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www.ogeecheeriverkeeper.org
Protecting the Ogeechee, Canoochee and Coastal Rivers

Via Hand-Delivery

February 10, 2011

Bulloch County Planning and Zoning Commission

Jeanne Anne Marsh, Chairman
Charles Chandler, Vice-Chair
Yolanda Tremble, Secretary
Ann Henderson
Schubert Lane
Derek Duke
Larry Jones

RE: Proposed Inert Landfill, Denise Wilson Burnsed (Zell Miller Blvd) Conditional Use Request CU2011-002

Dear Commissioners,

Thank you for the opportunity to address our concerns about the proposed inert landfill adjacent to Lotts Creek, a tributary of the Canoochee River in Bulloch County. Ogeechee Riverkeeper is a citizen-based nonprofit organization dedicated to ensuring clean water in the Ogeechee, Canoochee and coastal rivers. Our membership includes over 1,700 people who live, work, and play on these important natural resources.

Georgia Inert Landfill Regulations

The Georgia Environmental Protection Division (EPD) regulates inert at a minimal level known as permit by rule. In order to get a permit to operate an inert landfill the operator must simply fill out a 2-page form (Attachment A). This form does not require the operator to list contents of the materials disposed of at the facility. It does require that no portion of the disposal area be located within 100 linear feet of any property line or enclosed structure. A once yearly report is required to report on the tonnage received at the inert landfill, but the contents disposed of at the site are not required to be reported (Attachment B). Decomposing waste from inert landfills can increase nutrient loads and other contaminants to nearby groundwater and surface water sources. Inert landfills have been also found to be significant sources of combustible methane gas.

Site Suitability

According to the Bulloch County Zoning Ordinance (amended 2008), an inert landfill must be "Geotechnically suitable" in compliance with the State of Georgia Comprehensive Solid Waste Management Act 1990 (Solid Waste Management Act). A review of the Solid Waste Management Act failed to identify a definition of "geotechnically suitable." In lieu of an exact definition to refer to under the statute, ORK reviewed information from the U.S. Natural Resource Conservation Service (NRCS) regarding the soil suitability of the area for debris disposal and subsurface composting (Attachments C and D). The NRCS has the soils on this site listed as unsuitable for these types of disposal facilities.



The proposed landfill is adjacent to Lotts Creek, a major tributary of the Canoochee River. Unfortunately, this stream currently fails to meet basic water safety standards for fishing. The fish in the Creek have been found to have excessive levels of the toxin, mercury, and in the area directly adjacent to the proposed landfill, oxygen levels in the creek are too low. It is also our understanding that there may be drinking water supply wells in the vicinity of the proposed landfill.

ORK contends that the proposed site is unsuitable for an inert landfill, and that such a land use could pose significant environmental impacts such as a potential risk to further contaminating Lotts Creek and nearby wells. We respectfully request that the planning and zoning commission deny the application request for a conditional use.

Sincerely,

Chandra Brown
Ogeechee Riverkeeper

Attachment A

SOLID WASTE MANAGEMENT PROGRAM
4244 INTERNATIONAL PARKWAY, SUITE 104
ATLANTA, GEORGIA 30354-3902
(404) 362-2692
Fax: (404) 362-2693

PBR-_____ - _____
(For SWMP Use Only)

NOTIFICATION OF PERMIT BY RULE OPERATIONS

PLEASE TYPE OR PRINT:

I. FACILITY NAME _____

FACILITY ADDRESS /LOCATION _____
CITY _____ STATE _____ ZIP _____

OWNER/OPERATOR _____
ADDRESS _____ TELEPHONE () _____

CITY _____ STATE _____ ZIP _____

AUTHORIZED REPRESENTATIVE _____ TITLE _____
MAILING ADDRESS _____ TELEPHONE () _____
CITY _____ STATE _____ ZIP _____
SIGNATURE _____ DATE _____
(Please sign here)

II. TYPE OF OPERATION (*Check only the block for the operation(s) for which you will be responsible*)

- A. Collection
- B. Transfer Station
- C. Inert Landfill Is property for disposal site owned leased by applicant?

