# Storm Water Pollution Prevention Plan For

Kyle Murdock and Nathan Musser 8-11-2017

### Description:

This plan is for 4.5 acres of a 35 acre row crop field for the evacuation of three (3) pits 105 feet by 205 feet for the construction of three (3) 2480 head hog barns and the surrounding area to store removed soil. The drainage will flow 988 feet through field and woods before entering Walnut fork Creek. After excavation three (3) 100 ft. by 200 ft hog barns will be built. When the barns are finished the area will be graded to no more than 2% and sown in grasses. The soil is expected to be silt loam, which presents dissolved solid problems in the runoff. Fabric fencing and the groundcover will provide control of this problem.

First all silt fencing will be put into place, once control measures are in place the pits will be excavated and the concrete will be poured.

After the concrete is finished dirt will be moved back around the walls for final grading before being stabilized and sown in grass.

The SWPPP and NOC will be located at the entrance to the worksite.

There are no other industrial discharges on site.

No chemicals or other waste materials will be stored on site.

There will be no onsite waste disposal or septic system

There is no off site material storage

All areas will be stabilized after dirt work has stopped temporarily or permanently for more than 14 days

Preexisting vegetative ground cover will not be disturbed more than 14 days prior to earth disturbance.

Endangered species should not be affected due to the fact that there is no likely presence of threatened or endangered species in a one mile radius and no threatened or endangered species downstream. There are no exceptional waters that this site could impact.

### **Runoff Problems:**

Fabric fencing will be placed within 50 feet of the work area before the evacuation work begins. This fencing will be placed along the South, West, and East slopes of the work site. An on demand inventory system will be used and will prevent the development of an onsite runoff problem from storage areas. An existing field road off Hwy 69 will the access to the site.

A parking area will be built with rock and gravel. Most traffic limited to dry times because of weight problems. Construction equipment will be on site until work is completed then moved to other work sites which will limit off site tracking of soils, all other traffic will be personal cars of workers and expected to park on graveled areas.

The area will be sloped 1% to provide drainage and eliminate the need to dewater. Drainage from the work area will become sheet runoff and follow the path of site runoff through the fabric fence and groundcover.



Water accumulated in excavated pits will be removed through field tile to be released inside the site's sediment control structures.

All liter debris and chemicals will be removed and placed in secure locations before any anticipated storm event.

Sediments that have migrated off site will be removed to minimize impact to surface waters.

### Stuctures:

Fabric fencing will be placed in a 4 inch trench 6 inches wide, 3 inches of the fabric will be placed on the trench floor and the trench backfilled and tamped to insure stability, post will then be placed at 6 foot intervals and the fabric attached. Existing groundcover below the fabric fence will be left in place.

All accumulated sediments will be removed by hand if and when they reach 50% capacity of the silt fencing before the next rainfall event and before no longer than 7 days.

All repairs to sediment control structures will be carried out before the next rainfall event and before no longer than 7 days.

Permittee is responsible for implementation and upkeep of control measures

Any fill dirt used in the project will be coming from on site

### Post Construction Storm Water Control:

When completed there will be two 100 feet by 200 feet hog barns. After final grading all remaining disturbed areas adjacent to the barns will be sown in grasses and the drip line of the building will be rocked with 1.5 inch or larger stone to control erosion. All areas within the site where soil is taken from to build up the pad will be sown in grasses when the work is finished. There should be no net change in the quality of runoff from the site.

Using the Rational Method the Runoff Coefficient is:

Q=Cia

C: 0.28

i: 0.156 inch/hour

a: 4.5

Q = 0.19656 ft3/s (cfs)

Soil removed during construction that was stockpiled on site will be redistributed around d the barns

## Inspections:

Inspections will be conducted twice weekly by Danny Ham on Mondays and Thursdays then after any rainfall that produces runoff. Onsite workers will be instructed by the owner-developer to remove any accumulated soils whenever they present a danger of collapsing the fence and make repairs if there is any damage.

