



United States  
Department of  
Agriculture

## Accomack County, Virginia

*Antch*



**Farm 2112**  
**Tract 5289**

**2023 Program Year**

Map Created June 27, 2023

### Wetland Determination Identifiers

- Restricted Use
- ▼ Limited Restrictions
- Exempt from Conservation Compliance Provisions

Tract Cropland Total: 15.30 acres  
*10.47 10.83*

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).





United States  
Department of  
Agriculture

Accomack County, Virginia

Hutch



Farm 2112  
Tract 5263

2023 Program Year

Map Created June 27, 2023

#### Wetland Determination Identifiers

- Restricted Use
- ▼ Limited Restrictions
- Exempt from Conservation  
Compliance Provisions

Tract Cropland Total: 33.20 acres

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28.74





**Legend**

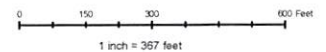
- |                       |                                 |
|-----------------------|---------------------------------|
| Road 10 Ft Buffer     | Streams                         |
| Ag Ditch 10 ft Buffer | Occupied Dwellings              |
| Application Area      | 200 ft Occupied Dwelling Buffer |
| 50 ft Property Buffer | Roads                           |
| Parcel                |                                 |
| 35 ft Stream Buffer   |                                 |
| Ag Ditch              |                                 |

**Farm: 2112**  
**Tract: 5289, 5263**

*Hutch*

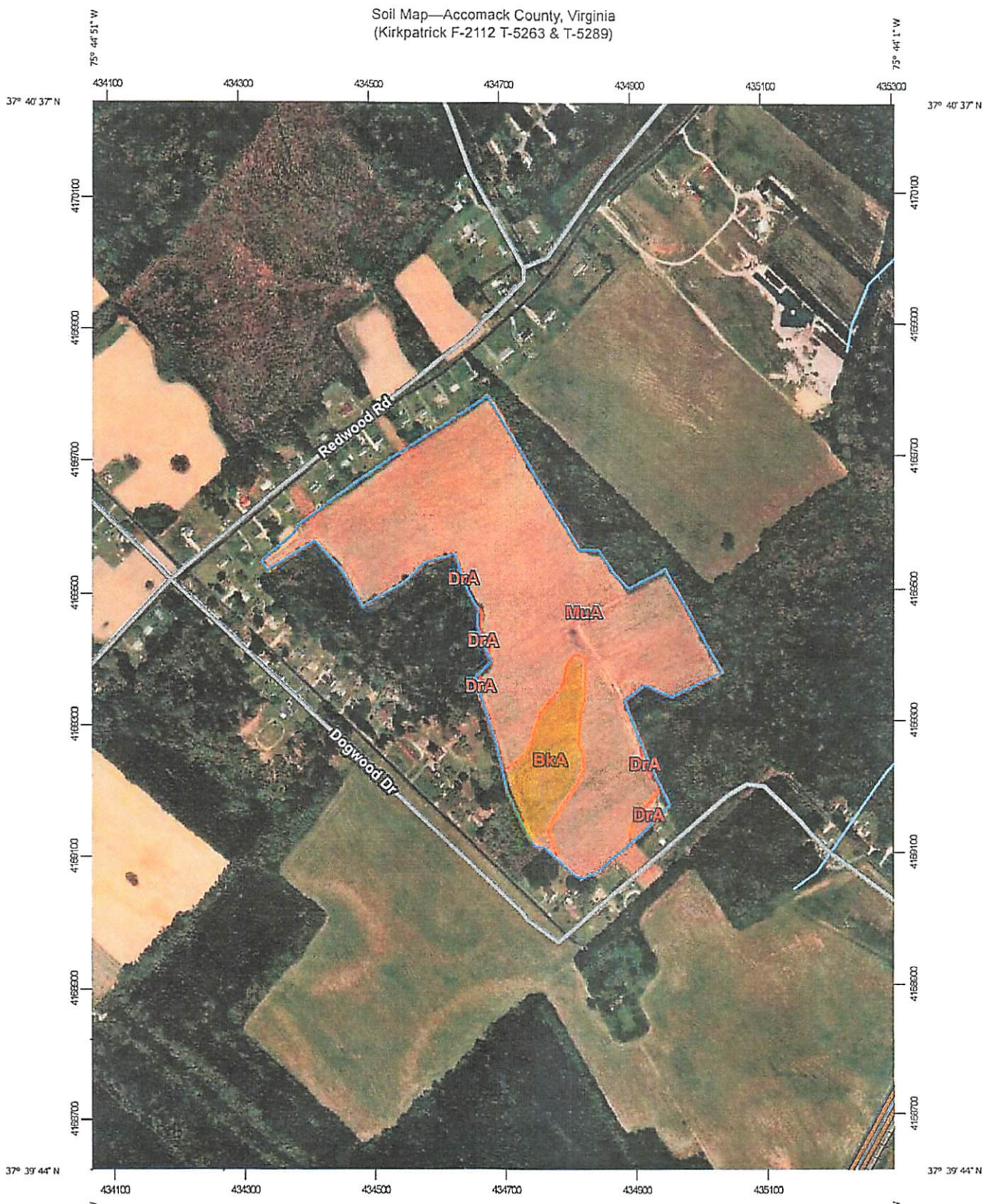
**Total Field Acres:**  
Field 1: 15.3  
Field 1: 33.2

