation Volume Reduction =	30	%
Screening Volume Reduction =	30	%

Volume of Mature Compost per year:	
71,111	CY/ year

Volume of Screened Final Product per year:	
49,778	CY/year

Tons of Finished Product per year:	
37,333	ton/year

Tons of Finished Product per calendar day:	
102	tons/day

COOK-JOYCE INC.
ENGINEERING AND CONSULTING
812 WEST ELEVENTH
AUSTIN, TEXAS 78701-2000
(512) 474-9097 FAX (512) 474-8463

Facility Closure Plan

for

Wholearth Organic Composting
Elmendorf, Texas

Prepared for

Wholearth Organic Composting
20805 Lamm Road
Elmendorf, Texas 78112

Prepared by

Geomatrix Consultants, Inc.

5725 Highway 290 West, Suite 200B
Austin, Texas 78735

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Revised by:

Cook-Joyce, Inc.
812 W. 11th St.
Austin, TX 78701

Revision History
Revised October 12, 2023
Revised July 31, 2023
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9/26/06

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Attachments

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9/26/06

FACILITY CONDITIONS AT CLOSURE & CLOSURE ASSUMPTIONS
The facility is in compliance with the conditions of its permit.
Retention pond is assumed to be full.
Processing area is assumed to contain the operating capacity of compost material. Compost material is assumed to be immature.
Mature compost in Post Processing area will be used as mulch on the facility at the conclusion of closure activities.
All exposed liner material, miscellaneous wastes, and surface equipment will be removed and properly disposed at an authorized facility.
None of the facility operator's equipment, personnel, or facilities will be available for use in the closure activities.
No soil that requires remediate is on-site
Processing Area earthen berms will be used as backfill.
Retention pond will be backfilled and Processing Area will be regarded to prevent ponding.
No salvage value has been assessed for any material or equipment at the site.
Facility will be seeded as necessary.

CLOSURE COST SUMMARY	
Oversight:	$ 18,000
Closure activities, Processing Area and Retention Pond:	$ 56,100
Transportation & Disposal:	$ 522,677
Revegetation:	$ 2,720
TOTAL CLOSURE COST	$ 599,497

Engineer's Seal and Certification

I Spenser J. Harvey, P.E., certify that this Closure Cost Estimate for the SouthWaste San Antonio Facility located in Elmendorf, Bexar County, TX was prepared by me and by others under my direct supervision using the attached assumptions.

LABOR, EQUIPMENT, MATERIAL LOADING, HANDLING, AND BACKFILLING				
	Unit	**Quantity**	**Unit Price**	**Subtotal**
Oversight:				
Closure Work Supervision (Consultant)	days	15	$ 1,200	$ 18,000
Closure activities, Processing Area and Retention Pond:				
Technician	days	9	$ 1,200	$ 10,800
Laborers, (2)	days	9	$ 1,300	$ 11,700
Mob/ Demob Heavy Equipment	rnd trip	2	$ 800	$ 1,600
Grader	days	3	$ 1,500	$ 4,500
Front-end Loader/ Backhoe	days	12	$ 2,000	$ 24,000
Roll-Off Box Delivery/ Pickup	box	2	$ 250	$ 500
Roll-Off Box Rental	days	10	$ 100	$ 1,000
Misc Materials & Supplies	lump sum	1	$ 2,000	$ 2,000
Transportation & Disposal:				
Transportation of Roll off to Disposal Facility (Liner and Misc Debris)	trip	2	$ 400	$ 800
Disposal at Municipal Landfill (Liner and Misc Debris)	CY	40	$ 15	$ 600
Transportation of Curing and Green Compost to Authorized Disposal Facility	hr	298	$ 120	$ 35,760
Disposal of Curing and Green Compost at Authorized Disposal Facility	ton	6,350	$ 50	$ 317,500
Transportation and Disposal of Retention Pond Water	gal	2,060,284	$ 0.06	$ 123,617
Transportation and Disposal of Storage Tanks (4 tanks @ 30,000 gallon capacity each) Contents	gal	120,000	$ 0.37	$ 44,400
Revegetation:				
Seeding	1000 sy	68	$ 40	$ 2,720
TOTAL CLOSURE COST				$ 599,497

NOTES:

1) Values are in 2023 dollars.

2) All tanks are assumed to be full.

3) The Operator is the Property Owner and will allow the liner to remain in place.

4) All vendors and disposal facilities (other than other authorized Composting Facility) are within 40 miles of the site, and total round trip, loading, and unloading time is approximately 3 hours.

5) Abbreviations:

cy- cubic yards

rnd - round

sy - square yards

GMX rate * 8 hr day

Quantity Calculations	Length (ft)	Width (ft)	Depth (ft)	Cu. Ft.	Gals.	Bbls.	Cu. Yds.	Tons	Sq. Yd.	Acre
Processing & Retention Pond Surface Area	791	519							45,614	9.4
Post-Processing Area									22,748	4.7
Berm Volumes (3' tall, 4' wide at top, 3/1 side slopes)	2,620	39	3	102,180			3,784			
Retention Pond (6/1 side slopes)	360	198	5	275,460	2,060,284	49,054	10,202		7,920	1.6
Green Compost (1,100 lb/cy)							3,577	1,967		
Curing Compost (1,100 lb/cy)							7,153	3,934		

TIME AND EQUIPMENT ESTIMATES		
Equipment & Labor Needs	Time to Perform Tasks	
tech & Laborers, loader	5	days to load immature compost and retention pond water
loader	2	days to backfill pond with berms
backhoe w/ hoe ram attachment	1	days to punch holes in processing area liner
grader	3	days to regrade
tech & Laborers, loader	4	days to revegetate and mulch
	15	Total days

REV 01 - October 12, 2023
REV 00 - July 31, 2023

Revised Pages of Permit
Redline/ Strikeout

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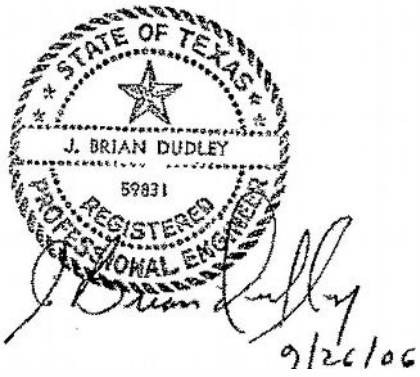

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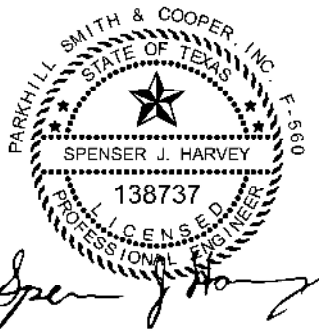

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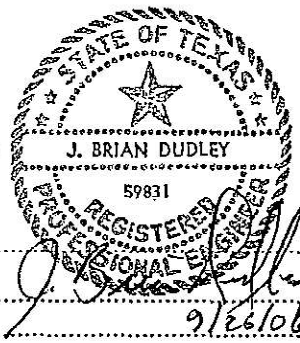

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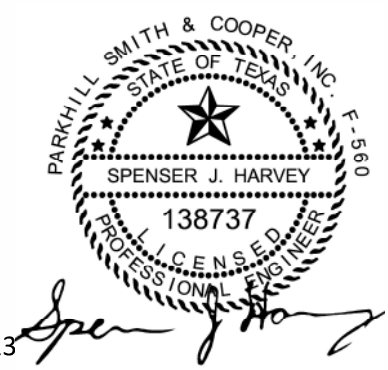

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The facility is in ~~compliane~~ compliance with the conditions of its permit.
Retention pond is assumed to be full.
Processing area is assumed to ~~contian~~ contain the operating capacity of compost material. Compost material is assumed to be immature.
Mature compost in Post Processing area will be used as mulch on the ~~faiclity~~ facility at the conclusion of closure activities.
All exposed liner material, miscellaneous wastes, and surface equipment will be removed and properly disposed at an authorized facility.
None of the facility operator's equipment, personnel, or ~~facillities~~ facilities will be available for use in the closure ~~acitivies~~ activities.
No soil that requires remediate is on-site
Processing Area earthen berms will be used as backfill.
Retention pond will be backfilled and Processing Area will be regarded to prevent ponding.
No salvage value has been assessed for any material or equipment at the site.
Facility will be seeded as necessary.

CLOSURE COST SUMMARY	
Oversight:	$ 18,000
Closure ~~activies~~ activities, Processing Area and Retention Pond:	$ 56,100
Transportation & Disposal:	$ 522,677
Revegetation:	$ 2,720
TOTAL CLOSURE COST	$ 599,497

Engineer's Seal and Certification

I Spenser J. Harvey, P.E., certify that this Closure Cost Estimate for the SouthWaste San Antonio Facility located in Elmendorf, Bexar County, TX was prepared by me and by others under my direct supervision using the attached assumptions.

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LABOR, EQUIPMENT, MATERIAL LOADING, HANDLING, AND BACKFILLING				
	Unit	**Quantity**	**Unit Price**	**Subtotal**
Oversight:				
~~Clsoure~~ Closure Work Supervision (Consultant)	days	15	$ 1,200	$ 18,000
Closure ~~activies~~ activities, Processing Area and Retention Pond:				
Technician	days	9	$ 1,200	$ 10,800
Laborers, (2)	days	9	$ 1,300	$ 11,700
Mob/ Demob Heavy Equipment	rnd trip	2	$ 800	$ 1,600
Grader	days	3	$ 1,500	$ 4,500
Front-end Loader/ Backhoe	days	12	$ 2,000	$ 24,000
Roll-Off Box Delivery/ Pickup	box	2	$ 250	$ 500
Roll-Off Box Rental	days	10	$ 100	$ 1,000
Misc Materials & Supplies	lump sum	1	$ 2,000	$ 2,000
Transportation & Disposal:				
Transportation of Roll off to Disposal Facility (Liner and Misc Debris)	trip	2	$ 400	$ 800
Disposal at ~~Municpal~~ Municipal Landfill (Liner and Misc Debris)	CY	40	$ 15	$ 600
Transportation of Curing and Green Compost to Authorized Disposal Facility	hr	298	$ 120	$ 35,760
Disposal of Curing and Green Compost at Authorized Disposal Facility	ton	6,350	$ 50	$ 317,500
Transportation and Disposal of Retention Pond Water	gal	2,060,284	$ 0.06	$ 123,617
Transportation and Disposal of Storage Tanks (4 tanks @ 30,000 gallon capacity each) Contents	gal	120,000	$ 0.37	$ 44,400
Revegetation:				
Seeding	1000 sy	68	$ 40	$ 2,720
TOTAL CLOSURE COST				$ 599,497

NOTES:
1) Values are in 2023 dollars.
2) All tanks are assumed to be full.
3) The Operator is the Property Owner and will allow the liner to remain in place.
4) All vendors and disposal facilities (other than other ~~authroized~~ authorized Composting Facility) are within 40 miles of the site, and total round trip, loading, and unloading time is approximately 3 hours.
5) ~~Abreviations~~ Abbreviations:
   cy- cubic yards
   rnd - round
   sy - square yards

GMX rate * 8 hr day

Quantity Calculations	Length (ft)	Width (ft)	Depth (ft)	Cu. Ft.	Gals.	Bbls.	Cu. Yds.	Tons	Sq. Yd.	Acre
Processing & Retention Pond Surface Area	791	519							45,614	9.4
Post-Processing Area									22,748	~~47.0~~ 4.7
Berm Volumes (3' tall, 4' wide at top, 3/1 side slopes)	2,620	39	3	102,180			3,784			
Retention Pond (6/1 side slopes)	360	198	5	275,460	2,060,284	49,054	10,202		7,920	1.6
Green Compost (1,100 lb/cy)							3,577	1,967		
Curing Compost (1,100 lb/cy)							7,153	3,934		

TIME AND EQUIPMENT ESTIMATES		
Equipment & Labor Needs		Time to Perform Tasks
tech & Laborers, loader	5	days to load immature compost and retention pond water
loader	2	days to backfill pond with berms
backhoe w/ hoe ram attachment	1	days to punch holes in processing area liner
grader	3	days to regrade
tech & Laborers, loader	4	days to revegetate and mulch
	15	Total days

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