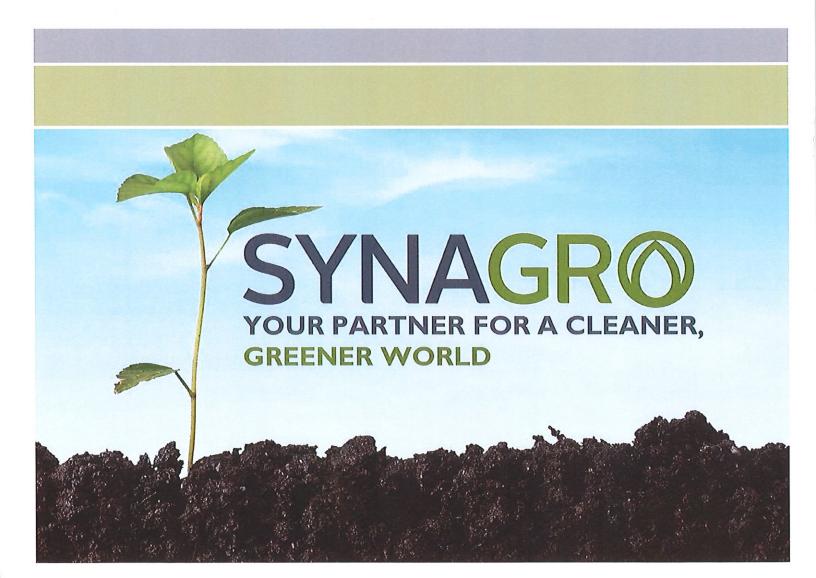
LAND APPLICATION OF BIOSOLIDS ROBERT GAWEN

WE 07 (FIELD 24) WESTMORELAND COUNTY, VIRGINIA APRIL 2022





APRIL 29, 2022

Mr. Neil Zahradka Department of Environmental Quality Piedmont Regional Office 4949-A Cox Road Glen Allen, VA 23060

Dear Mr. Zahradka,

Transmitted herein for your consideration is land application site for Robert Gawen (designated as WE 07, field 24), located in Westmoreland County, Virginia. This submission contains strictly site specific information. Please refer to the operations and maintenance manual submitted under separate cover for all non-site specific information.

Do not hesitate to contact me at (804) 443-2170 should you have any questions or require additional information.

Sincerely,

Wayne T. Webb Jr.

Technical Services Manager



FIELD SUMMARY SHEET

Robert Gawen

WE 07

SYNAGRO FIELD #	GROSS ACRES		FSA TRACT #	FIELD TYPE	OWNER
07-24	138.1	138.1		Agriculture	Donald O & Brittany D Gawen
TOTALS:	138.1	138.1			5/6/2022