**Total Application Acres:**  
Field 1: 10.88  
Field 1: 29.74





Soil Map—Accomack County, Virginia  
(Kirkpatrick F-2112 T-5263 & T-5289)



Map Scale: 1:7,920 if printed on A portrait (8.5" x 11") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

*Environmentally Sensitive*

Soil Map—Accomack County, Virginia  
(Kirkpatrick F-2112 T-5263 & T-5289)

## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)


### Soils


 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit


 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water


 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole


 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

### Water Features

 Streams and Canals

### Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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

Soil Survey Area: Accomack County, Virginia

Survey Area Data: Version 16, Jun 3, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Sep 24, 2017

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.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BkA	Bojac sandy loam, 0 to 2 percent slopes	4.6	9.9%
DrA	Dragston fine sandy loam, 0 to 2 percent slopes	0.7	1.6%
MuA	Munden sandy loam, 0 to 2 percent slopes	41.2	88.5%
Totals for Area of Interest		46.6	100.0%

## Map Unit Description (Brief, Generated)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, provide information on the composition of map units and properties of their components.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

## Report—Map Unit Description (Brief, Generated)

### Accomack County, Virginia

**Map Unit:** BkA—Bojac sandy loam, 0 to 2 percent slopes

**Component:** Bojac (90%)

The Bojac component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on terraces on coastal plains. The parent material consists of marine sediments. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 60 inches during January, February, March, April, November, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria.



**Map Unit: DrA—Dragston fine sandy loam, 0 to 2 percent slopes****Component: Dragston (90%)**

The Dragston component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on terraces on coastal plains. The parent material consists of marine sediments. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March, April, November, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

**Component: Arapahoe (3%)**

Generated brief soil descriptions are created for major soil components. The Arapahoe soil is a minor component.

**Map Unit: MuA—Munden sandy loam, 0 to 2 percent slopes****Component: Munden (90%)**

The Munden component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on terraces on coastal plains. The parent material consists of marine sediments. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

**Component: Nimmo (6%)**

Generated brief soil descriptions are created for major soil components. The Nimmo soil is a minor component.

**Data Source Information**


Soil Survey Area: Accomack County, Virginia  
Survey Area Data: Version 16, Jun 3, 2020



Legend

Tax Parcel #/Owner:

93-5-A and 93-5-B:

 Kelvin Pettit

93-5-B7:

 Robert Hall

Map Printed from AccoMap  
<http://accomack.mapsdirect.net/>

Feet

0 200 400 600 800  
1:9,028 / 1"=752 Feet



Title: Kirkpatrick Pettit/Hall Field 1

F212 T5289 F212 T5263 Date: 9/14/2016

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Accomack is not responsible for its accuracy or how current it may be.



# VPA 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 11/14/2020 between Kelvin + Carolyn Pettit referred to here as "Landowner", and Tyson Foods, 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.

### Landowner:

The Landowner is the owner of record of the real property located in Accomack County, 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.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
<u>93-5-A T 5289</u>			
<u>93-5-B T 5263</u>			

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

Check one: ☒ 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
2. Notify the Permittee of the sale within two weeks following property transfer.

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.