If leased, Property Owner _____
Address _____
City _____ State _____ Zip _____

- D. On-Site Processing or Thermal Treatment
- E. Facility will be Private or Public (open to general public)

III. DESCRIPTION OF OPERATION (*Described briefly the general nature of the proposed operation and list the specific solid waste to be disposed, processed or treated.*)

IV. STATUS OF OPERATION (Check) Existing Proposed (Projected startup _____ / _____)
Month Year

V. AREA TO BE SERVED (List County(s)) _____

NOTIFICATION OF PERMIT BY RULE OPERATIONS
PAGE 2

VI. Latitude and Longitudinal of facility: Latitude: o ' " Longitude: o ' "

→ If this notification is for an INERT LANDFILL, the following items must be attached to the notification form:

- a. A letter from the host local jurisdiction which states that this operation is in compliance with all applicable local rules and ordinances, including erosion and sediment control.
- b. A drawing that documents that no portion of the waste disposal area will be located within one hundred (100) linear feet of any property line or enclosed structure.
- c. A street or highway map indicating location of site or facility.
- d. 1) For inert landfill sites that will disturb 1 acre or more of land during their active life, a copy of the Notice of Intent (NOI) to comply with State General Permit No. GAR100001 for Storm Water Discharges Associated with Construction Activity for Stand Alone Projects that was submitted to the appropriate EPD District Office along with a delivery receipt (certified mail, UPS, FedEx, etc.) documenting that the Notice of Intent was submitted at least 14 days prior to the commencement of land disturbing or waste disposal on the site. Compliance with the State General Permit is required from the time land disturbance begins at the site until the site is properly closed and meets all conditions of final stabilization in accordance with the State General Permit. The NOI Form can be downloaded from the EPD website at:
http://www.gaepd.org/files_DOC/forms/wpb/noi_pp
2) For small inert landfill sites that will disturb less than 1 acre during their active life, the owner or operator may submit a signed and notarized letter certifying that less than 1 acre will be disturbed during the active life of the inert landfill. The owner or operator should be aware that disturbing 1 acre or more of land without proper coverage under State General Permit No. GAR100001 is a violation of Georgia's Water Quality Control Act.

→ If this notification is for a transfer station, on-site processing or thermal treatment or wastewater treatment or thermal treatment plant sludge disposal operations the following item must be attached to the notification form:

- c. A street or highway map indicating location of site or facility.