A Residuals Manager	tent Company
VIRGINIA REQUEST AND CO	NSENT FOR BIOSOLIDS
FARM OPERATOR: Robert Gawen	PHONE: (804) 761-0232
	PHONE: (804) 761-0232 auge VA 22469
FARM LOCATION: IN Jostman Pland, Va	
FSA TRACT #:	4
TOTAL ACRES: / 2-5 COUNTY:	Jestmoreland
CROPS: Com	
CROPS	
1. I agree to be responsible for adhering to the following cond	
 The soil pH will be adjusted ≥6.0 when biosolids are ap of lime-treated biosolids). 	plied. (This may be accomplished through the application
	application of biosolids. In addition, animals intended for
dairy production should not be allowed to graze on the	
application of biosolids. Meat-producing livestock should	d not be fed chopped foliage for 30 days after the
application of biosolids.	a day and a ball with a sumface of the land shall we the
 Food crops for direct human consumption with harvested harvested for 14 months after the application of biosolic 	
d. Food crops for direct human consumption with harveste	
harvested for 20 months after the application of biosolic	
months prior to incorporation into the soil or 38 months	when the biosolids remain on the land surface < 4 months
prior to incorporation.	
e. Food crops, feed crops and fiber crops shall not be har	
	osure (land the public uses infrequently including but not d for 30 days after application of biosolids. Public access
to land with a high potential for public exposure (land th	
public contact site such as parks, playgrounds and golf	
	site for 30 days following the biosolids application unless
adequate provisions are made to prevent public exposu	
	t be harvested for one year after application of biosolids
when the harvested turf is placed on either land with a	high potential for public exposure or a lawn, unless
otherwise specified by the permitting authority. h. Supplemental commercial fertilizer or manure application	ons should be coordinated with the biosolids applications
such that the total crop needs fro nutrients are not exce	
	partment of Conservation and Recreation to be supplied to
the farm operator by Synagro at the time of application	
	dmium, should not be grown for three years following the
application of biosolids-borne cadmium equal to or exce	
2. I understand that this transaction is not contemplated by the	
provide to me without charge the service of land applying bios regulatory agencies for land application.	collds which have been approved by the appropriate
3. I understand that successful crop production depends on ma	any variables, such as weather, soil conditions and
specific farming practices and that while Synagro has experience	
properly accommodating agricultural practices to biosolids utiliz	ation are solely mine. I have also read and understand the
"Important Information About Using Biosolids as a Fertilizer" wh	ich is on the reverse side and incorporated by reference in
this Request and Consent.	

OPERATOR'S SIGNATURE a

3/10/14 DATE

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Synagro * 10647 Tidewater Trail * Champlain, VA 22438 * 804.443.2170

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2.

WHITE: Regional Office

Biosolids Generation

Biosolids are the accumulated, treated solids separated from water during the treatment of wastewater by public and private wastewater treatment plants (Generators). The Generator is responsible for supplying biosolids that are suitable for land application under state and federal regulations.

Benefits of Biosolids

Biosolids provide nitrogen in a form that can be taken up by plants during their growth cycle. Biosolids also add phosphorus to the soil. If time is added to biosolids, the biosolids will have the added benefit of a liming agent. Biosolids contain primary, secondary and micronutrients that can be used by plants. Biosolids are primarily an organic material; when added to soil, they improve water and nutrient retention, reduce erosion potential and improve soil structure.

The Permitting Process

Once the farm operator requests biosolids, a Synagro representative initially evaluates the farm for truck access and field conditions. If the farm is found to be suitable and the Request for Biosolids and the Consent for Biosolids forms are signed, Synagro will collect soil samples and have them analyzed by an independent laboratory.

Synagro will then apply for any federal, state or local permits required for blosolids application. The permits will specifically identify the fields to which blosolids will be applied and will be issued to Synagro or the Generator.

After the permits are obtained (a process that may take several months or more) Synagro will apply biosolids, as they become available, to the fields. Availability of biosolids may vary because of weather conditions, contractual arrangements with biosolids generators and other factors. Although the company cannot guarantee biosolids application because of factors beyond its control, Synagro will use its best efforts to apply biosolids to the permitted fields.

The conditions outlined in the permit will apply to any and all biosolids applications made by Synagro. Synagro will not e responsible for biosolids application made by any other entity.

Periodic visits to the land application site(s) by federal, state and local regulatory staff and Synagro representatives may occur for the purpose of permitting the site, inspecting the site, applying biosolids, obtaining samples at the site and testing. Proper identification will be provided upon request.

Agronomic Considerations

Tractor-traller units are used to deliver biosolids to the fields approved for biosolids applications. Soil compaction may occur on the travel areas used by the trucks and in areas where biosolids are unloaded for transfer to the applicator vehicle.

Since some biosolids contain lime, it is important to recognize any increase in soil pH where biosolids have been applied and exercise care in using certain herbicides. If considering the use of a sulfonylurea herbicide, particular attention should be paid to any label restrictions. High soil pH and dry weather may slow decomposition of these chemicals, resulting in carryover. For soils with low manganese levels, increased soil pH from lime addition (alone or in lime treated biosolids) may reduce manganese availability and thereby potentially reduce crop yields.

In planning a herbicide program, it should be noted that seeds may sometimes survive the biosolids treatment process – for example, tomato seeds. Also, the organic matter additions from biosolids application (organic matter tends to tie up certain herbicides) may require increased herbicide application rates. Consult your extension agent or chemical representative for a specific recommendation.

Biosolids contain salts. Biosolids applications alone rarely cause salt problems. However, if combined with other significant salt-increasing factors, such as drought, excessive soil compaction, saline irrigation water and salt-contain fertilizers, salts may reach levels that could negatively affect germination and growth of some crops.

While odors from biosolids applications are not usually significant, and typically less than that from livestock manure, it is possible that an odor from the decomposition of organic matter may be noticed. It this occurs, it generally disappears in a short time.

Since biosolids provide nitrogen that will be released slowly throughout the growing season with diminishing carryover in subsequent years, it is important to reduce the use of nitrogen and other fertilizers to appropriate levels.

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on <u>S/10/2022</u> between <u>Donald O & Brittany D Gawen</u> referred to here as "Landowner", and <u>Synagro Central, LLC</u>, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

The Landowner is the owner of record of the real property located in Westmoreland _____, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) with county documentation identifying owners, attached as Exhibit A.

	Tax Daraol ID	Tax Parcel ID	Tax Parcel ID
Tax Parcel ID	Tax Parcel ID		
47-63			

Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

0

N

The Landowner is the sole owner of the properties identified herein.

The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

- 1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later
 - than the date of the property transfer; and Notify the Permittee of the sale within two weeks following property transfer.

2. The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the determining compliance with regulatory requirements applicable to such application.

Class B biosolids X Yes □ No	Water trea X Yes	atment residua	<u>s Food proce</u> X Yes	essing waste □ No	X Yes	<u>strial sludges</u> □ No
Printed name Donald O & Brittany I By: Donald O Gawen Title* *□ I certify that I have *□ I certify that I am a proprietorship, LLC	authority to	sign for the lan official (or offic	er] authorized to act off	61-5671 my title as execute	or, Trustee or Po	wer of attorney, etc.

Synusio Cunfral, LLC, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with \$10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and ecifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

Printed name Hunter Davis.	Mailing Address: 1681 Tappahannock Blvd, Tappahannock, VA 22560	Signature
	Phone No. 443-2170	Auntr Var

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

County or City: Westmoreland Permittee: SYNAGRO CENTRAL LLC

Landowner: <u>Donald O & Brittany D Gawen</u>

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

- 1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
- Public Access 2.
- a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure C. or a lawn, unless otherwise specified by DEQ.
- Crop Restrictions: 3.
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to C.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to e. lactating dairy animals).
- Livestock Access Restrictions: 4.

Following biosolids application to pasture or hayland sites:

- a. Meat producing livestock shall not be grazed for 30 days,
- Lactating dairy animals shall not be grazed for a minimum of 60 days. b.
- Other animals shall be restricted from grazing for 30 days; C.
- Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the 5. nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
- 6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

andowner's Signature

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

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Landowner:

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Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
47-63			

Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

D

X

The Landowner is the sole owner of the properties identified herein.

The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

- Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
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	er treatment residuals		essing waste		strial sludges
X Yes 🗆 No X Ye	es 🗆 No	X Yes	🗆 No	X Yes	□ No
Printed name	Mailing	Address 946	3 Coplettu	Landowner S	Signature
Donald O & Brittany D Gaw By: Brittany D Gawen			53 Coplettu Z469	Rut	land Man
Title* Owner	Phone N	10. 804-76	01-6345	p	00 0
* I certify that I have authority to sign for the landowner as indicated by my title as executor, Trustee or Power of attorney, etc.					
 I certify that I am a responsible official (or officer) authorized to act on behalf of the following corporation, partnership, proprietorship, LLC, municipality, state or federal agency, etc. 					

Permittee:

Standard Contral, LLC, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

Printed name	Mailing Address: 1681 Tappahannock	Permittee- Authorized Representative
Hunter Davis.	Blvd, Tappahannock, VA 22560	Signature
Title Technical Services Specialist	Phone No. 443-2170	Aunt Da-3

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: SYNAGRO CENTRAL LLC County or City: Westmoreland

Landowner: Donald O & Brittany D Gawen

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I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

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 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
- 3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
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 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
- 4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

- a. Meat producing livestock shall not be grazed for 30 days,
- b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
- c. Other animals shall be restricted from grazing for 30 days;
- 5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
- Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Landowner's Signature

8/10/22 Date

TAX ID LANDOWNER IDENTIFICATION SHEET

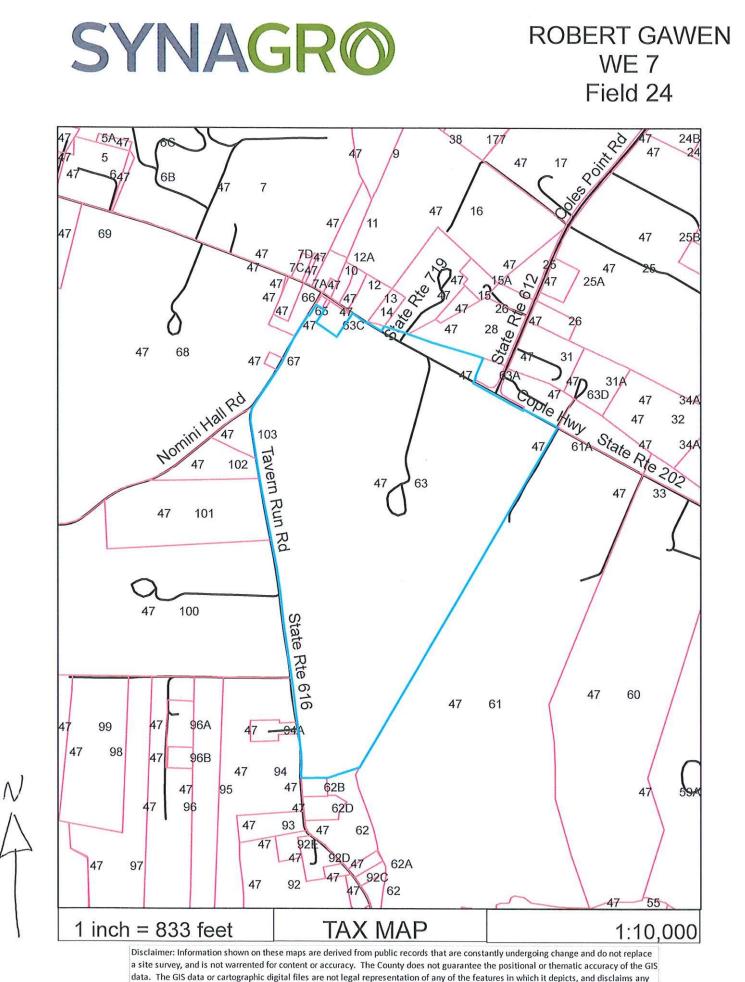
Landowner	Field Number	Tax ID
Donald O & Brittany D Gawen	07-24	47-63

Field Number	Latitude (North)	Longitude (West)
07-24	38.067°	-76.650°

*Latitude and Longitude are a random point determined by ArcView program

Haul Route:

The Location maps in conjunction with the above latitude and longitude coordinates are a route planning tool meant to be a guide to indicate suggested haul routes for various preferences: to include but not limited to all federal, state, and local granted STAA access routes.



assumption of the legal status of which it represents.

Rev. 5/29/24

ENVIRONMENTALLY SENSITIVE AREAS

FieldReason for Sensitive Area41-01High Leaching Potential (Map Units 17E - 2.6%)

Westmoreland County Soils that are Environmentally Sensitive

Soil Map Unit	Series Name	Time of year		Environmental
		High Water	Flooded	Environmental
2	Bibb	Dec-April	Dec-April	Drainage
3	Bohicket	Jan-Dec	Jan-Dec	
4	Bojac			Leaching
5B	Catpoint			Leaching
8	Leaf	Dec-April		
9	Lenoir	Dec-May		
10	Lumbee	Nov-April		Drainage
11A, 11B	Montross	Dec-April		
15	Rappahannock	Jan-Dec	Jan-Dec	Drainage
16B, 17E, 18D	Rumford			Leaching

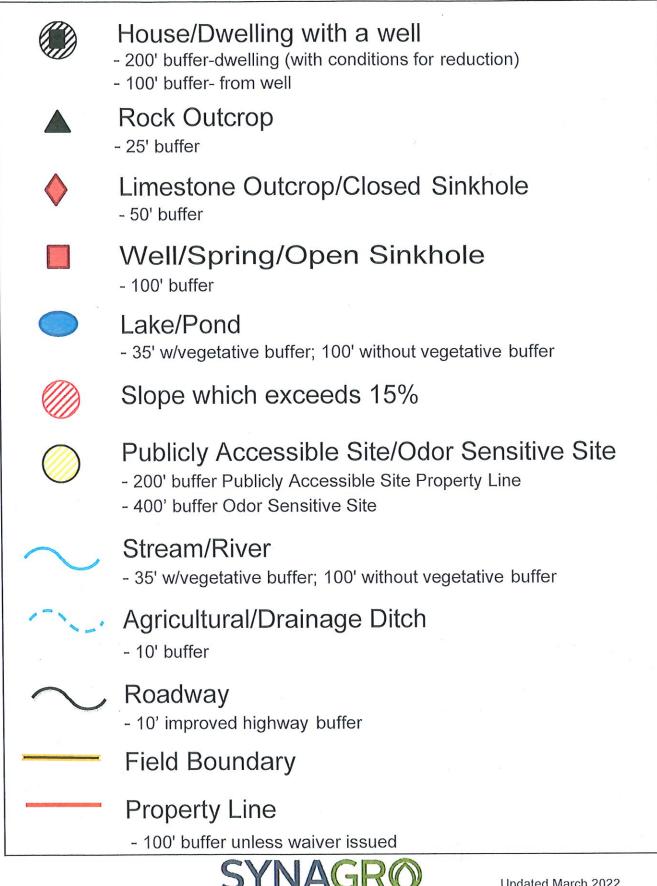
Synagro Central, LLC

Lab

Farm Summary Report

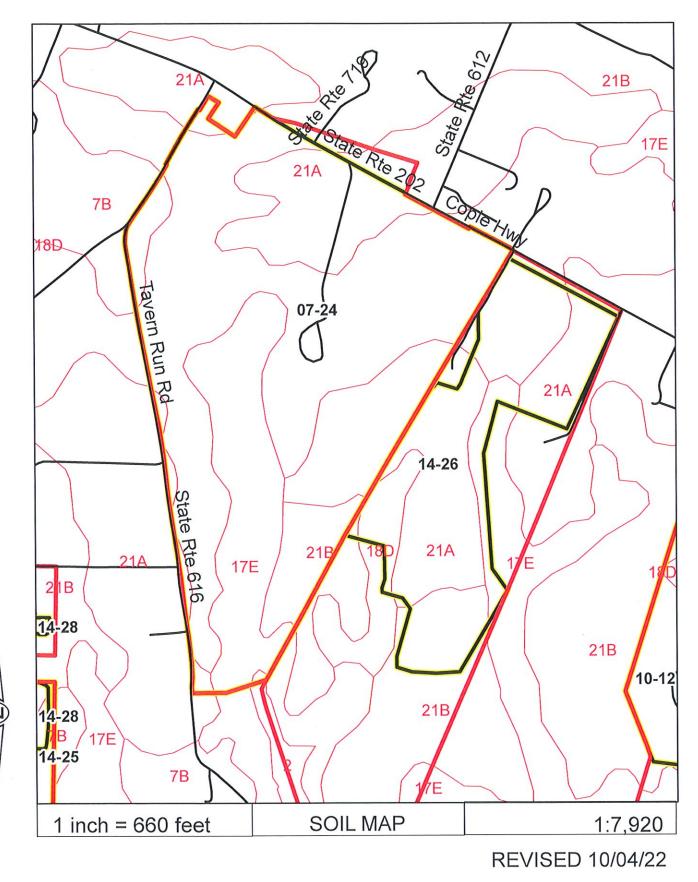
Winter, 2022 - Winter, 2032 Plan: New Plan Farm Name: **WE07** Location: Westmoreland Hunter Davis Specialist: N-based Acres: 138.0 P-based Acres: 0.0 Tract Name: WE7 FSA Number: 0 Location: Westmoreland Field Name: 24 138.00 Usable Acres: 138.00 Total Acres: FSA Number: 0 WE7 Tract: Location: Westmoreland Slope Class: С Hydrologic Group: В Riparian buffer width: 0 ft Distance to stream: 0 ft P-Index Summary N-based Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method Soil Test Results: K P PH DATE [NO TEST] Soils: SOIL SERIES SYMBOL PERCENT Kempsville 2 7B Rumford 18 17E 24 21A Suffolk 21B Suffolk 57 Field Warnings: Environmentally Sensitive Soils due to: Soils with potential for leaching based on soil texture or excessive drainage Soils with perent slope in excess of 15% Crop Rotation: YIELD **CROP NAME** PLANTED

Map Legend

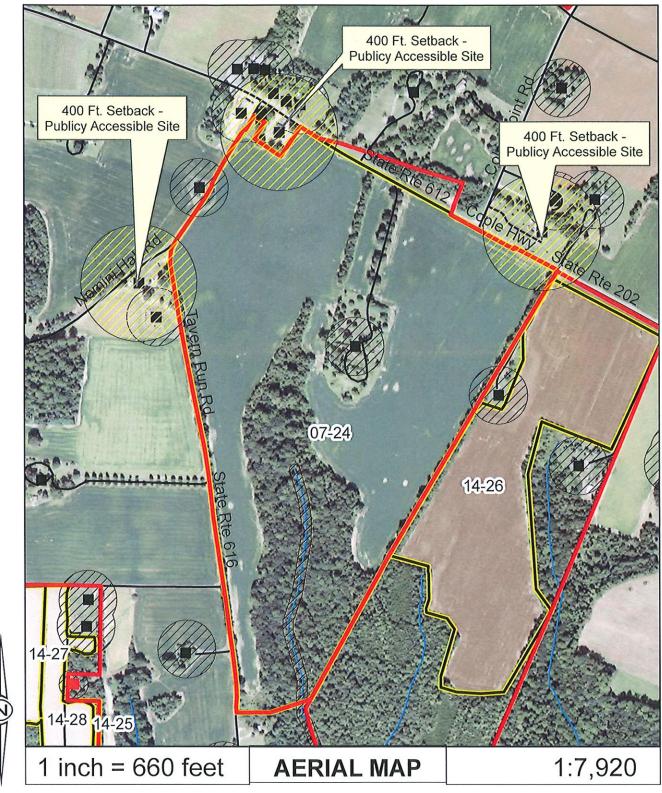


Updated March 2022

Robert Gawen WE 07 Field 24



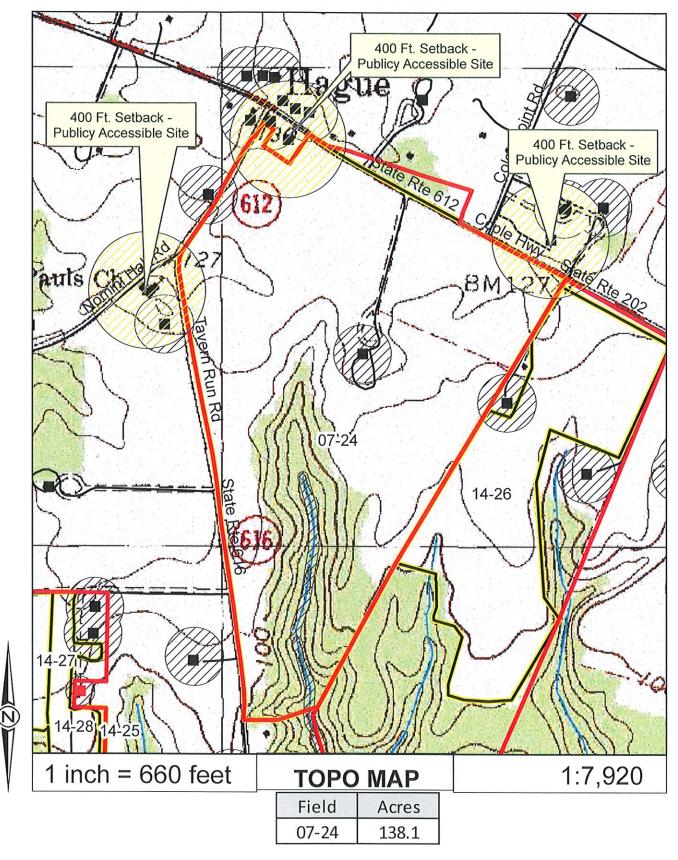
Robert Gawen WE 7 Field 24



Publicy Accessbile Site Setback

