Wisconsin Department of Natural Resources
Bureau of Watershed Management (WT/3)
101 S. Webster Street
PO Box 7921
Madison, WI 53707-7921
dnr.wi.gov

Final Report

Agricultural Targeted Runoff Management & Notice of Discharge Grant Programs

Form 3400-189A (R 05/19)

NOTICE: This document is required under s. 281.65, Wis. Stats., and chs. NR 153 and 154, Wis. Adm. Code. A final project report must be submitted as part of the final reimbursement request. Personally identifiable information contained in this form will be used for determining reimbursement eligibility in the Targeted Runoff Management and Notice of Discharge Grant Programs and will not be used for any other purpose.

INSTRUCTIONS: Send the completed, electronic copy of this form and all attachments to the Department of Natural Resources (DNR) Region Nonpoint Source Coordinator. Please read all instructions prior to completion.

Grant Type

Select Grant Type: Small Scale Non Total Maximum Daily Load (TMDL)

Grant Information

Grantee - Governmental Unit Name	Grant Number
Waupaca County Land & Water Conservation Department	TMD68000Y18

Project Name: Little Wolf River - Rodney Hass Manure Management

Project Contact Name	Phone Number	E-mail Address
Brian Haase	(715) 258-6482	brian.haase@co.waupaca.wi.us

Site 1 - Location & Watershed Information

Additional sites may be added to the project by clicking on the [+Loc] button

Name of Cost-Share Recipient	Animal Units	Latitude	Longitude
Rod & Lori Hass	368	44.436478	-88.92788

County	12-Digit HUC	12-Digit Watershed Name
Waupaca	040302021704	Bear Lake-Little Wolf River

Nearest Receiving Waterbody	Primary Waterbody addressed by project
Spiegelberg Creek	Little Wolf River

Site 1 - BMP & Load Reduction Information

Additional BMPs for this site may be added by clicking on the [+] button

Best Management Practice Installed	Quantity	Unit of Measure	Performance Standard/Prohibition Addressed	Load Reduction: Phosphorus lbs/yr	Load Reduction: Nitrogen lbs/yr	Load Reduction: Sediment Tons/yr	Total Installation Cost
Manure Storage Systems	1	No.	Code(s) 9,4,7	137.8			$356,306.30
Barnyard Runoff Control Systems	1	No.	Code(s) 13	43.6			$51,131.00
Waste Transfer Systems	2	No.	Code(s) 4,9,7	137.8			$43,881.63

Model(s)/Methods Used to Calculate Load Reduction (check all that apply)

☐ STEPL ☒ SNAP+ ☒ BARNY ☐ RUSLE 2 ☐ Other (specify) _____

Site 1 - Compliance Requirements

Performance Standard or Prohibition Addressed	Chs. NR 151 or 243 Wis. Adm. Code Notice Type	Notice Letter Attached?	Compliance Achieved?	Compliance letter attached?
Manure storage facilities-new/significant alterations.	NR 151	No	Yes	Yes
Process wastewater handling.	NR 151	No	Yes	Yes
Nutrient management.	NR 151	No	Yes	Yes
Prohibit runoff from feedlot or stored manure into the state's waters.	NR 151	No	Yes	Yes

Check all of the true statements below.

☒ 1. A copy the compliance letter for site 1 has been placed in county files.

2. The attached compliance letter for site 1:

☒ a. has been provided by the county to the landowner and cost-share recipient;

☒ b. identifies each of the performance standards & prohibitions (PS&Ps) on cropland and livestock facilities brought into compliance by the project, and listed in the table above;

☒ c. identifies the name and location of the facility where compliance has been achieved; and

☒ d. states that the landowner is obligated to maintain compliance with each PS&P addressed by the project in perpertuity regardless of future cost sharing.

Site 1 - Required attachments

Check the box if the required information for the site is attached:

Wisconsin Department of Natural Resources
Bureau of Watershed Management (WT/3)
101 S. Webster Street
PO Box 7921
Madison, WI 53707-7921
dnr.wi.gov

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- [x] Photos of pre-and post-implementation of BMP(s)
- [x] Aerial photo map of site with BMPs labeled
- [x] Load reduction modeling documents
- [ ] Water quality monitoring results/summary, if applicable

Site 1 - Information

Narrative space will expand to fit

A new waste storage structure, transfer system and pumps, and a total containment barnyard all were installed at this site during 2019. Most of the project occurred over a 4 month period from early July through the end of September. Due to wet weather conditions, the project was delayed approximately one month. The BMPs addressed barnyard runoff and increased the landowners manure storage capacity in order to eliminate winter spreading on vulnerable fields.

- [x] DNR may use this site as a success story to meet state and federal reporting needs.

Additional Project Information and/or Comments

Narrative space will expand to fit

Due to high groundwater conditions during construction, the pit was raised 2 feet to ensure adequate separation distances were met per the NRCS 313 standard. Foundry sand was also used as a subliner to the reduced seepage concrete. The completion of this project should be effective at eliminating polluted runoff from the farmstead and ensuring that the operators meet the NR 151 Ag Performance Standards.

Grantee Certification

A responsible government official (authorized signatory) must authorize and date the final report form prior to submittal to DNR.

I certify that, to the best of my knowledge, the project is complete and the information contained in this final report and attachments are correct and true.

Name of Authorized Government Official	Title of Authorized Government Official	Date
Brian Haase	County Conservationist	02/24/2020

For DNR Use Only

- [x] Received complete reports with all attachments
- [x] Practices implemented were consistent with the grant agreement

Comments about this project:

Name of Region Nonpoint Source Coordinator	Date
Eric Evensen	03/31/2020

Send the Final Report and attachments to the Community Financial Assistance Grants Manager and to the Runoff Management Grant Coordinator. Keep a printed copy for the Region file.

Waupaca County
Land & Water Conservation Department
811 Harding Street
Waupaca WI 54981
Fax: 715/258-6239 Phone: 715/258-6245

Brian Haase
County Conservationist
Ann Stearns
Program Assistant
Corey Schuelke
Engineering Technician
Greg Peterson
Engineering Technician
Dan McFarlane
Engineering Technician/GIS
Stefan Stults
Nutrient Mngmt. Specialist

January 23, 2020

Rod & Lori Hass
N5454 State Rd 22-110
Manawa, WI 54949

Mr. & Mrs. Hass,

Waupaca County is required to inform you in writing, as part of the TRM grant process, of your obligation to maintain compliance with the applicable state agricultural performance standards and prohibitions that were addressed by the TRM cost-share agreement for your farm located at T23N R13E Sec 28. These standards and prohibitions are outlined in Subchapter II (NR 151.02-NR 151.09) of Wisconsin Administrative Code NR 151 and are listed below. Keep in mind that you are now obligated to maintain compliance with each of the performance standards listed below in perpetuity regardless of future cost sharing. I encourage you to take the time to read them over carefully.

NR 151.05(2)	Manure storage facilities performance standards (New Construction and Alterations)
NR 151.07	Nutrient Management
NR 151.055(2)	Processed Wastewater Handling (No significant discharge to waters of the state)
NR 151.08(4)	Manure Management Prohibitions (A livestock operation shall have no direct runoff from a feedlot or stored manure into waters of the state)

Also, to further comply with NR 151.07 (Nutrient Management) and Section 51.08(4) of the Waupaca County Code of Ordinances, Waupaca County and the State of Wisconsin requires that you submit a copy of your Nutrient Management Plan (NRCS 590) to our office by April 15th of each year. Copies of your plan will be kept on file for potential review by DNR, DATCP or County staff.

If you have any questions regarding this issue or would like a full copy of Wisconsin Administrative Code NR 151, please feel free to call me at 715-258-6482.

Sincerely,

Brian Haase
County Conservationist
Waupaca County LWCD
715-258-6482

PRE CONSTRUCTION P OUTPUT (Based on BARNY)

Farmer: Rod Hass Planner/Designer: DM Date: 2019

	Input	Output	
Closest City of similar climate:	2		1 Madison 2 Appleton 3 Wausau 4 Eau Claire
Paved lot area:	6,925		sq ft
Earth lot area:	1,675		sq ft
Animal Lot size:		8,600	sq ft
Is there a designed settling basin?	2		Yes= 1; No= 2

Animals on lot:	100	number	0	number	
Type of animal:	1				(Dairy = 1;Beef=2)
Ave. Animal Weight:	600	lbs		lbs	
Lot Use:	1				1= Heavy;2=Med;3= Light)

TRIBUTARY AREAS

Tributary area:	750	sq ft		sq ft
Runoff Curve Number:	95		←	See RCN tab below for typical values
Roof Trib. area:	0	sq ft		

43.6 lbs P per year at downstream lot edge

Enter Existing Buffer Data:

Length:	46	ft
Width:	20	ft
Buffer area:		
Slope:	1	%
c value	0.15	For c values see table below

P Output: 43.6 lb

PRE CONSTRUCTION P OUTPUT (Based on BARNY)

Farmer: Rod Hass Planner/Designer: DM Date: 2019

	Input	Output	
			1 Madison
			2 Appleton
Closest City of similar climate:	2		3 Wausau
			4 Eau Claire
Paved lot area:	6,640		sq ft
Earth lot area:	0		sq ft
Animal Lot size:		6,640	sq ft
Is there a designed settling basin?	1		Yes= 1; No= 2

Animals on lot:	100	number	0	number	
Type of animal:	1				(Dairy = 1;Beef=2)
Ave. Animal Weight:	600	lbs		lbs	
Lot Use:	1				1= Heavy;2=Med;3= Light)

TRIBUTARY AREAS

Tributary area:	0	sq ft		sq ft
Runoff Curve Number:	0		←	See RCN tab below for typical values
Roof Trib. area:	0	sq ft		

0.0 lbs P per year at downstream lot edge

Enter Existing Buffer Data:

Length:		ft
Width:		ft
Buffer area:		
Slope:	1	%
c value	0.15	For c values see table below

P Output: 0.0 lb

FM10: Annual PI Report		Hass Farms		Crop Rotation 2016 to 2022 - WSF built in 2019								PI Difference *"No WSF" - "Yes WSF"*	PI Difference x Field Acres
Field Name	**Field Acreage**	**Field Rotational Average PI**	**P Index**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	Sum(2016-2019) minus Sum(2020-2023)	Negative means P Loss Positive means P Loss reduction
Apple Field	14.5	2	Total	1.9	1.6	2.1	2.0	1.3	1.0	1.1	1.1	3.1	45.0
Back Field	18.6	3	Total	4.0	2.9	2.8	2.7	3.3	2.5	2.0	1.9	2.7	50.2
Behind Sandy	6.2	2	Total	2.7	2.0	1.2	1.2	3.0	2.3	1.7	1.6	-1.5	-9.3
Between Roads	16.4	3	Total	4.0	3.0	2.8	2.7	3.3	2.5	2.0	1.8	2.9	47.6
By Garden	5.9	3	Total	5.2	3.1	1.4	1.1	5.0	3.2	1.3	1.1	0.2	1.2
Dump	10.4	5	Total	8.8	5.8	4.0	3.6	8.0	5.5	3.2	2.8	2.7	28.1
Koschuck 22	22.6	3	Total	3.7	2.8	2.7	2.6	3.1	2.3	1.8	1.7	2.9	65.5
Koschuck 32	30.0	3	Total	3.8	2.8	2.6	2.5	3.1	2.3	1.7	1.6	3.0	90.0
Koschuck Pole	14.1	4	Total	5.2	3.8	3.5	3.3	4.5	3.4	2.7	2.6	2.6	36.7
Leons East	11.4	4	Total	7.2	4.9	3.4	3.1	6.3	4.5	2.6	2.3	2.9	33.1
Leons West	15.2	4	Total	6.9	4.7	3.3	3.0	6.1	4.4	2.5	2.2	2.7	41.0
Neighbors House	7.5	3	Total	3.9	2.9	2.5	2.4	3.2	2.5	1.9	1.8	2.3	17.3
Next to Sandy	13.6	3	Total	4.1	3.0	2.5	2.3	3.4	2.6	2.0	1.8	2.1	28.6
Oak Tree	18.0	3	Total	4.4	3.3	2.5	2.4	3.7	2.8	2.2	2.1	1.8	32.4
Pole Field	16.9	3	Total	4.4	3.1	2.6	2.5	3.8	2.7	1.8	1.7	2.6	43.9

Total = 551.3 (4yr)

551.3 / 4yr Rotation
= 137.8

FM10: Annual PI Report

Reported For	Hass Farms
Printed	2020-02-03
Plan Completion/Update Date	2018-10-08
SnapPlus Version 19.1 built on 2019-12-26	
V:\LWCD\Nutrient_Management_TRM_Modeling\TRM_Modeling_Hass\Hass Farms_TRM.snapDb	

Prepared for:
Hass Farms
attn:Hass Farms
N5454 State Road 22 & 110
Manawa, 54949

Field Name	Soil Series & Symbol (critical)	Slope	Tillage	Rot Avg PI	PI	2016	2017	2018	2019	2020	2021	2022	2023
Apple Tree	PLAINFIELD PlB	4	FCD-FCD-None-None-FCD-FCD-None-None	2	Total Particulate Soluble	1.9 0.9 1.0	1.6 0.6 1.0	2.1 0.2 1.8	2.0 0.2 1.8	1.3 0.9 0.4	1.0 0.6 0.4	1.1 0.2 0.8	1.1 0.2 0.9
Back Field	HORTONVILLE HnB	4	FCD-FCD-None-None-FCD-FCD-None-None	3	Total Particulate Soluble	4.0 2.9 1.1	2.9 1.8 1.2	2.8 0.8 2.0	2.7 0.7 2.0	3.3 2.8 0.5	2.5 1.9 0.6	2.0 0.8 1.1	1.9 0.7 1.1
Behind Sandy	HORTONVILLE HnB	4	FCD-FCD-None-None-FCD-FCD-None-None	2	Total Particulate Soluble	2.7 2.5 0.2	2.0 1.7 0.3	1.2 0.7 0.5	1.2 0.6 0.5	3.0 2.7 0.3	2.3 1.8 0.4	1.7 0.8 0.8	1.6 0.7 0.9
Between Roads	HORTONVILLE HnB	4	FCD-FCD-None-None-FCD-FCD-None-None	3	Total Particulate Soluble	4.0 2.9 1.1	3.0 1.8 1.1	2.8 0.8 2.0	2.7 0.7 2.0	3.3 2.8 0.5	2.5 1.9 0.6	2.0 0.9 1.1	1.8 0.7 1.1
By Garden	RICHFORD RfC	10	FCD-FCD-None-None-FCD-FCD-None-None	3	Total Particulate Soluble	5.2 5.0 0.2	3.1 3.0 0.2	1.4 1.1 0.3	1.1 0.9 0.2	5.0 4.9 0.1	3.2 3.1 0.1	1.3 1.2 0.1	1.1 1.0 0.1
Dump	HORTONVILLE HrC2	9	FCD-FCD-None-None-FCD-FCD-None-None	5	Total Particulate Soluble	8.8 7.8 1.1	5.8 4.7 1.1	4.0 1.9 2.0	3.6 1.6 2.0	8.0 7.5 0.5	5.5 4.9 0.6	3.2 2.1 1.1	2.8 1.7 1.1
Koshuck 22	HORTONVILLE HnB	4	FCD-FCD-None-None-FCD-FCD-None-None	3	Total Particulate Soluble	3.7 2.7 1.0	2.8 1.7 1.1	2.7 0.8 1.9	2.6 0.6 1.9	3.1 2.6 0.4	2.3 1.8 0.6	1.8 0.8 1.0	1.7 0.7 1.0

Field Name	Soil Series & Symbol (critical)	Slope	Tillage	Rot Avg PI	PI	2016	2017	2018	2019	2020	2021	2022	2023
Koshuck 32	HORTONVILLE HnB	4	FCD-FCD-None-None-FCD-FCD-None-None	3	Total Particulate Soluble	3.8 2.9 0.9	2.8 1.8 1.0	2.6 0.8 1.8	2.5 0.7 1.8	3.1 2.8 0.3	2.3 1.9 0.5	1.7 0.9 0.9	1.6 0.7 0.9
Koshuck Pole	HORTONVILLE HnB	4	FCD-FCD-None-None-FCD-FCD-None-None	4	Total Particulate Soluble	5.2 3.7 1.5	3.8 2.3 1.5	3.5 1.0 2.5	3.3 0.8 2.5	4.5 3.6 0.9	3.4 2.4 1.0	2.7 1.1 1.6	2.6 0.9 1.6
Leons East	HORTONVILLE HrC2	9	FCD-FCD-None-None-FCD-FCD-None-None	4	Total Particulate Soluble	7.2 6.3 0.9	4.9 3.9 0.9	3.4 1.6 1.7	3.1 1.3 1.7	6.3 6.0 0.3	4.5 4.1 0.4	2.6 1.8 0.8	2.3 1.5 0.8
Leons West	HORTONVILLE HrC2	9	FCD-FCD-None-None-FCD-FCD-None-None	4	Total Particulate Soluble	6.9 6.1 0.9	4.7 3.8 0.9	3.3 1.6 1.7	3.0 1.3 1.7	6.1 5.8 0.3	4.4 3.9 0.4	2.5 1.7 0.8	2.2 1.4 0.8
Neighbors House	HORTONVILLE HnB	4	FCD-FCD-None-None-FCD-FCD-None-None	3	Total Particulate Soluble	3.9 2.9 1.1	2.9 1.8 1.1	2.5 0.8 1.7	2.4 0.7 1.7	3.2 2.8 0.5	2.5 1.9 0.6	1.9 0.9 1.0	1.8 0.7 1.1
Next to Sandy	HORTONVILLE HnB	4	FCD-FCD-None-None-FCD-FCD-None-None	3	Total Particulate Soluble	4.1 3.0 1.1	3.0 1.9 1.2	2.5 0.8 1.7	2.3 0.7 1.7	3.4 2.9 0.5	2.6 2.0 0.6	2.0 0.9 1.1	1.8 0.8 1.1
Oak Tree	HORTONVILLE HnB	4	FCD-FCD-None-None-FCD-FCD-None-None	3	Total Particulate Soluble	4.4 3.2 1.2	3.3 2.0 1.3	2.5 0.8 1.7	2.4 0.7 1.7	3.7 3.1 0.6	2.8 2.0 0.7	2.2 0.9 1.3	2.1 0.8 1.3
Pole Field	HORTONVILLE HnB	4	FCD-FCD-None-None-FCD-FCD-None-None	3	Total Particulate Soluble	4.4 3.5 0.9	3.1 2.1 1.0	2.6 0.9 1.7	2.5 0.8 1.7	3.8 3.4 0.3	2.7 2.2 0.5	1.8 1.0 0.8	1.7 0.8 0.9

