



STATE OF DELAWARE
**DEPARTMENT OF NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL**
DIVISION OF WATER
RICHARDSON & ROBBINS BUILDING
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

DIRECTOR'S
OFFICE

PHONE
(302) 739-9949

December 4, 2019

Janelle M. Cornwell
Director of Planning and Zoning
2 The Circle
P.O. Box 417
Georgetown, DE 19947

**Re: County Council Questions regarding CU 2186 Mountaire Farms of Delaware off Mount Joy Rd. and Maryland Camp Rd.
Tax Parcels: 234-28.00-1.00, 2.0 and 3.00**

Dear Ms. Cornwell:

The Department of Natural Resources and Environmental Control (Department) received your letter dated November 13, 2019. In the letter, you indicated that Sussex County Council held a public hearing on November 5, 2019 regarding "Conditional Use application CU 2186 Mountaire Farms of Delaware" for sludge and spray irrigation onto farms off of Mount Joy Road (Al Rust and Thorogood Farms). In the letter, you included a list of five (5) questions from Sussex County Council members related to topics under the Department's spray irrigation and sludge programs. Sussex County's five (5) questions are listed below with the Department's responses in italics.

1. Is the permit the same for the application of sludge and spraying of treated wastewater?

No, spray and sludge permits are different with many different requirements. Spray permits are regulated under the Regulations Governing the Design, Installation, and Operation of On-Site Wastewater Treatment and Disposal Systems (Spray Regulations) <http://regulations.delaware.gov/AdminCode/title7/7000/7100/7101.shtml#TopOfPage> and sludge permits are regulated under Part III, B. of the Guidance and Regulations Governing the Land Treatment of Wastes (Sludge Regulations) <http://regulations.delaware.gov/AdminCode/title7/7000/7100/7103.shtml#TopOfPage>. As Sussex County was recently made aware, the Al Rust and Thorogood Farms have had a sludge (agricultural utilization permit) permit through the Department (see attached email chain) since 1990. During the sludge permit renewal process, the Department identified that the Al Rust and Thorogood Farms did not have a Conditional Use through Sussex County

and notified Sussex County of this finding. Neither farm has been permitted by the Department for the spray irrigation of treated wastewater. In the event Mountaire would like to pursue a permit for spray irrigation of treated wastewater at these locations, after obtaining county approval, Mountaire would have to submit a permit application in accordance with Spray Regulation application requirements for the Department's consideration.

2. What are the setbacks and regulations for spraying treated water and applying sludge from roads, homes, etc.? Is there a limitation on distance of spray is allowed to travel on windy days?

In accordance with Section 6.3.2.3.10 of the Spray Regulations, the following vegetated buffer zones shall be maintained:

- *A 150 foot buffer must be maintained between the edge of the wetted field area and all property boundaries.*
- *A 150 foot buffer must be maintained between the edge of the wetted field area and the shoulder of internal and external public roads. Buffers from highways must be measured from the outer edge of the shoulder or edge of the highway, if no shoulder.*
- *A 150 foot buffer must be maintained between the edge of the wetted field area and any public supply well and a 100 foot buffer from any individual domestic well unless other jurisdictions dictate greater distances.*
- *Internal roads that are closed to public use do not require buffer zones.*
- *A 100 foot buffer is required between the wetted edge of spray fields and the edge of any perennial lake or stream or ephemeral drain.*
- *A 50 foot buffer is required between spray fields and the edge of any channelized, intermittent watercourse.*
- *If any channelized intermittent watercourse were to become perennial, the 100 foot buffer requirement will apply.*
- *A 50 foot buffer is required between the wetted field area and the edge of any wetlands.*
- *Lesser distances may be permitted if the design and operations demonstrate that aerosols will be contained within the site and/or no threat to public health or the environment exists.*

While the Spray Regulations do not have a specific limit for spray aerosols on windy days, language in section 6.5.3.2.2.3 of the Spray Regulations states: "Aerosols or nuisance odors shall not extend beyond the boundary of the spray irrigation site when treated wastewater is being applied. If odors are produced that are considered to be a public nuisance, the permittee shall take the necessary steps to eliminate such odors. All action taken shall be reported to the Department." Additionally, Mountaire's current spray irrigation permit states: "The permittee shall track the wind direction to ensure that no spray

drift occurs to roadways during irrigation. If wind conditions are such that spray drift could occur over roadways, then all spray irrigation activities shall cease in those fields."