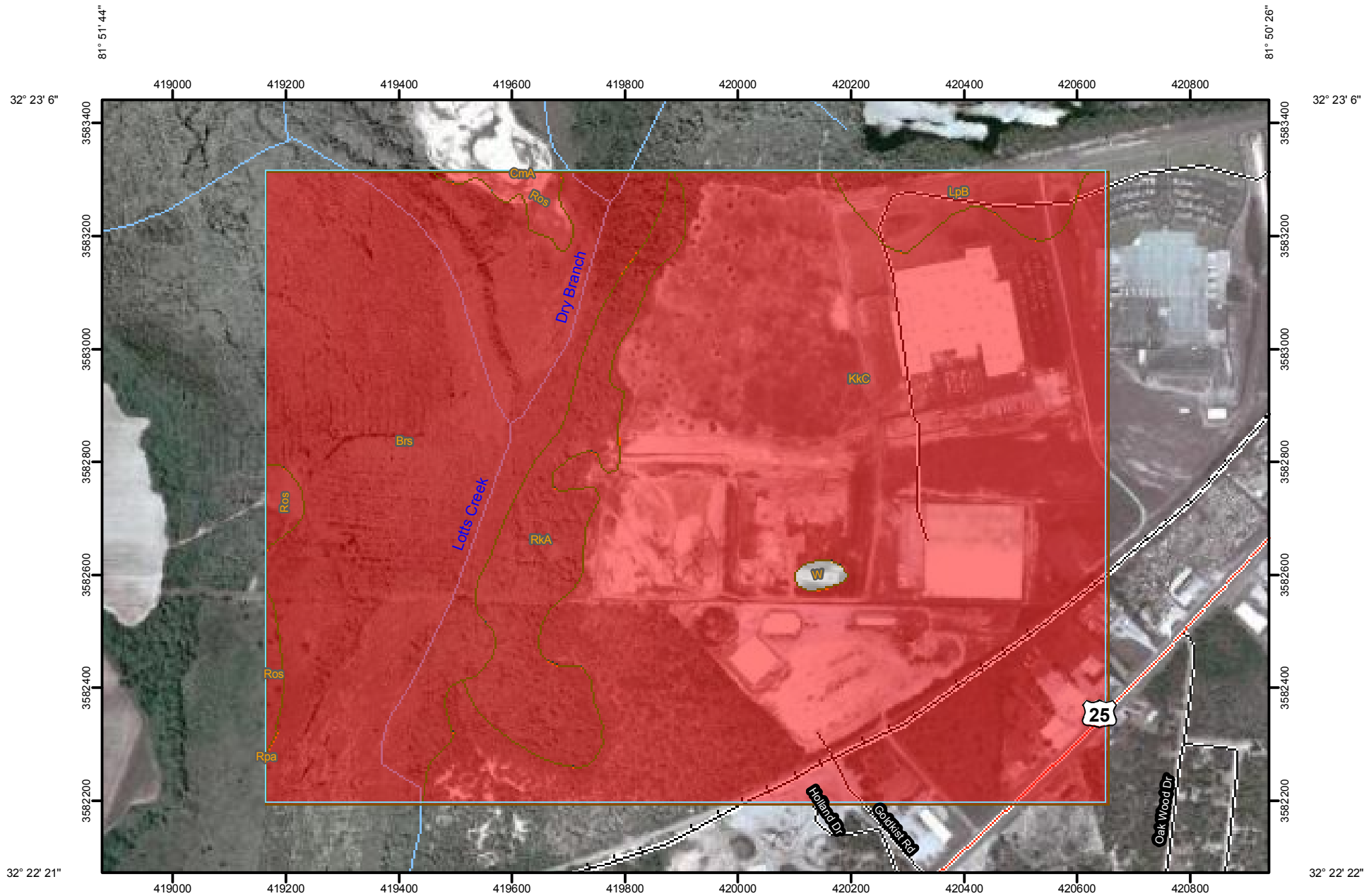
NOTE

INCOMPLETE NOTIFICATIONS WILL BE RETURNED. OPERATIONS MUST MEET THE CONDITIONS IN PARAGRAPH (2) AND THE CONDITIONS IN PARAGRAPH (3) OF SECTION .06 OF THE RULES FOR SOLID WASTE MANAGEMENT IN ORDER TO OPERATE UNDER THE PERMIT BY RULE PROVISION.

Attachment B

Attachment C

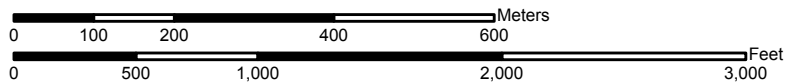
Rubble and Debris Disposal, Large-Scale Event—Bulloch County, Georgia
(Denise Wilson Burnsed Proposed Inert Landfill)



81° 51' 44"




Map Scale: 1:9,800 if printed on A size (8.5" x 11") sheet.



81° 50' 25"

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Soil Ratings

 Severely limited

 Somewhat limited


 Not limited

 Not rated or not available

Political Features

 Cities

Water Features

 Oceans

 Streams and Canals


Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

MAP INFORMATION

Map Scale: 1:9,800 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 17N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bulloch County, Georgia
Survey Area Data: Version 6, Mar 13, 2009

Date(s) aerial images were photographed: 7/24/2007

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Rubble and Debris Disposal, Large-Scale Event

Rubble and Debris Disposal, Large-Scale Event— Summary by Map Unit — Bulloch County, Georgia						
Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
Brs	Bladen and Rains soils and swamp	Severely limited	Bladen (40%)	Flooding (1.00)	125.0	30.4%
				Wetness (1.00)		
				Seepage, bottom layer (1.00)		
				Water gathering (0.33)		
				Clay content (0.27)		
			Rains (40%)	Flooding (1.00)		
				Wetness (1.00)		
				Water gathering (0.33)		
				Adsorption (0.18)		
				Cutbanks cave (0.01)		
			Swamp (20%)	Flooding (1.00)		
				Wetness (1.00)		
				Water gathering (0.33)		
Cutbanks cave (0.01)						
CmA	Chipley sand, 0 to 2 percent slopes	Severely limited	Chipley (100%)	Wetness (1.00)	0.0	0.0%
				Seepage, bottom layer (1.00)		
				Too sandy (1.00)		
				Cutbanks cave (1.00)		
KkC	Kershaw coarse sand, 2 to 8 percent slopes	Severely limited	Kershaw (100%)	Seepage, bottom layer (1.00)	241.1	58.6%
				Too sandy (1.00)		
				Water gathering (0.13)		
				Cutbanks cave (0.01)		
LpB	Lakeland sand, 0 to 5 percent slopes	Severely limited	Lakeland (100%)	Seepage, bottom layer (1.00)	10.4	2.5%
				Too sandy (1.00)		
				Cutbanks cave (1.00)		