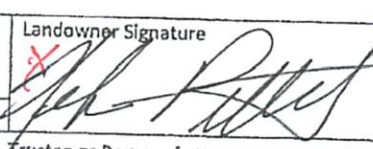
The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application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

Class B biosolids  
☐ Yes ☒ No

Water treatment residuals  
☐ Yes ☒ No

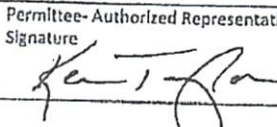
Food processing waste  
☒ Yes ☐ No

Other industrial sludges  
☐ Yes ☒ No

Printer's name By: _____ Title: _____	Mailing Address _____ Phone No. _____	Landowner Signature 
<input type="checkbox"/> I certify that I have authority to sign for the landowner as indicated by my title as Executor, Trustee or Power of attorney, etc. <input checked="" type="checkbox"/> I certify that I am a responsible official (or officer) authorized to act on behalf of the corporation, partnership, proprietorship, LLC, municipality, state or federal agency, etc.		

### Permittee:

Tyson Foods, 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 <u>Kevin Taylor</u>	Mailing Address <u>P.O. Box 8</u> <u>Temperanceville, VA 23442</u>	Permittee-Authorized Representative Signature 
Title <u>Complex Manager</u>	Phone No. <u>257-824-3471</u>	



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

Permittee: Tyson Foods

County or City: Accomack County

Landowner: Kelvin + Carolyn Pettit

**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.
2. Public Access
  - 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.
  - b. 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;
  - 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.
  - 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,
  - 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;
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 (6.5 kilograms/hectare).

X Kelvin A. Pettit  
Landowner's Signature

11/14/2020  
Date

## Landowner Coordination Form

Submission of completed Form D VPA Permit Application Workbook, Tabs 14.a and/or 14.b, supersedes the need to complete this Landowner Coordination Form.

County or City: Accomack County

(Landowner signatures are not required on this page)

[illegible]





United States  
Department of  
Agriculture

## Accomack County, Virginia

Hutch



Farm 3251  
Tract 6339

2023 Program Year

Map Created June 27, 2023

### Wetland Determination Identifiers

- Restricted Use
- ▼ Limited Restrictions
- Exempt from Conservation Compliance Provisions

Tract Cropland Total: 23.10 acres

16.417.68

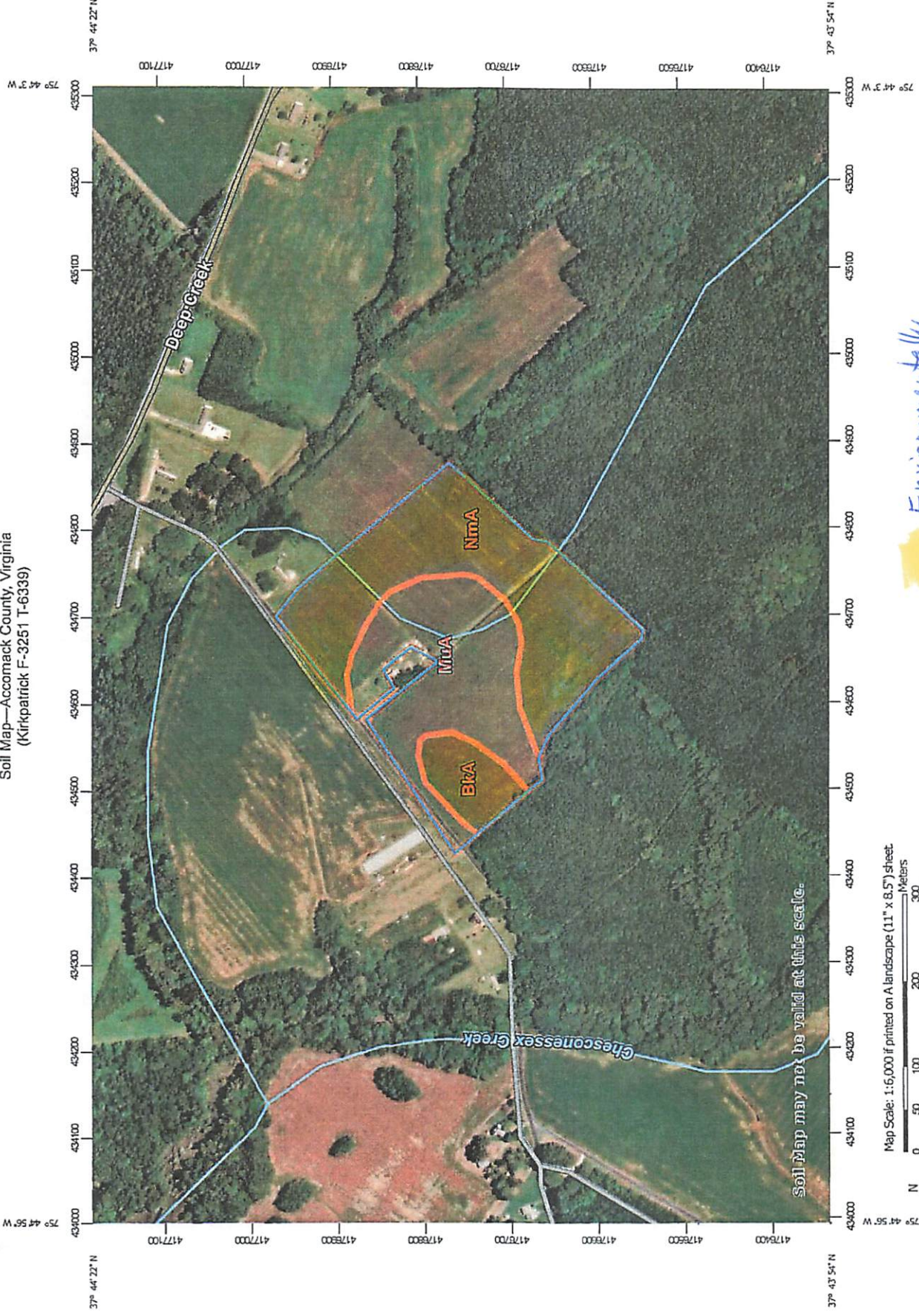
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Soil Map—Accomack County, Virginia  
(Kirkpatrick F-3251 T-6339)