Imagery Date:
April, 2015

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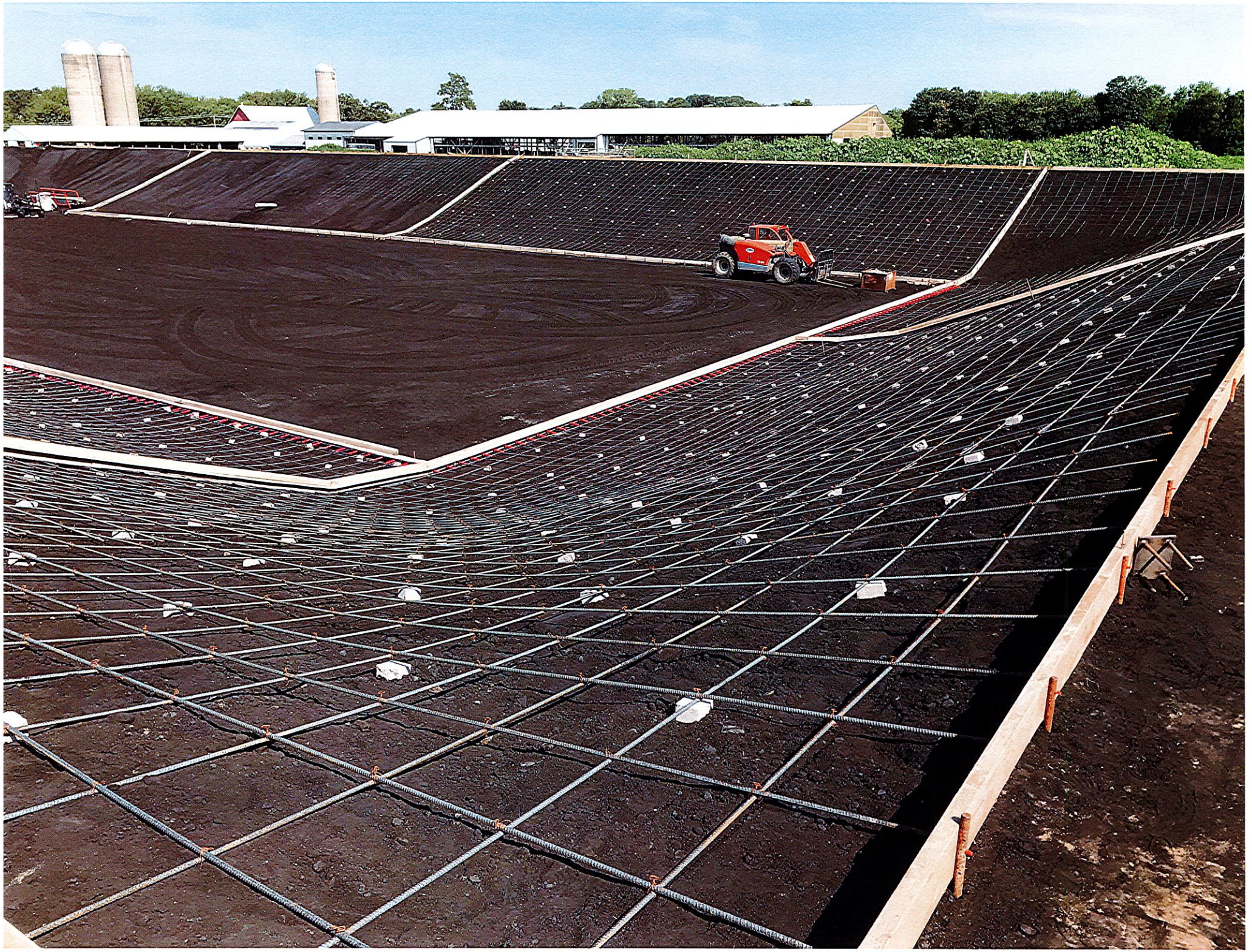


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WARNING