### **Revisions:**

Any revisions to this plan will be incorporated as needed. If material changes are made to structures or barn design copies will be forwarded to the Jackson FO of the TN DWPC.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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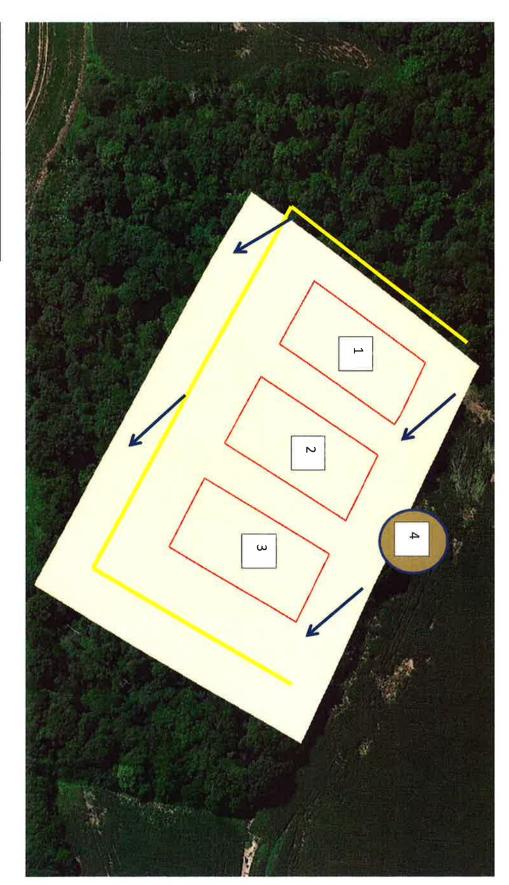
8/14/2017

Sign

Date

"I certify under penalty of law that I have reviewed this document, any attachments and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above and/or my inquiry of the person directly responsible for assembling this NOI and SWPPP, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities onsite are there by regulated. I am aware that there are significant penalties, including the possibility of fine and imprisonment for knowing violations and for failure to comply with these permit requirements."

| noth Mune | 8/14/2017 |  |  |
|-----------|-----------|--|--|
| Sign      | Date      |  |  |



1 = Barn#1 4 = Soil Stock Pile
2 = Barn #2
3 = Barn #3
= Flow of Water
= Fabric Fence

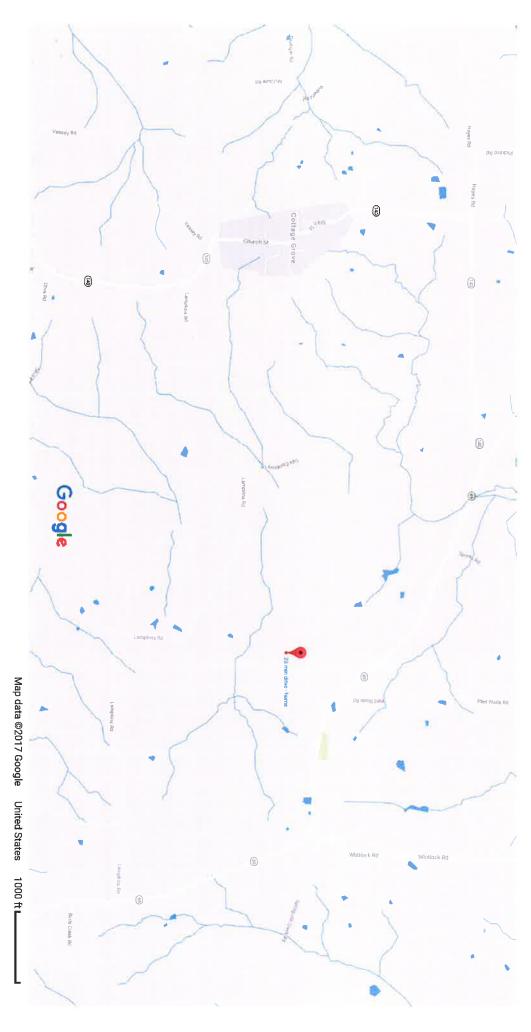
.35 Acres water flow onto site

0' 100' 200'

.



# Google Maps 36°22'43.3"N 88°26'24.7"W





### TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Pollution Control 6<sup>th</sup> Floor Annex, L&C Tower, 401 Church Street, Nashville, Tennessee 37243 1-888-891-8332 (TDEC)

### Notice of Intent (NOI) for General NPDES Permit for Stormwater Discharges from Construction Activities (TNR100000)

| Site or Project Name:  | K and N Farms  |   |  | NPDES Tracking                              | Number: TN                        | R   |
|--|--|---|--|---|-----------------------------------|---|
| Street Address or  | Hwy 69 South Cottage Grove,  | TN 38224  |  | Start date:                                 |                                   | 10/01/2017                                    |
| Location:  |  |   |  | Estimated end dat                           |                                   | 9/30/2018                                     |
| Site   | Construction of Hog Barns  |   |  | Latitude (dd.dddd                           |                                   | 36.378700                                     |
| Description:   |  |   |  | Longitude (dd.dd                            | dd):                              | -88.440200                                    |
| County(ies):   | Henry  | MS4 Jurisdiction:                                       | f  | Acres Disturbed:                            |                                   | 4.5   |
|  |  | Jurisaletion.   |  | Total Acres:                                |                                   | 35  |
|  | ow dotted or solid blue lines  |   | on or adjacent to th                               | e construction site?                        | •                                 |   |
|  | site and may be impacted, attach   |   | *  |   |                                   |   |
| If an Aquatic Resource Alt   | eration Permit has been obtained   | d for this site, what is                                | the permit number?                                 | ARAP permit l                               | No.:                              |   |
| Receiving waters:  | Walnut Fork Creek  |   |  |   |                                   |   |
| Attach the SWPPP with the  | e NOI SWI  | PPP Attached  | Attach a site location map                         | Map Attach                                  | ned                               |   |
| Name of Site Owner or D<br>plans and specifications):<br>Kyle Murdock and Nathan                   | eveloper (Site-Wide Permittee<br>Musser  | ): (person, company,                                    | or legal entity that h                             | as operational or de                        | esign control                     | over construction                             |
| Site Owner or Developer C<br>Nathan Musser   | Contact Name: (individual respon   | nsible for site):                                       | Title or Position: (<br>Owner                      | the party who signs                         | s the certificat                  | tion below):                                  |
| Mailing Address:<br>2186 Rayburn Road  |  |   | City:<br>Murray                                    |   | State:<br>KY                      | Zip:<br>42071                                 |
| Phone:   | Fax:   |   | E-mail:  |   | IX I                              | 420/1   |
| ( 270 ) 978-0303   | (  | )   | nathan@m-mirriga                                   | ation.com                                   |                                   |   |
| Optional Contact:  |  |   | Title or Position:                                 |   |                                   |   |
| Danny Ham Mailing Address:   |  |   | Enterprise Risk M City:                            |   | State:                            | Zip:  |
| 1586 Atlantic Ave  |  |   | Henry  | 110   | Tn                                | 38231   |
| Phone:   | Fax:   |   | E-mail:  |   |                                   |   |
| ( 731 ) 693-4631   | ( 731  | ) 243-4860  | dham@toshfarms.                                    | net   |                                   |   |
| Owner or Developer Cert  | ification (must be signed by pro   | esident, vice-president                                 | t or equivalent, or rai                            | nking elected offici                        | al) (Primary l                    | Permittee)                                    |
| qualified personnel properly gresponsible for gathering the in                                     | hat this document and all attachmer<br>ather and evaluate the information s<br>aformation, the information submitt<br>tting false information, including th    | ubmitted. Based on my i<br>ed is, to the best of my k   | nquiry of the person or<br>nowledge and belief, tr | persons who manage<br>ue, accurate, and con | the system, or                    | those persons directly                        |
| Owner or Developer Name  | ; (print or type) Nathan Musser  |   | Signature  | Mary  | Date:                             | 14/2017                                       |
| Contractor(s) Certification  | on (must be signed by president,   | vice-president or equ                                   | ivalent, or ranking e                              | lected official) (Sec                       | condary Perm                      | ittee)  |
| owner/developer identified about am aware that this NOI, if ap                                     | hat I have reviewed this document,<br>ove and/or my inquiry of the person<br>proved, makes the above-described<br>a aware that there are significant per<br>s. | directly responsible for a<br>construction activity sub | assembling this NOI ar<br>pject to NPDES permit    | nd SWPPP, I believe (<br>number TNR100000,  | the information, and that certain | submitted is accurate. n of my activities on- |
| Primary contractor name and address; (print or type) Tosh Pork 1586 Atlantoic Ave. Henry, TN 38231 |  | Signature:  | w) Van Pate:                                       |   | 11/2017                           |   |
| Other contractor name and address; (print or type)   |  | Signature:  | ignature: Dat                                      |   |                                   |   |
| Other contractor name and  | address; (print or type)   |   | Signature:   |   | Date:                             |   |
| OFFICIAL STATE US  | E ONLY   |   |  |   |                                   |   |
| Received Date:   |  | ld Office:  | Permit Number TNR   2   98                         | 1   | Exceptional                       | IN Water:                                     |
| Fee(s): 75,000   | T & E Aquatic Flora and Fauna:   |   | Impaired Receiving Stre                            | eam:  | Notice of Co                      | verage Date:                                  |
| $\alpha\omega$   | Mo   |   | NO   |   |                                   |   |

### Notice of Intent (NOI) for General NPDES Permit for Stormwater Discharges from Construction Activities (TNR100000)

Purpose of this form A completed notice of intent (NOI) must be submitted to obtain coverage under the Tennessee General NPDES Permit for Discharges of Stormwater Associated with Construction Activity (permit). Requesting coverage under this permit means that an applicant has obtained and examined a copy of this permit, and thereby acknowledges applicant's claim of ability to be in compliance with permit terms and conditions. This permit is required for stormwater discharge(s) from construction activities including clearing, grading, filling and excavating (including borrow pits) of one or more acres of land. This form should be submitted at least 30 days prior to the commencement of land disturbing activities, or no later than 48 hours prior to when a new operator assumes operational control over site specifications or commences work at the site.

<u>Permit fee</u> (see table below) must accompany the NOI and is based on total acreage to be disturbed by an entire project, including any associated construction support activities (e.g. equipment staging yards, material storage areas, excavated material disposal areas, borrow or waste sites). There is no fee for sites less than 1 acre.

| Acres Disturbed | = or ≥ 150 acres | = or > 50 < 150 acres | = or $>$ 5 $<$ 50 acres | = or > 1 < 5 acres |
|-----------------|------------------|-----------------------|-------------------------|--------------------|
| Fee             | \$7,500          | \$4,000               | \$1,000                 | \$250              |

Who must submit the NOI form? Per Section 2 of the permit, all site operators must submit an NOI form. "Operator" for the purpose of this permit and in the context of stormwater associated with construction activity means any person associated with a construction project who meets either or both of the following two criteria: (1) The person has operational or design control over construction plans and specifications, including the ability to make modifications to those plans and specifications. This person is typically the owner or developer of the project or a portion of the project (e.g. subsequent builder), or the person that is the current land owner of the construction site. This person is considered the primary permittee; or (2) The person has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions. This person is typically a contractor or a commercial builder who is hired by the primary permittee, and is considered a secondary permittee.

Owners, developers and all contractors that meet the definition of the operator in subsection 2.2 of the permit shall apply for permit coverage on the same NOI, insofar as possible. After permit coverage has been granted to the primary permittee, any subsequent NOI submittals must include the site's previously assigned permit tracking number and the project name. The comprehensive site-specific SWPPP shall be prepared in accordance with the requirements of part 3 of the permit and must be submitted with the NOI unless the NOI being submitted is to only add a contractor (secondary permittee) to an existing coverage.

Notice of Coverage The division will review the NOI for completeness and accuracy and prepare a notice of coverage (NOC). Stormwater discharge from the construction site is authorized as of the effective date of the NOC.

Complete the form Type or print clearly, using ink and not markers or pencil. Answer each item or enter "NA," for not applicable, if a particular item does not fit the circumstances or characteristics of your construction site or activity. If you need additional space, attach a separate piece of paper to the NOI form. The NOI will be considered incomplete without a permit fee, a map, and the SWPPP.

Describe and locate the project Use the legal or official name of the construction site. If a construction site lacks street name or route number, give the most accurate geographic information available to describe the location (reference to adjacent highways, roads and structures; e.g. intersection of state highways 70 and 100). Latitude and longitude (expressed in decimal degrees) of the center of the site can be located on USGS quadrangle maps. The quadrangle maps can be obtained at the USGS World Wide Web site: <a href="http://www.usgs.gov/">http://www.usgs.gov/</a>; latitude and longitude information can be found at numerous other web sites. Attach a copy of a portion of a 7.5 minute quad map, showing location of site, with boundaries at least one mile outside the site boundaries. Provide estimated starting date of clearing activities and completion date of the project, and an estimate of the number of acres of the site on which soil will be disturbed, including borrow areas, fill areas, stockpiles and the total acres. For linear projects, give location at each end of the construction area.

Give name of the receiving waters Trace the route of stormwater runoff from the construction site and determine the name of the river(s), stream(s), creek(s), wetland(s), lake(s) or any other water course(s) into which the stormwater runoff drains. Note that the receiving water course may or may not be located on the construction site. If the first water body receiving construction site runoff is unnamed ("unnamed tributary"), determine the name of the water body that the unnamed tributary enters.

ARAP permit may be required If your work will disturb or cause alterations of a stream or wetland, you must obtain an appropriate Aquatic Resource Alteration Permit (ARAP). If you have a question about the ARAP program or permits, contact your local Environmental Field Office (EFO).

<u>Submitting the form and obtaining more information</u> Note that this form must be signed by the company President, Vice-President, or a ranking elected official in the case of a municipality, for details see subpart 2.5. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). Submit the completed NOI form (keep a copy for your records) to the appropriate EFO for the county(ies) where the construction activity is located, addressed to **Attention: Stormwater NOI Processing**.

| EFO       | Street Address                 | Zip Code   | EFO          | Street Address              | Zip Code   |
|-----------|--------------------------------|------------|--------------|-----------------------------|------------|
| Memphis   | 8383 Wolf Lake Drive, Bartlett | 38133-4119 | Cookeville   | 1221 South Willow Ave.      | 38506      |
| Jackson   | 1625 Hollywood Drive           | 38305-4316 | Chattanooga  | 540 McCallie Avenue STE 550 | 37402-2013 |
| Nashville | 711 R S Gass Boulevard         | 37243      | Knoxville    | 3711 Middlebrook Pike       | 37921      |
| Columbia  | 1421 Hampshire Pike            | 38401      | Johnson City | 2305 Silverdale Road        | 37601      |