

Agri-Waste Technology, Inc. 501 N. Salem Street, Suite 203 Apex, North Carolina 27502 919-859-0669 www.agriwaste.com

IP/CA Acknowledgement Form

Acknowledgement of subsurface wastewater evaluation and design by <u>Agri-Waste</u>

<u>Technology, Inc.</u> for <u>9444 NC 27 W, Lillington NC 27546</u> for issuance of an IP/CA.

For Improvement Permit (IP) issuance:

"The LSS/LG evaluation(s) attached to this application is to be used to issue an Improvement Permit in accordance with G.S. 130A-335(a2) and (a3)."

For Construction Authorization (CA) issuance:

"The **p**lans or evaluations attached to this a**pp**lication are to be used to issue a Construction Authorization in accordance with G.S. 130A-335(a2), (a5), and (a6)."

The LSS evaluation attached to this application was used to produce and design a subsurface wastewater septic system for permitting to obtain an IP and CA in accordance with G.S. 130A-335(a2), (a3), (a5), and (a6).

Owner: Carl Colinson	Lukey
Owner's Representative:	8
Date: November 8th	- 2027-



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Soil Suitability for Domestic Sewage Treatment and Disposal Systems 9444 NC 27 W, Lillington, NC 27546 (Harnett County)

November 7, 2022

Soil suitability for domestic sewage treatment and disposal systems was evaluated on September 8, 2022 for the property located at 9444 NC 27 W in Lillington, NC (Harnett County). Heath Clapp of Agri-Waste Technology, Inc. (AWT) conducted the soil evaluation. This evaluation was done to facilitate permitting for a septic system for a 4 bedroom home. This report and attached documents were prepared to this application is to be used to issue an Improvement Permit in accordance with G.S. 130A-335(a2) and (a3). The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).

A drawing of the site plan, septic layout, septic system design, and soil boring locations is included in Attachment 1. Profile descriptions for each soil boring are included in Attachment 2.

The total property area is approximately 2.85 acres. The property is mostly wooded with a cleared area in the southern portion. A home served by a private well and a septic system was previously on the property. The proposed septic system for the property is a conventional gravity septic system (accepted drainfield product).

Soil Suitability for Domestic Sewage Treatment and Disposal Systems

The drawing in Attachment 1 details the property boundaries, soil boring locations, and layout of drain field trenches. Five soil borings were advanced without the proposed septic system area on the property. Soil borings were examined to determine soil suitability for on-site sewage disposal systems in accordance with 15A 18A .1900 Rules for Sewage Treatment and Disposal Systems. These borings were advanced with hand auger borings. All soil borings were provisionally suitable for a conventional style trench. Soil borings are within the proposed drainfield area.

The layout shown in Attachment 1 indicates there is available space for a four-bedroom conventional pump initial system. The initial system can be installed with the use of a 25% reduction trench product based on the drainfield layout in the field.

The proposed LTAR (Long Term Acceptance Rate) by AWT is 0.4 GPD/ft². The soils on this property are group III soils within the distribution and treatment zone as used to

define the LTAR. With an LTAR of 0.4 GPD/ft², 300 linear feet of trench is necessary to support a 4-bedroom home for the initial system with the use of the 25% reduction. The proposed trench depth for the trench is 24 inches. The attached drawings substantiate that the necessary linear footage of trench can be installed on the property for the initial system and repair system.

Any logging, disturbances, or grading done in the usable area or within the proposed setbacks will change the potential of using the area designated for a drainfield. Prior to moving forward with the development on the property, Harnett County Health Department should be contacted to complete the necessary Construction Oversight and to issue an OP (Operations Permit) for the property once the septic system has been installed.

Conclusions

An IP (Improvement Permit) and CA (Construction Authorization) for this property can be issued with the site plan that is in Attachment 1. A CA permit will be required in order to secure a building permit for the property. The county issues an Operation Permit after the system has been installed to meet the specifications of the Authorization to Construct. Additional septic layouts have been or will be performed as needed. It will be critical to not disturb any of the proposed septic area or there is a risk that the IP and CA will be revoked. The LSS/AOWE Evaluation and attached documents were prepared to this application is to be used to issue an Improvement Permit in accordance with G.S. 130A-335(a2) and (a3). The LSS/AOWE evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a5).