Rubble and Debris Disposal, Large-Scale Event— Summary by Map Unit — Bulloch County, Georgia						
Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
RkA	Rutlege sand	Severely limited	Rutlege (100%)	Flooding (1.00)	27.7	6.7%
				Wetness (1.00)		
				Ponding (1.00)		
				Water gathering (0.50)		
				Cutbanks cave (0.01)		
Ros	Rains sandy loam	Severely limited	Rains (100%)	Wetness (1.00)	6.5	1.6%
				Water gathering (0.17)		
				Adsorption (0.01)		
				Cutbanks cave (0.01)		
Rpa	Rutlege and Portsmouth soils and alluvial land	Severely limited	Rutlege (40%)	Flooding (1.00)	0.0	0.0%
				Wetness (1.00)		
				Ponding (1.00)		
				Seepage, bottom layer (1.00)		
				Water gathering (0.50)		
			Portsmouth (35%)	Flooding (1.00)		
				Wetness (1.00)		
				Ponding (1.00)		
				Water gathering (0.33)		
				Cutbanks cave (0.01)		
			Alluvial land (25%)	Flooding (1.00)		
				Wetness (1.00)		
				Seepage, bottom layer (1.00)		
				Too sandy (1.00)		
				Cutbanks cave (1.00)		
W	Water	Not rated	Water (100%)		0.9	0.2%
Totals for Area of Interest					411.7	100.0%

Rubble and Debris Disposal, Large-Scale Event— Summary by Rating Value		
Rating	Acres in AOI	Percent of AOI
Severely limited	410.8	99.8%
Null or Not Rated	0.9	0.2%
Totals for Area of Interest	411.7	100.0%

Description

Burial of rubble and debris in an expeditiously constructed landfill is a method of disposing of material that has been rendered unsafe and unusable by the effects of a large-scale disaster, either natural or man-made, often affecting tens of counties or parishes. Many homes and business structures are rendered unfit for occupancy, either by destruction or contamination. Such a landfill involves excavating a large pit or trench, placing the rubble and debris in the trench, and covering each layer with a blanket of soil material. A final blanket of cover material is placed over the whole facility when completed.

This interpretation shows the degree and kind of limitations that affect a soil's use for such a landfill. The soil is evaluated from the surface to 79 inches. An on-site investigation to greater depth will be needed for final site acceptance. The ratings are based on the soil properties that affect attenuation of suspended, soil solution, and gaseous decomposition products and microorganisms; construction and maintenance of the site; and public health. Improper site selection, design, or installation may cause contamination of ground water, seepage, and contamination of stream systems from surface drainage or floodwater.

Properties that influence the risk of pollution, ease of excavation, trafficability, and revegetation are major considerations. Soils that flood or have a water table within the depth of excavation present a potential pollution hazard and are difficult to excavate. Soils that have high saturated hydraulic conductivity (Ksat) or are shallow to bedrock, ice, a cemented pan, or stones and boulders are limited because these features interfere with the installation, performance, and maintenance of the system. Slope is an important consideration because it affects the work involved in road construction, the performance of the roads, and the control of surface water around the excavation. It may also cause difficulty in constructing trenches for which the trench or pit bottom must be kept level and oriented to follow the ground contour.

The ease with which the trench or pit is dug and with which a soil can be used as daily and final covers is based largely on texture and consistence of the soil which affect the workability of the soil both when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and difficult to place as a uniformly thick cover over a layer of rubble or debris. The uppermost part of the final cover should be soil material that is favorable for the growth of plants. It should not contain excess sodium or salt and should not be too acid. In comparison with other horizons, the A horizon in most soils has the best workability and the highest content of organic matter. Thus, for a rubble and debris disposal operation it may be desirable to stockpile the surface layer for use in the final blanketing of the filled area.

The ratings are both verbal and numerical. Numerical ratings indicate the severity of the individual limitations. The ratings are shown in decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low

maintenance can be expected of a properly designed and installed system on these soils. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Severely limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Rating Options