Revised 6/15/2023

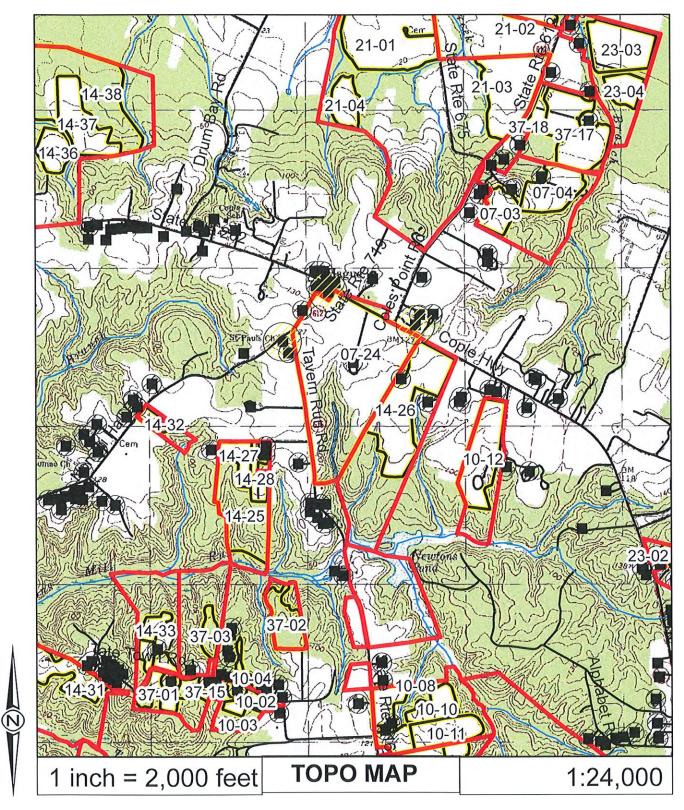
Robert Gawen WE 7 Field 24



Publicy Accessbile Site Setback

Revised 6/15/2023

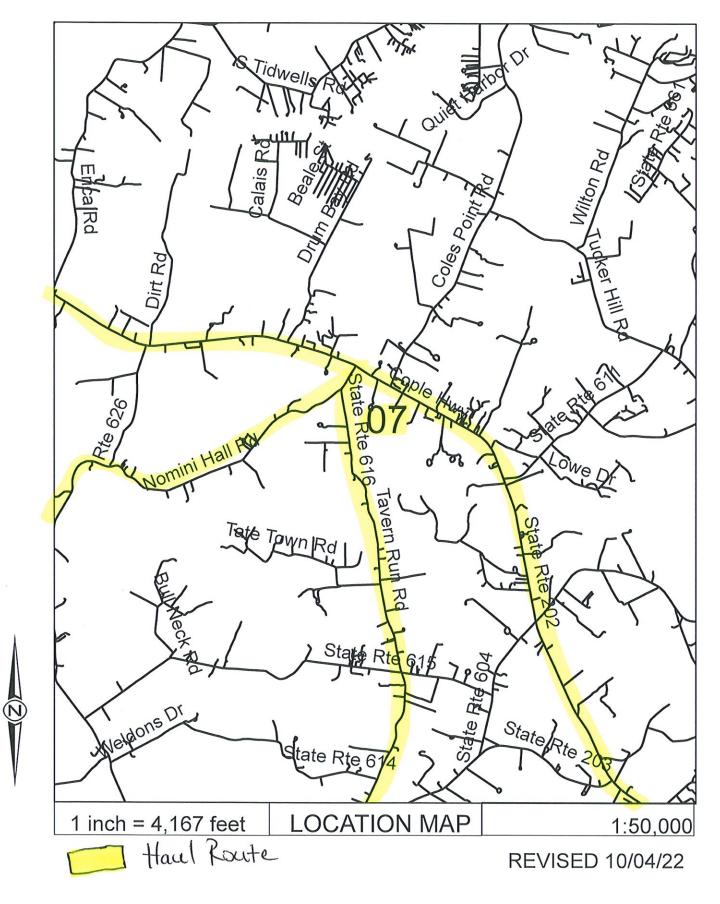
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