We appreciate the opportunity to assist you in this matter. Please contact us with any questions, concerns, or comments.

Sincerely,

Jeff Vaughan, NC LSS

Jeff W/

IMPROVEMENT PERMIT F	OR G.S. 130A-33	5(a2)/SL2022-11		
PIN/Lot Identifier: 0517-28-3766				
Issued To: Coleman Pankey				
Property Location: 9444 NC 27 W, Lillington, NC 2754	6			
Subdivision:	Lot #:	Block:	Section:	
LSS Report Provided: Yes ☑ No □				
If yes, name and license number of LSS: Jeff Vaughan, 1227				
New ☑ Repair □ Expansion □ System	Relocation			
Proposed Structure: Single Family Residence				
Proposed Wastewater System Type: Gravity, accepted	(Initial)	Gravity, accept	ted	(Repair)
Fill System: ☐ Yes ☐ No If yes, specify: ☐ New ☐ Existing (when	adding more than	6 inches of fill to system a	rea please provide a fi	ill plan)
Proposed Design Daily Flow: 480 GPD Proposed L	TAR (Initial): 0.4	Proposed LTAR	(Repair): 0.4	
Design Wastewater Strength: ☑ domestic ☐ high stre	ength	☐ industrial process		
Number of bedrooms: 4 Number of Occupants: 8 Other:				
Pump Required: ☐ Yes ☐ No ☐ May be required based upon	n final location an	d elevations of facilities		
Artificial Drainage Required: ☐ Yes ☐ No If yes, please specify deta	ils:			
Type of Water Supply: ☑ Private well ☐ Public well ☐ Municipal So	upply Spring	☐ Other:		
Drainfield location meets requirements of Rule .1945: Yes ☑	No 🗆			
Drainfield location meets requirements of Rule .1950: Yes ☑	No 🗆			
Permit valid for: Five years [site plan submitted pursuant to GS 130	DA-334(13a)]	No expiration [plat submit	ted pursuant to GS 13	OA-334(7a)
Permit conditions:				
Licensed Soil Scientist Print Name: Jeff Vaughan				
Licensed Soil Scientist Signature:		Date:	11/7/2022	
The LSS evaluation is being submitted pursuan	t to and meets th	e requirements of G.S. 130	DA-335(a2).	

See attached site sketch

County: Harnett

This Section for Local H	ealth Departmen	t Use Only	
Initial submittal received:		_ by	
	Date	Initials	
Permit Number:			
G.S. 130A-335(a4) states the following: 'If a local health department submitted pursuant to subsection (a3) of the section within 10 budepartment shall issue the improvement permit.'			
In accordance with G.S. 130A-335(a3) the improvement permit a	pplication is:		
☐ Incomplete (If box is checked, information in this section is r	equired.)		
The following items are missing:			
Copies of this were sent to the LSS and the Owner on			
State Authorized Agent:			Date:
	51		MACON SUPPLIES
☐ Denied (See attached report.)			
Copies of this were sent to the LSS and the Owner on			
Da			
State Authorized Agent:			Date:
□ Complete			
State Authorized Agent:		Date of Is	ssuance:
This Improvement Permit is issued pursuant to G.S. 130A-335 (a attached here. The issuance of this permit by the Health Department holder is responsible for checking with appropriate gover revocation if the site plan, plat, or the intended use changes, or inaccurate or misleading. The Improvement Permit shall not be subject to compliance with the provisions of the Laws and Rule permit. The location and identification of all property lines, earnesponsibility of the owner. The Department, the Department's authorized agents, and the any liabilities, duties, and responsibilities imposed by statute of evaluations, submittals, or actions from a licensed soil scientist.	etment in no way erning bodies in no rif information subseted by a chartested by a chartested for Sewage Treasements, water listed local health deparin common law	guarantees the neeting their requesting their requesting their requesting the same of their requesting their requestions and their requestions are requesting their requestions and their requestions are requesting their requestions and their requestions are requestions.	issuance of other permits. The quirements. This site is subject to application was falsified, hip of the site. This permit is posal and to conditions of this appropriate utilities shall be the edischarged and released from arising out of or attributed to