In accordance with Section 138.2.1 of the Sludge Regulations, the following setback distances must be maintained for Class B sludge application:

	Surface Application	Surface Injection
Occupied off-site dwelling	200 feet	100 feet
Occupied on-site dwelling	100 feet	50 feet
Potable wells	100 feet	100 feet
Non-potable wells	25 feet	25 feet
Public roads	25 feet	15 feet
Property lines	50 feet	25feet
Bedrock outcrops	50 feet	25 feet
Streams, tidal waters, or other water bodies	50 feet	25 feet
Drainage ditches	25 feet	25 feet

3. In what form is sludge applied to fields? IE: liquid or dried cake material?

Historically, Mountaire has applied several different types of sludges from their wastewater treatment plant. The material has ranged from a liquid sludge injected into the top foot of soil, a liquid sludge sprayed into a forested tract of land, to an anaerobic cake material that is a solid that was surface applied followed by incorporation into the soil.

4. Testimony was given during the public hearing that Mountaire stopped applying sludge in 2017. Is that because of prohibition by DNREC, or did they stop on their own.

DNREC did not direct Mountaire to stop applying sludge. Mountaire's decision to stop applying sludge, since 2017 was a business decision.

5. Can the same fields be used for both sludge and spray irrigation, if yes, if there a limitation on when they can be applied to the land.

Ms. Cornwell
December 4, 2019
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The Department could permit the fields for both sludge application and spray irrigation; however, the Department would not allow both products to be land applied during the same year. In addition, the Department would require testing to demonstrate site conditions are still suitable for spray irrigation prior to allowing a transition to spray irrigation to occur. Currently, Mountaire's sludge permit does not allow the application of sludge from December 7 through February 15th (this mirrors the Delaware Department of Agriculture's nutrient prohibition timeframe) unless the Department approves the application in writing. Approval to apply sludge during this time period would only be granted if there was an emergency situation at the wastewater treatment plant and the Department determined land application of sludge was necessary.

Should you need additional information, please do not hesitate to contact me at (302) 739-9949.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Roushey', with a long horizontal flourish extending to the right.

Jennifer S. Roushey
Environmental Program Administrator
DNREC – Division of Water

Enclosure

Churchill, Brian (DNREC)

From: Churchill, Brian (DNREC)
Sent: Tuesday, January 15, 2019 2:57 PM
To: 'Jamie Whitehouse'
Cc: Roushey, Jennifer S. (DNREC)
Subject: RE: Planning & Zoning - Conditional Uses - 234-28.00-2.00 and 3.00 and the farm at 234-28.00-1.00
Attachments: CU 1090.pdf; DNREC approval.pdf; 1994 Conditional Use and Permit Application.pdf

Jamie,

Thank you for the information and summary.

CU 1090 was for the Udell Tract and this land is no longer permitted for the application of biosolids. CU 1090 did not have any connection to Mountaire's Thorogood and Al Rust farms.

Based on your email below, I believe it is appropriate for me to notify my contact at Mountaire of the issue and have them work with you and Sussex County to go through the conditional use process. Please let me know your thoughts.

Thank you,

Brian Churchill
Environmental Scientist
Surface Water Discharges Section
Division of Water
Voice: (302) 739-9946 Fax: (302) 739-8369

From: Jamie Whitehouse
Sent: Tuesday, January 15, 2019 12:02 PM
To: Churchill, Brian (DNREC)
Subject: RE: Planning & Zoning - Conditional Uses - 234-28.00-2.00 and 3.00 and the farm at 234-28.00-1.00

Brian, Good morning,

My apologies for the delay in getting back to you. I have been looking into the Mountaire/Townsend's Inc. application received after May 1990 when the Biosolids Code changes came into effect.