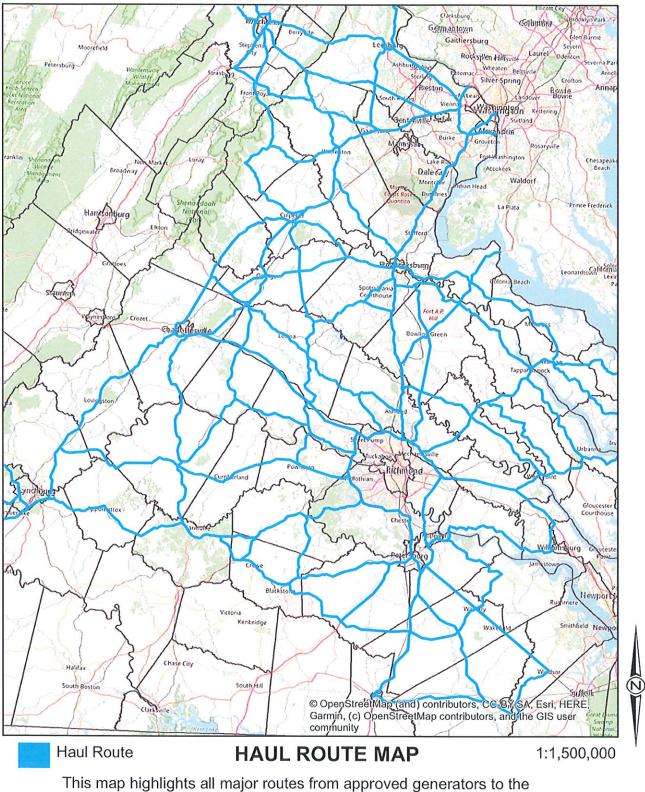


Revised 6/15/2023



Robert Gawen WE 07 Field 24





locations of permitted sites. The Highlighted routes on the Location Map will pinpoint routes closer to the site.