See attached site sketch

Improvement Permit Expiration Date:

County: Harnett

County: Harnett	
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CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)/SL2022-11

PIN/Lot Identifier: 0517-28-3766								
Issued To: Coleman Pankey								
Property Location: 9444 NC 27 W, Lillington, NC 27546								
AOWE/PE Plans/Evaluations Provided: Yes ☑ No ☐ If yes, name and license number of AOWE/PE: Jeff Vaughan, 10003E								
Facility Type: Single Family Residence								
\square New \square Expansion \square Repair System Relocation \square								
Basement? ☐ Yes ☐ No Basement Fixtures? ☐ Yes ☐ No								
Type of Wastewater System** Gravity, accepted (Initial) Gravity, accepted	(Repair)							
Design Daily Flow: 480 GPD Wastewater Strength: ☑ domestic ☐ high strength ☐ industrial process								
Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies?								
Installation Requirements/Conditions								
Septic Tank Size: $1,250$ gallons Total Trench/Bed Length: 300 feet Trench/Bed Spacing: 9 feet on center								
Drainfield square footage: 900 Trench/Bed Width: 36 inches LTAR: 0.4 gpd/ft ²								
Soil Cover: 0 inches Slope Adjusted Maximum Trench/Bed Depth: 24 inches								
Aggregate Depth:inches above pipeinches below pipeinches total								
Pump Tank Size (if applicable): gallons Requires more than 1 pump? ☐ Yes ☑ No								
Pump Requirements: ft. TDH vs GPM Grease Trap Size (if applicable): gallons								
Distribution Method: ☐ Serial ☑ D-Box or Parallel ☐ Pressure Manifold(s) ☐ LPP ☐ Other:								
Artificial Drainage Required: Yes No If yes, please specify details:								
Legal Agreements (If the answer is "Yes" to any type of legal agreements, please attach a copy of the agreement.)								
Multi-party Agreement Required [.1937(h)]: Yes □ No ☑								
Easement, Right-of-Way, or Encroachment Agreement Required [.1938(j)]: ☐ Yes ✓ No								
Declaration of Restrictive Covenants: ☐ Yes ☑ No								
**If applicable: I understand the system type specified is different from the type specified on the application. I accept the specifications of this permit.								
Owner/Legal Representative Print Name:								
Owner/Legal Representative Signature: Date:								
Pre-Construction Conference Required: Yes □ No □								
Conditions:								
CONSTRUCTION CONTRACTOR CONTRACTO								
The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by reference to the construction and installation requirements of Rules .1950, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by reference to the construction and installation requirements of Rules .1950, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by reference to the construction and installation requirements of Rules .1950, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by reference to the construction and installation requirements of Rules .1950, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by reference to the construction of the construction and construction and .1959 are incorporated by reference to the construction of the construction	rence							
into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.								
AOWE/PE Print Name: Jeff Vaughan	Sept.							
AOWE/PE Signature:	- ICDONE							
This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5).	Carrier Service							