Environmentally  
Sensitive

1972

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[Large block of faint, mostly illegible text in the middle section of the page, separated by a horizontal line.]

[Faint, mostly illegible text in the lower middle section of the page.]


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Soil Map—Accomack County, Virginia  
(Kirkpatrick F-3251 T-6339)


## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)


### Soils

 Soil Map Unit Polygons


 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features

 Blowout


 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp


 Mine or Quarry


 Miscellaneous Water


 Perennial Water

 Rock Outcrop

 Saline Spot


 Sandy Spot

 Severely Eroded Spot


 Sinkhole

 Slide or Slip

 Sodic Spot


 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

### Water Features

 Streams and Canals


### Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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Survey Area Data: Version 16, Jun 3, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Sep 24, 2017

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.





1. The first step in the process of the investigation is the identification of the problem. This is done by the investigator who is assigned to the case. The investigator will then gather information about the problem and the people involved. This information will be used to develop a plan of action.

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

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1. The first group of people who are not in the military are the people who are not in the military. This group of people is the largest group of people who are not in the military. This group of people is the largest group of people who are not in the military.

1. The first step is to identify the problem. This involves understanding the current situation and what needs to be changed.

2. The second step is to set goals. These should be specific, measurable, achievable, relevant, and time-bound.

3. The third step is to develop a plan. This involves identifying the resources needed and the steps to be taken.

4. The fourth step is to implement the plan. This involves putting the plan into action and monitoring progress.

5. The fifth step is to evaluate the results. This involves comparing the actual results with the goals and making adjustments as needed.

1. The first part of the document is a list of references. The references are listed in two columns. The first column contains references 1 through 10, and the second column contains references 11 through 20. The references are as follows:

1. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>19</b> , 1 (1967).	11. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>20</b> , 1 (1968).
2. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>21</b> , 1 (1969).	12. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>22</b> , 1 (1970).
3. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>23</b> , 1 (1971).	13. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>24</b> , 1 (1972).
4. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>25</b> , 1 (1973).	14. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>26</b> , 1 (1974).
5. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>27</b> , 1 (1975).	15. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>28</b> , 1 (1976).
6. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>29</b> , 1 (1977).	16. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>30</b> , 1 (1978).
7. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>31</b> , 1 (1979).	17. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>32</b> , 1 (1980).
8. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>33</b> , 1 (1981).	18. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>34</b> , 1 (1982).
9. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>35</b> , 1 (1983).	19. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>36</b> , 1 (1984).
10. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>37</b> , 1 (1985).	20. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>38</b> , 1 (1986).