The following CU 1569, CU 1570, CU 1090 and CU 1017 all concern requests to apply biosolids. CU 1569 and CU 1570 seem to apply to other sites than the parcels enquired about.

CU 1569 Mountaire Cordrey & Frame Tract (376.32 Acres) lying south of Route 314, east of Route 30 and west of Route 305 – P&Z 10.28.2004 and CC 11.30.2004 approved 11.30.2004 under Ordinance 1730 subject to conditions.
<https://sussexcountyde.gov/sites/default/files/minutes/m113004.pdf>

CU 1570 – application of **MOUNTAIRE FARMS OF DELAWARE, INC.** (Colony Tract) to consider the Conditional Use of land in an AR-1 Agricultural Residential District for land application of bio-solids from Mountaire wastewater treatment systems to be located on a certain parcel of land lying and being in Dagsboro Hundred, Sussex County, containing 80.00 acres, more or less, lying northeast of Route 326, across from

Route 329 and north of Route 86

<https://sussexcountyde.gov/sites/default/files/minutes/ml02804.pdf>

CU 1090 351 acres of forested land within Indian River Hundred - Approved by CC on 12.13.1994 Ordinance 997

<https://sussexcountyde.gov/sites/default/files/minutes/Council%20Minutes%2012131994.pdf>

I have requested this file to see if it is of relevance to the above parcels.

CU 1017 -Withdrawn following CCmeeting 10.13.1992

As this was withdrawn and never determined. I have not looked further into into this site.

Summary

Based on the above, if the request to use parcels 234-28.00, 1.00, 2.00 or 3.00 for the application of bio-solids is a new one, and there is no history of bio-solids being applied/sprayed prior to 1990, then a Conditional Use Permit would likely be required.

Thanks,

Mr. Jamie Whitehouse, AICP, MRTPI
Planning & Zoning Manager, Department of Planning & Zoning
Sussex County
2 The Circle, P.O. Box 417, Georgetown, DE, 19947
Tel: 302-855-7878, Fax: 302-854-5079

Much of the County's Planning and Zoning Information can be found online at:
<https://sussexcountyde.gov/sussex-county-mapping-applications>

Information on the 2018 Sussex County Comprehensive Plan can be found at:
<https://sussexplan.com/>

From: Churchill, Brian (DNREC) <Brian.Churchill@state.de.us>
Sent: Monday, January 14, 2019 9:11 AM
To: Jamie Whitehouse <jamie.whitehouse@sussexcountyde.gov>
Subject: RE: Planning & Zoning - Conditional Uses

Good morning Jamie,

I wanted to follow up on the email chain below to see if Sussex County has determined if Mountaire needs to obtain a CU for the two fields we discussed.

Thank you,

Brian

From: Jamie Whitehouse <jamie.whitehouse@sussexcountyde.gov>
Sent: Friday, December 28, 2018 11:36 AM
To: Churchill, Brian (DNREC) <Brian.Churchill@state.de.us>
Subject: RE: Planning & Zoning - Conditional Uses

Thanks Brian,

Before we contact Mountaire, let me look further into the site history on our end. It may be that they need a Conditional Use Permit.

Thanks,

Mr. Jamie Whitehouse
Planning & Zoning Manager, Department of Planning & Zoning
Sussex County
2 The Circle, P.O. Box 417, Georgetown, DE, 19947
Tel: 302-855-7878, Fax: 302-854-5079

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From: Churchill, Brian (DNREC)
Sent: Friday, December 28, 2018 9:33 AM
To: Jamie Whitehouse
Subject: RE: Planning & Zoning - Conditional Uses

Good morning Jamie,

I can dig up more details related to the historic timeline if needed but to answer your questions, the sludge application would have started after May 8, 1990 and it is normal for there to be periods of time where no sludge application occurs (sometimes there have been periods longer than 2 years without application). Please let me know if you need additional details. Based on the two answers and what you have stated about County Code, it sounds like we have an issue that may need to be addressed through the County process?