See attached site sketch

This Section for Local Health Department	Use Only
Initial submittal received:	_ by
Permit Number:	
G.S. 130A-335(a6) states the following: 'If a local health department fails to act on submitted pursuant to subsection (a5) of the section within 10 business days of recidepartment shall issue the construction authorization.'	
In accordance with G.S. 130A-335(a5) the construction authorization application is	:
☐ Incomplete (If box is checked, information in this section is required.)	
The following items are missing:	
Copies of this were sent to the AOWE/PE and the Owner on	_
Date	
State Authorized Agent:	Date:
☐ Denied (See attached report.)	
Copies of this were sent to the AOWE/PE and the Owner on	
State Authorized Agent:	Date:
State Additionized Agent.	
□ Complete	
State Authorized Agent:	Date of Issuance:
This Construction Authorization is issued pursuant to G.S. 130A-335(a2), (a5), and evaluations attached here. This Construction Authorization is subject to revocation changes, or if information submitted in the application was falsified, inaccurate of shall not be affected by a change in ownership of the site. This Construction Authorizations of the Laws and Rules for Sewage Treatment and Disposal and to the identification of all property lines, easements, water lines, and other appropriate Final landscaping shall be constructed to divert water and establish vegetative constructed.	on if the site plan, plat, or the intended use or misleading. The Construction Authorization horization is subject to compliance with the conditions of this permit. The location and e utilities shall be the responsibility of the owner.
The Department, the Department's authorized agents, and the local health depa any liabilities, duties, and responsibilities imposed by statute or in common law a plans, evaluations, preconstruction conference findings, submittals, or actions from the General Statutes as a licensed engineer or a person certified pursuant to Arti Authorized On-Site Wastewater Evaluator in GS 130A-335(a2), (a5), and (a7). The agents, and the local health departments shall be responsible and bear liability for obligations under State law or rule, including the issuance of the operations performs for the construction Authorization Expiration Date:	from any claim arising out of or attributed to om a person licensed pursuant to Chapter 89C of cle 5 of Chapter 90A of the General Statutes as an e Department, the Department's authorized or their actions and evaluations and other

See attached site sketch

County: Harnett

Sheet <u>1</u> of <u>2</u>
PROPERTY ID #: <u>9444 NC 27 W</u>
COUNTY: <u>Harnett</u>

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

(Complete all fields in full)

P R O F I L	.1940	HORIZON		RPHOLOGY 1941)	1	OTE PROFILE		S	
E #	LANDSCAPE POSITION/ SLOPE %	DEPTH (IN.)	.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
\Box		A 0-6"	S-LS; Gr	NS; NP; VFr	2.5Y 4/2	-6			Suitable
		E 6-28"	LS; Gr	NS; NP; VFr	10YR 6/3			0.4GPD/ft2	
,	5-9%	Bt 22-48"+	SL-SCL; SBK	SS; SP; Fr	7.5YR 6/4	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			0.401 15/112
		A 0-4"	S-LS; Gr	NS; NP; VFr	2.5Y 4/2	44+"			Provisionally
3,		E 4-20"	LS; Gr	NS; NP; VFr	10YR 6/3				Suitable
,, 	0-2%	Bt 20-44"	SCL; SBK	SS; SP; Fr	7.5YR 6/4 7.5YR 7/7 7.5YR 6/2				0.4GPD/ft2
				The cuertain of the cuertain o	D D A GEORG	1046			
	DESCRIPTION	DESCRIPTION INITIAL Available Space (.1945) Provisic Suitable			ER FACTORS (CLASSIFICAT		_ 9 9		

Site LTAR
COMMENTS

0.4GPD/Ft2

0.4 GPD/ Ft2

LEGEND

use the following standard abbreviations

LANDSCAPE POSITION	GROUP	SOIL TEXTURE	.1955 LTAR*	LPP .1957 LTAR*	MINERALOGY/ CONSISTENCE	STRUCTURE
CC (Concave Slope) CV (Convex Slope) D (Drainage Way)	I	S (Sand) LS (Loamy Sand)	1.2 - 0.8	0.6 - 0.4	SEXP (Slightly Expansive) EXP (Expansive)	G (Single Grain) M (Massive) CR (Crumb)
DS (Debris Slump) FP (Flood Plain) FS (Foot Slope)	П	SL (Sandy Loam) L (Loam)	0.8 - 0.6	0.4 - 0.3		GR (Granular) SBK (Subangular Blocky) ABK (Angular Blocky)
H (Head Slope) L (Linear Slope) N (Nose Slope)	Ш	Si (Silt) SiCL (Silty Clay Loam) CL (Clay Loam)	0.6 - 0.3	0.3 - 0.15		PL (Platy) PR (Prismatic)
R (Ridge) S (Shoulder Slope)		SCL (Sandy Clay Loam) SiL (Silt Loam)			MOIST	WET
T (Terrace)					VFR (Very Friable)	NS (Non-sticky)
	IV	SC (Sandy Clay)	0.4 - 0.1	0.2 - 0.05	FR (Friable)	SS (Slightly Sticky)
		SiC (Silty Clay) C (Clay)			FI (Firm) VFI (Very Firm v. Very Sticky)	S (Sticky) VS (Very Sticky)
		O (Organic)	None	None	EFI (Extremely Firm)	NP (Non-plastic) SP (Slightly Plastic)