2. The second part of the document is a list of references. The references are listed in two columns. The first column contains references 21 through 30, and the second column contains references 31 through 40. The references are as follows:

21. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>39</b> , 1 (1987).	31. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>41</b> , 1 (1989).
22. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>40</b> , 1 (1988).	32. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>42</b> , 1 (1990).
23. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>43</b> , 1 (1991).	33. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>44</b> , 1 (1992).
24. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>45</b> , 1 (1993).	34. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>46</b> , 1 (1994).
25. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>47</b> , 1 (1995).	35. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>48</b> , 1 (1996).
26. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>49</b> , 1 (1997).	36. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>50</b> , 1 (1998).
27. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>51</b> , 1 (1999).	37. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>52</b> , 1 (2000).
28. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>53</b> , 1 (2001).	38. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>54</b> , 1 (2002).
29. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>55</b> , 1 (2003).	39. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>56</b> , 1 (2004).
30. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>57</b> , 1 (2005).	40. J. H. D. Eklund, <i>Acta Polytechnica Scandinavica</i> , <b>58</b> , 1 (2006).

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THE

[illegible]

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

1. The first group of people who are interested in the results of the study are the researchers themselves. They want to know if the study was successful in achieving its goals and if the data collected is reliable and valid. They also want to know if the study has contributed to the field of research and if it has any practical implications.

100-443887-100

Geometric mean = 18.75, standard deviation = 10.75



## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres In AOI	Percent of AOI
BkA	Bojac sandy loam, 0 to 2 percent slopes	2.1	9.1%
MuA	Munden sandy loam, 0 to 2 percent slopes	9.0	38.5%
NmA	Nimmo sandy loam, 0 to 2 percent slopes	12.2	52.4%
<b>Totals for Area of Interest</b>		<b>23.4</b>	<b>100.0%</b>







## Map Unit Description (Brief, Generated)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, provide information on the composition of map units and properties of their components.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

## Report—Map Unit Description (Brief, Generated)

### Accomack County, Virginia

**Map Unit:** BkA—Bojac sandy loam, 0 to 2 percent slopes

**Component:** Bojac (90%)

The Bojac component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on terraces on coastal plains. The parent material consists of marine sediments. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 60 inches during January, February, March, April, November, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria.



**Map Unit: MuA—Munden sandy loam, 0 to 2 percent slopes****Component: Munden (90%)**

The Munden component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on terraces on coastal plains. The parent material consists of marine sediments. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

**Component: Nimmo (6%)**

Generated brief soil descriptions are created for major soil components. The Nimmo soil is a minor component.

**Map Unit: NmA—Nimmo sandy loam, 0 to 2 percent slopes****Component: Nimmo (85%)**

The Nimmo component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on terraces on coastal plains. The parent material consists of marine sediments. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria.

**Component: Polawana (2%)**

Generated brief soil descriptions are created for major soil components. The Polawana soil is a minor component.

**Data Source Information**

Soil Survey Area: Accomack County, Virginia  
Survey Area Data: Version 16, Jun 3, 2020



1. The first part of the document is a letter from the President of the United States to the Congress, dated January 1, 1862. It is a very long letter, and it contains a great deal of information about the state of the country at that time. It is a very important document, and it is one of the most important documents in the history of the United States.

*[Faint, illegible handwritten notes]*

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 1, 1861. It is a very important document, as it sets out the President's policy for the new year. The President states that he is pleased to see the Congress assembled, and that he is confident that the country is in a good position to meet the challenges of the future. He also mentions the recent election of Abraham Lincoln as President, and expresses his confidence in Lincoln's ability to lead the country.

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 3, 1862. It is a message of condolence to the people of the State of California, who have been afflicted by a severe drought and famine. The President expresses his sympathy for the suffering people and offers them his prayers for relief.

2. The second part of the document is a report from the Secretary of the Interior, dated January 3, 1862. It contains information about the progress of the survey of the public lands in California, and the results of the survey. The report also contains information about the land claims of the State of California, and the progress of the survey of the public lands in the State.

3. The third part of the document is a report from the Secretary of the Interior, dated January 3, 1862. It contains information about the progress of the survey of the public lands in California, and the results of the survey. The report also contains information about the land claims of the State of California, and the progress of the survey of the public lands in the State.

4. The fourth part of the document is a report from the Secretary of the Interior, dated January 3, 1862. It contains information about the progress of the survey of the public lands in California, and the results of the survey. The report also contains information about the land claims of the State of California, and the progress of the survey of the public lands in the State.

5. The fifth part of the document is a report from the Secretary of the Interior, dated January 3, 1862. It contains information about the progress of the survey of the public lands in California, and the results of the survey. The report also contains information about the land claims of the State of California, and the progress of the survey of the public lands in the State.

6. The sixth part of the document is a report from the Secretary of the Interior, dated January 3, 1862. It contains information about the progress of the survey of the public lands in California, and the results of the survey. The report also contains information about the land claims of the State of California, and the progress of the survey of the public lands in the State.

7. The seventh part of the document is a report from the Secretary of the Interior, dated January 3, 1862. It contains information about the progress of the survey of the public lands in California, and the results of the survey. The report also contains information about the land claims of the State of California, and the progress of the survey of the public lands in the State.

8. The eighth part of the document is a report from the Secretary of the Interior, dated January 3, 1862. It contains information about the progress of the survey of the public lands in California, and the results of the survey. The report also contains information about the land claims of the State of California, and the progress of the survey of the public lands in the State.

9. The ninth part of the document is a report from the Secretary of the Interior, dated January 3, 1862. It contains information about the progress of the survey of the public lands in California, and the results of the survey. The report also contains information about the land claims of the State of California, and the progress of the survey of the public lands in the State.

10. The tenth part of the document is a report from the Secretary of the Interior, dated January 3, 1862. It contains information about the progress of the survey of the public lands in California, and the results of the survey. The report also contains information about the land claims of the State of California, and the progress of the survey of the public lands in the State.

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SECRET

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED  
DATE 08-19-2006 BY 60322 UCBAW/SJS/KSP

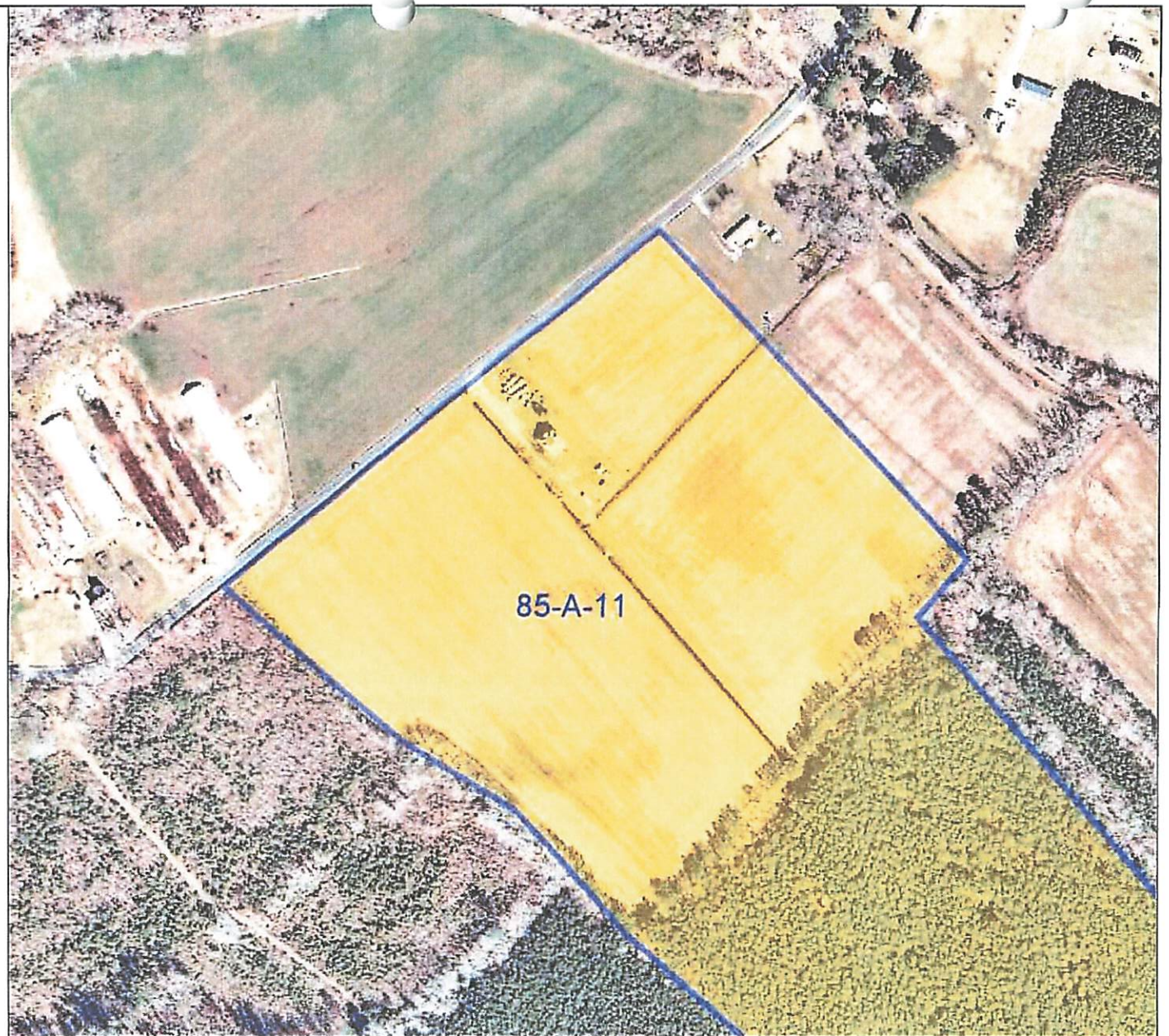
1



## Legend

Tax parcel #/Owner:

85-A-11: Sisters 1 LLC



Map Printed from AccoMap  
<http://accomack.mapsdirect.net/>

Feet

0 100 200 300 400  
1:4,514 / 1"=376 Feet

Title: Kirkpatrick Kirkpatric Field 2

F3251 T-6339

Date: 9/14/2016

*DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Accomack is not responsible for its accuracy or how current it may be.*

~~CONFIDENTIAL~~ - TO BE RELEASED TO THE PUBLIC WHEN IT IS DETERMINED THAT DISCLOSURE OF THIS INFORMATION WOULD NOT BE IN THE NATIONAL DEFENSE.

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

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*[Faint handwritten notes at the bottom of the page]*

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the situation.

1. The first step in the process of the investigation is the identification of the problem. This is done by the investigator who is responsible for the study. The investigator must first identify the problem that is being studied. This is done by the investigator who is responsible for the study. The investigator must first identify the problem that is being studied.

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1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

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1955-1956

ENCLOSURE OF THE ABOVE-REFERENCED LETTER.

~~CONFIDENTIAL~~

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# VPA 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 10/14/2020 between Sisters 1 LLC referred to here as "Landowner", and Tyson Foods 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.

### Landowner:

The Landowner is the owner of record of the real property located in Accomack County, 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.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
<u>85-A-11</u>			

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

Check one: ☒ 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
2. Notify the Permittee of the sale within two weeks following property transfer.

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 purpose of determining compliance with regulatory requirements applicable to such application.

Class B biosolids ☐ Yes ☒ No      Water treatment residuals ☐ Yes ☒ No      Food processing waste ☒ Yes ☐ No      Other industrial sludges ☐ Yes ☒ No

Printed name <u>J.S. Kirkpatrick</u>	Mailing Address <u>22529 Lankford Hwy</u>	Landowner Signature <u>[Signature]</u>
By: <u>owner</u>	Accomack, VA <u>23351</u>	
Title <u>owner</u>	Phone No. <u>757-270-2866</u>	
* <input type="checkbox"/> I certify that I have authority to sign for the landowner as indicated by my title as Executor, Trustee or Power of attorney, etc.		
* <input checked="" type="checkbox"/> I certify that I am a responsible official [or officer] authorized to act on behalf of the corporation, partnership, proprietorship, LLC, municipality, state or federal agency, etc.		

### Permittee:

Tyson Foods, 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 <u>Kevin Taylor</u>	Mailing Address <u>P.O. Box 8</u>	Permittee- Authorized Representative Signature <u>[Signature]</u>
Title <u>Complex Manager</u>	Temporanceville, VA <u>23442</u>	
	Phone No. <u>757-824-3471</u>	



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

Permittee: Tyson Foods

County or City: Accomack County

Landowner: Sisters 1 LLC

**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.
2. Public Access
  - 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.
  - b. 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;
  - 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.
  - 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,
  - 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:

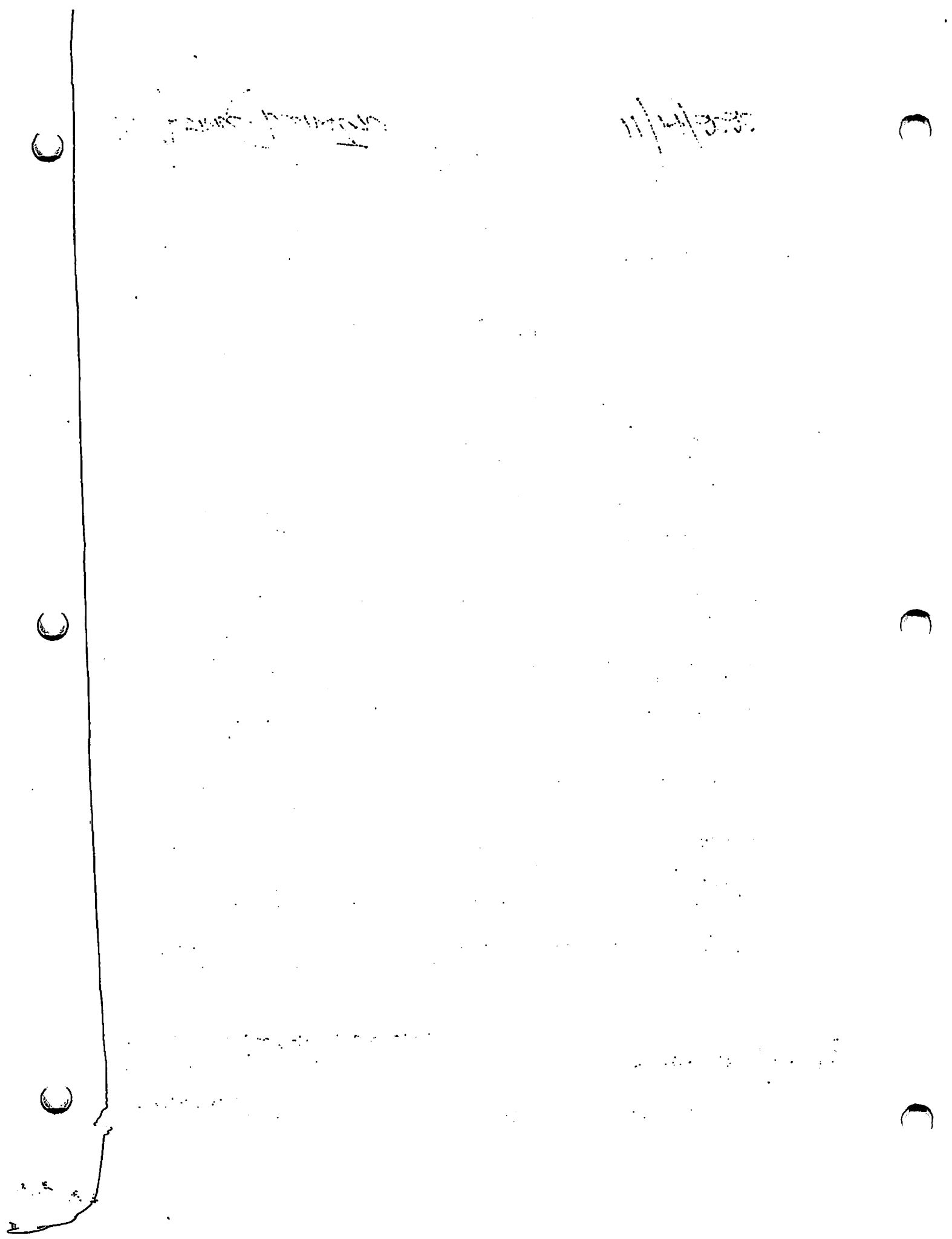
  - a. Meat producing livestock shall not be grazed for 30 days,
  - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
  - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids 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;
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).

Sisters 1 LLC - J. J. R. K.  
Landowner's Signature

10-14-20  
Date

11/4/53

11/4/53





## Landowner Coordination Form

Submission of completed Form D VPA Permit Application Workbook, Tabs 14.a and/or 14.b, supersedes the need to complete this Landowner Coordination Form.

County or City: Accomack

(Landowner signatures are not required on this page)

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