Do you want me to reach out to Mountaire and let them know of the situation and have them contact you to work through the process (assuming they don't decide to have the two land application fields we have been discussing from the permit renewal)? As you are probably aware, this will likely be a highly contentious process with the ongoing litigation due to the wastewater treatment plant issues at the Millsboro Mountaire facility but I will be happy to assist as appropriate.

Thanks again for your help,

Brian Churchill
Environmental Scientist
Surface Water Discharges Section
Division of Water
Voice: (302) 739-9946 Fax: (302) 739-8369

From: Jamie Whitehouse <jamie.whitehouse@sussexcountyde.gov>
Sent: Thursday, December 27, 2018 3:57 PM
To: Churchill, Brian (DNREC) <Brian.Churchill@state.de.us>
Subject: RE: Planning & Zoning - Conditional Uses

Thank Brian,

It looks like my colleague Will was only able to find one Conditional Use application for the two parcels you asked about. It may be that they started prior to the Ordinance coming into effect. However, if the land application of sludge started after May 8 1990, then it could potentially be a violation. From a County Code perspective, we are interested in the date on which the land application of sludge actually began, and whether it ceased for any continuous periods of time. If it began before May 8, 1990 then it would have likely been permitted by right, and would now be considered as a non-conforming use provided that there has not been any intervening cessation or abandonment of the use.

As an aside, if it is now classed as a non-conforming use, then any proposed expansion might require approval, as there are specific rules in the Code relating this.

I am working in Jennifer Wall's old position. I hear that Jen is back working at DNREC again. I hope that she's doing well. She did email me a few months ago.

Thanks,

Mr. Jamie Whitehouse
Planning & Zoning Manager, Department of Planning & Zoning
Sussex County
2 The Circle, P.O. Box 417, Georgetown, DE, 19947
Tel: 302-855-7878, Fax: 302-854-5079

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From: Churchill, Brian (DNREC) <Brian.Churchill@state.de.us>
Sent: Thursday, December 27, 2018 3:27 PM
To: Jamie Whitehouse <jamie.whitehouse@sussexcountyde.gov>
Subject: RE: Planning & Zoning - Conditional Uses

Jamie,

Thank you so much for the information. In the case of the tax parcels I was looking into, the biosolids land application permit was issued on June 7, 1990 meaning it would have been reviewed and legal noticed prior to the May 8, 1990 date that Sussex County put in place Ordinance 681. Based on this information, I suppose it would have been "permitted by right"?

I am not sure why for the 1991 site (Rehoboth) I only have a letter from Sussex County and I do not have a copy of a conditional use; however, I feel comfortable with the letter as it indicates that Sussex County did not oppose to the activity. Please let me know if you see anything differently or have any concerns.

Are you in Jennifer Wall's previous position?

Thanks again for the help and I look forward to working with you in the future.

Brian Churchill
Environmental Scientist
Surface Water Discharges Section

Division of Water
Voice: (302) 739-9946 Fax: (302) 739-8369

From: Jamie Whitehouse <jamie.whitehouse@sussexcountyde.gov>
Sent: Thursday, December 27, 2018 2:18 PM
To: Churchill, Brian (DNREC) <Brian.Churchill@state.de.us>
Cc: William Cornish <william.cornish@sussexcountyde.gov>
Subject: RE: Planning & Zoning - Conditional Uses

Brian,

Good afternoon. From what I can tell, the land application of sludge was not added as a Conditional Use until May 8th 1990 (Ordinance 681). Prior to this date, the land application of sludge would likely have been permitted by right, given the wide definition of agriculture in the Code. The 1990 text is below:

Land application of sludge, treated sludge or any product containing these materials. For purposes of this section, "sludge" means the accumulated semiliquid suspension, settled solids or dried residue of these solids that is deposited from liquid waste in a wastewater treatment plant or surface or ground waters treated in a water treatment plant, whether or not these solids have undergone treatment. "Septage" is included herein as sludge. "Land application" means the placement of sludge, treated sludge or any other product containing these materials within two feet below the surface of land used to support vegetative growth.

[Added 5-8-1990 by Ord. No. 681]

I hope that this is of assistance,

Thanks,

Mr. Jamie Whitehouse
Planning & Zoning Manager, Department of Planning & Zoning
Sussex County
2 The Circle, P.O. Box 417, Georgetown, DE, 19947
Tel: 302-855-7878, Fax: 302-854-5079

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From: William Cornish
Sent: Thursday, December 27, 2018 2:10 PM
To: Jamie Whitehouse <jamie.whitehouse@sussexcountyde.gov>
Subject: FW: Planning & Zoning - Conditional Uses

From: William Cornish
Sent: Thursday, December 27, 2018 2:10 PM
To: 'Churchill, Brian (DNREC)' <Brian.Churchill@state.de.us>
Subject: RE: Planning & Zoning - Conditional Uses

Sorry Brian but at this point I'm completely out of my depth. I can refer you to my supervisor Jamie Whitehouse he may be able to help you.

He's currently on lunch but I can forward him our conversation, and ask him to get back to you.

From: Churchill, Brian (DNREC) <Brian.Churchill@state.de.us>

Sent: Thursday, December 27, 2018 1:42 PM

To: William Cornish <william.cornish@sussexcountyde.gov>

Subject: RE: Planning & Zoning - Conditional Uses

Will, I am sorry for so many questions. I am trying to determine how Sussex County "approved" sites that applied sewage sludge (biosolids) which were originally approved by DNREC approximately 25 or 30 years ago.

Attached is a letter (page 2) dated March 11, 1991 to the City of Rehoboth in which Sussex County "approved" the application onto sludge onto a farm under a "nonconforming use". At some point after 1991 (I recently saw one from 1994), Sussex County issued conditional uses for the application of biosolids onto fields.

Do you think it is possible that the tax parcel numbers I listed in a previous email (234-28.00-2.00,3.00 or the farm at 234-28.00-1.00) were approved under a nonconforming use letter like the attached Rehoboth letter? If so, do you think Sussex County would have a copy of the letter(s)? The two aforementioned farms were approved by DNREC in 1990 for the application of biosolids.

Thank you,

Brian Churchill
Environmental Scientist
Surface Water Discharges Section
Division of Water
Voice: (302) 739-9946 Fax: (302) 739-8369

From: William Cornish <william.cornish@sussexcountyde.gov>

Sent: Thursday, December 27, 2018 11:40 AM

To: Churchill, Brian (DNREC) <Brian.Churchill@state.de.us>

Subject: RE: Planning & Zoning - Conditional Uses

The oldest we can find is from March 1971

From: Churchill, Brian (DNREC) <Brian.Churchill@state.de.us>

Sent: Thursday, December 27, 2018 11:31 AM

To: William Cornish <william.cornish@sussexcountyde.gov>

Subject: RE: Planning & Zoning - Conditional Uses

Hello Will,

I have one more question that you may be able to help me with. Do you know what year Sussex County first started to issue conditional uses?

Thank you,

Brian Churchill
Environmental Scientist

Surface Water Discharges Section
Division of Water
Voice: (302) 739-9946 Fax: (302) 739-8369

From: William Cornish <william.cornish@sussexcountyde.gov>
Sent: Thursday, December 27, 2018 10:54 AM
To: Churchill, Brian (DNREC) <Brian.Churchill@state.de.us>
Subject: Planning & Zoning - Conditional Uses

Will here; I was Just emailing you to confirm no conditional use exists for the farm at 234-28.00-2.00,3.00 or the farm at 234-28.00-1.00. Conditional use number 1090 is in our archives, I've arranged for it to be brought here for digitization. If it does not arrive by today, then I should be able to get it to you tomorrow.