VP (Very Plastic)

NOTES

HORIZON DEPTH DEPTH OF FILL

In inches below natural soil surface In inches from land surface

RESTRICTIVE HORIZON SAPROLITE

Thickness and depth from land surface

SOIL WETNESS

S(suitable) or U(unsuitable)

CLASSIFICATION

Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation

S (Suitable), PS (Provisionally Suitable), or U (Unsuitable)

Evaluation of saprolite shall be by pits.

Long-term Acceptance Rate (LTAR): gal/day/ft²

Show profile locations and other site features (dimensions, reference or benchmark, and North).

AGRITEC-01

CGARKALNS

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 9/19/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(les) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT Connie Garkains			
Hartsfield & Nash Agency, Inc. 10405 Ligon Mill Rd., Ste H	PHONE (A/C, No, Ext): (919) 556-3698 (A/C, No): (919)			
Wake Forest, NC 27587	EDDRESS: Connie@hartsfield-nash.com			
	INSURER(S) AFFORDING COVERAGE INSURER A: SELECTIVE INSURANCE COMPANY INSURER B: Accident Fund National Insurance Company			
INSURED				
Agri-Waste Technology Inc	INSURER C: Evanston Insurance Company			
501 N. Salem St Ste 203	INSURER D:			
Apex, NC 27502	INSURER É :			
	INSURER F:			

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		v	 < D			

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	T	PE OF INSURAN	ICE	ADDL	SUBR	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP	LIMIT	s			
A	-	CIAL GENERAL MS-MADE X	7			\$ 2253659	1/18/2022	1/18/2023	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	2,000,000 300,000		
									MED EXP (Any one person)	\$	10,000		
									PERSONAL & ADV INJURY	s	2,000,000		
	GEN'L AGGRE	GATE LIMIT APP	LIES PER:						GENERAL AGGREGATE	s	4,000,000		
	POLICY	X PRO-	LOC						PRODUCTS - COMP/OP AGG	\$	4,000,000		
	OTHER:									\$			
A	AUTOMOBILE	LIABILITY							COMBINED SINGLE LIMIT (Ea accident)	\$	1,000,000		
	X ANY AUTO					\$ 2253659	1/18/2022	1/18/2023	BODILY INJURY (Per person)	\$			
	OWNED SCHEDULED AUTOS ONLY							BODILY INJURY (Per accident)	\$				
	AUTOS O	NLY N	ON-OWNED								PROPERTY DAMAGE (Per accident)	\$	
										\$			
A	X UMBREL	A LIAB X	OCCUR					1/18/2023	EACH OCCURRENCE	\$	2,000,000		
	EXCESS	IAB	CLAIMS-MADE			S 2253659	1/18/2022		AGGREGATE	\$	2,000,000		
	DED	RETENTION	1							\$			
В	WORKERS CON	PENSATION RS' LIABILITY	2002						X PER OTH-				
	ANY PROPRIET	OR/PARTNER/EX	ECUTIVE N	N/A		100003072	1/18/2022	1/18/2023	E.L. EACH ACCIDENT	\$	1,000,000		
	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)								E.L. DISEASE - EA EMPLOYEE	\$	1,000,000		
	If yes, describe DESCRIPTION	Inder OF OPERATIONS	below						E.L. DISEASE - POLICY LIMIT	\$	1,000,000		
С	Prof & Pollu	tion				MKLV3ENV103400	8/22/2022	8/22/2023	Each Claim		5,000,000		
A					S 2253659	1/18/2022	1/18/2023	Equipment		25,000			

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER	CANCELLATION
***This is ONLY For Informational Purposes Contact Agency for Specific Holder info to be added	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
©	AUTHORIZED REPRESENTATIVE
	Connie garalin