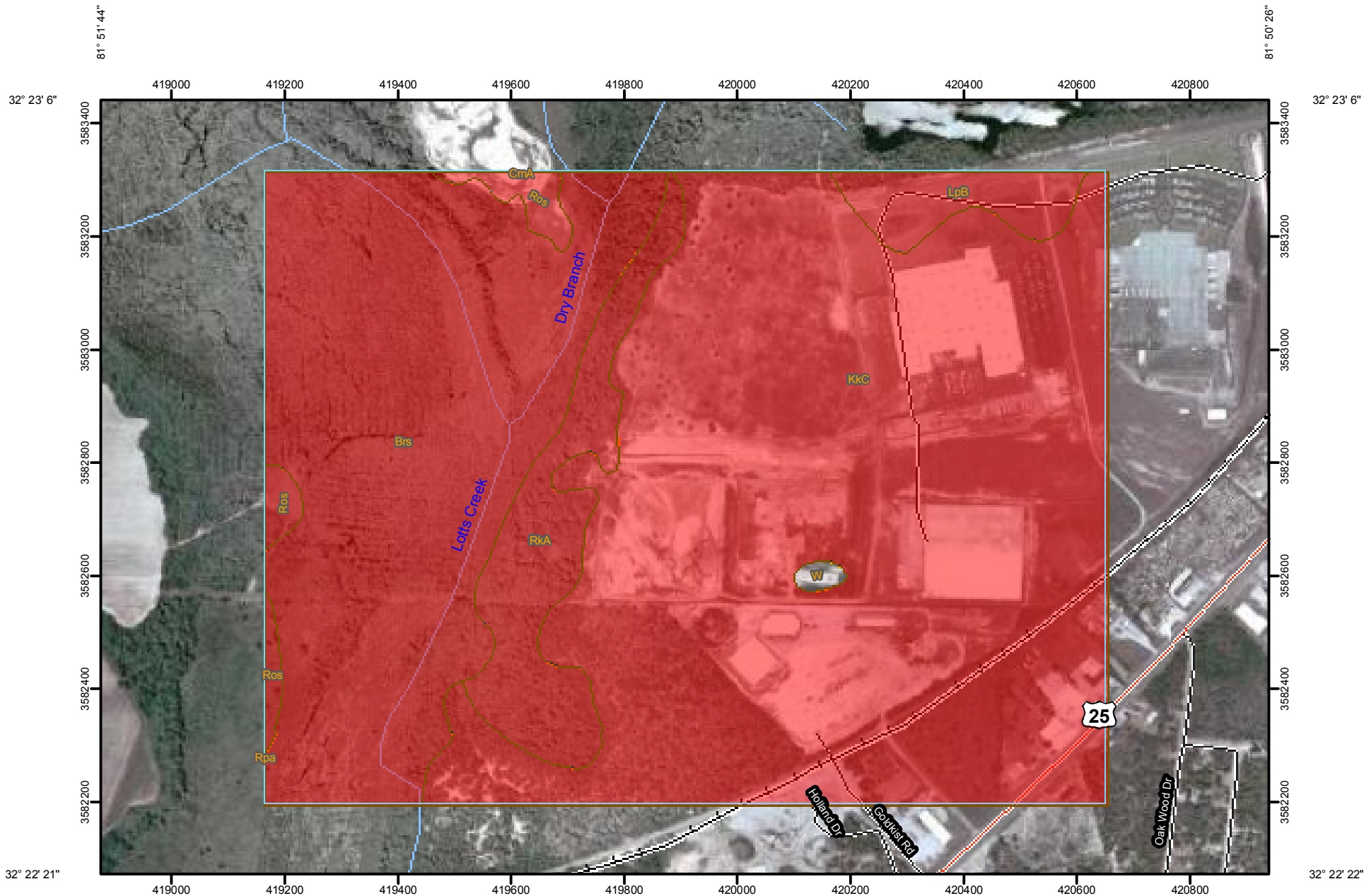
Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Attachment D

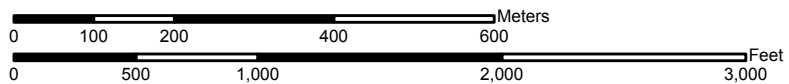
Composting Facility - Subsurface—Bulloch County, Georgia
(Denise Wilson Burnsed Proposed Inert Landfill)



81° 51' 44"




Map Scale: 1:9,800 if printed on A size (8.5" x 11") sheet.



81° 50' 25"

MAP LEGEND

Area of Interest (AOI)


 Area of Interest (AOI)


Soils


 Soil Map Units

Soil Ratings

 Very limited

 Somewhat limited

 Not limited


 not rated or not available

Political Features

 Cities


Water Features

 Oceans

 Streams and Canals


Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

MAP INFORMATION

Map Scale: 1:9,800 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 17N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bulloch County, Georgia
Survey Area Data: Version 6, Mar 13, 2009

Date(s) aerial images were photographed: 7/24/2007

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Composting Facility - Subsurface

Composting Facility - Subsurface— Summary by Map Unit — Bulloch County, Georgia						
Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
Brs	Bladen and Rains soils and swamp	Very limited	Bladen (40%)	Seepage, bottom layer (1.00)	125.0	30.4%
				Flooding (1.00)		
				Wetness (1.00)		
				Water gathering (0.33)		
				Cutbanks cave (0.01)		
			Rains (40%)	Flooding (1.00)		
				Wetness (1.00)		
				Water gathering (0.33)		
				Adsorption (0.18)		
				Cutbanks cave (0.01)		
			Swamp (20%)	Flooding (1.00)		
				Wetness (1.00)		
				Water gathering (0.33)		
				Cutbanks cave (0.01)		
				Low precipitation (0.01)		
CmA	Chipley sand, 0 to 2 percent slopes	Very limited	Chipley (100%)	Seepage, bottom layer (1.00)	0.0	0.0%
				Wetness (1.00)		
				Cutbanks cave (1.00)		
				Low precipitation (0.01)		
KkC	Kershaw coarse sand, 2 to 8 percent slopes	Very limited	Kershaw (100%)	Seepage, bottom layer (1.00)	241.1	58.6%
				Water gathering (0.13)		
				Cutbanks cave (0.01)		
				Low precipitation (0.01)		
LpB	Lakeland sand, 0 to 5 percent slopes	Very limited	Lakeland (100%)	Seepage, bottom layer (1.00)	10.4	2.5%
				Cutbanks cave (1.00)		
				Low precipitation (0.01)		
RkA	Rutlege sand	Very limited	Rutlege (100%)	Ponding (1.00)	27.7	6.7%
				Flooding (1.00)		
				Wetness (1.00)		
				Water gathering (0.50)		
				Cutbanks cave (0.01)		

Composting Facility - Subsurface— Summary by Map Unit — Bulloch County, Georgia						
Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
Ros	Rains sandy loam	Very limited	Rains (100%)	Wetness (1.00)	6.5	1.6%
				Water gathering (0.17)		
				Adsorption (0.01)		
				Cutbanks cave (0.01)		
				Low precipitation (0.01)		
Rpa	Rutlege and Portsmouth soils and alluvial land	Very limited	Rutlege (40%)	Seepage, bottom layer (1.00)	0.0	0.0%
				Ponding (1.00)		
				Flooding (1.00)		
				Wetness (1.00)		
				Water gathering (0.50)		
			Portsmouth (35%)	Ponding (1.00)		
				Flooding (1.00)		
				Wetness (1.00)		
				Water gathering (0.33)		
				Cutbanks cave (0.01)		
			Alluvial land (25%)	Seepage, bottom layer (1.00)		
				Flooding (1.00)		
				Wetness (1.00)		
				Cutbanks cave (1.00)		
				Water gathering (0.33)		
W	Water	Not rated	Water (100%)		0.9	0.2%
Totals for Area of Interest					411.7	100.0%

Composting Facility - Subsurface— Summary by Rating Value		
Rating	Acres in AOI	Percent of AOI
Very limited	410.8	99.8%
Null or Not Rated	0.9	0.2%
Totals for Area of Interest	411.7	100.0%

Description

Composting is a method of using natural processes to change vegetative debris into a useful product. This interpretation shows the degree and kind of limitations that affect the siting of a subsurface composting facility to stabilize vegetative debris produced as a result of a major disaster.

The soil is evaluated from the surface to a depth of 79 inches. The ratings are based on the soil properties that affect attenuation of suspended, soil solution, and gaseous decomposition products and microorganisms, construction and maintenance of the site, and public health. Improper site selection, design, or installation may cause contamination of ground water, seepage, and contamination of stream systems from surface drainage or floodwater.

Properties that influence the risk of pollution, ease of excavation, trafficability, and revegetation are major considerations. Soils that flood or have a water table within the depth of excavation present a potential pollution hazard and are difficult to excavate. Soils that have high saturated hydraulic conductivity (Ksat) are shallow to bedrock, ice, or a cemented pan, or have a high content of stones and boulders are limited because these features interfere with the installation, performance, and maintenance of the system. Slope is an important consideration because it affects the work involved in road construction, the performance of the roads, and the control of surface water around the excavation. It may also cause difficulty in constructing trenches which must be kept level and oriented to follow the ground contour.

Climatic factors influence the ease with which a composting facility can be maintained. Adequate precipitation to keep the mass moist, and sufficient heat to sustain biological activity are essential.

The ratings are both verbal and numerical. Numerical ratings indicate the severity of the individual limitations. The ratings are shown in decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected of a properly designed and installed system on these soils. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

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of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher