Compliance and Monitoring Issues for Manure Irrigation
Just one CAFO in Michigan

- Failed to meet the effluent limitations set forth in their permit
- Irrigated effluent on 128 days on various fields resulting in 707 instances where the CAFO irrigated waste at concentrations more than two times the amount allowed under their NPDES permit.
- Unacceptable high levels of copper in waste effluent irrigated
Problems with Irrigation

- Farmers have no training and should be licensed.
- How will you prevent over application? There is no metering of applications required.
- Irrigation requires 4 or 5 to 1 ratio of fresh water for dilution of waste. Water usage monitoring should be required.
- How will DNR monitor?
- Test Wells? Arsenic, copper, manganese contamination, nitrates. Ammonia and salt?
- How will there be incorporation on a growing crop?
- Irrigation can cause contamination of the crop. Which crops will be more susceptible to disease?
- Emissions? Morning, noon, overnight?
- What is the actual content of the waste? What are the outside industrial waste inputs?
- How much e-coli, pathogens, viruses, bacteria, ammonia, methane, etc. being emitted through the air?
- Applications before rainfall, during rainfall, during the winter? Wind direction and air speed?
- Will irrigation be allowed over tile lines, county drains, open waterways, wetlands?
- What is the cost to the taxpayers?
- No Well sampling, groundwater monitoring.
- Will there be monitoring of health of neighbors?
- What besides manure is in this waste?
Good morning Larry,

I spoke with Luke this morning regarding the testing of Chemtreat CT-9104 in the digester at your facility and have reviewed the product data sheet and the MSDS. Given the type of additive, the expected benefits, and the small volume in relation to the total capacity of the digester, I conditionally approve use of this product provided that you notify the Department on whether or not you intend to continue using the product after the testing phase and that you follow the Proper Operation and Maintenance section of your Permit, specifically:

1.3.1
- Prior to introducing any influent additives to a digester, other than manure, the permittee shall obtain written Department approval. If any materials other than manure are used in the digester, the permittee shall maintain daily records of the volumes of all manure and non-manure components added to the digester influent. As part of its approval, the Department may apply additional requirements in accordance with s. NR 243.17(1). As part of the Department's review, the Department may also require amendments to the permittee's nutrient management plan and the permittee shall submit an amended plan to the Department to incorporate the additional requirements.

This information must be submitted with your annual report. Additionally, please note that if materials other than manure comprise greater than 10% of the total digester volume, per 243.17, the Department may apply additional requirements.

Thank you for the notification. If you have any questions, please contact me.

Jay Schiefelbein
Wisconsin Department of Natural Resources
Agricultural Runoff Management Specialist
(920) 662-5407 (Green Bay)
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Jeremiah_Schiefelbein@wisconsin.gov

Jay Would this be ok to add this to are digester to reduce are h2s levels? thank you Larry Dufek

---Original Message---
From: Luke Brockman <LROCKMAN@energysystemsgroup.com>
To: larrydufek@aol.com
Cc: Chuck Beier <cbieber@energysystemsgroup.com>; Scott Krupicka <skrupicka@energysystemsgroup.com>; Leon Halter <lhalter@energysystemsgroup.com>; Corey Brickl (CoreyB@dvoinc.net) (CoreyB@dvoinc.net) <CoreyB@dvoinc.net>; Tom Pahl (TPahl@chemtreat.com) <TPahl@chemtreat.com>
Sent: Mon, Aug 20, 2012 10:53 am
Subject: State Notification -additive to digester for H2S control
MATERIAL SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

Product Name: ChemTreat CT9104
Product Use: Odor Control
Supplier's Name: ChemTreat, Inc.
Emergency Telephone Number:
(800) 424-9300 (Toll Free)
(703) 527-3887
Address (Corporate Headquarters):
4461 Cox Road
Glen Allen, VA 23060
Telephone Number for Information:
(800) 648-4579
Date of MSDS: March 25, 2010

Section 2. Hazard(s) Identification

Signal Word: WARNING!
Hazard Statement(s):
May be harmful in contact with skin.
May be harmful if inhaled.
May be harmful if swallowed.
Precautionary Statement(s):
No significant health risks are expected from exposures under normal conditions of use.

Section 3. Composition/Hazardous Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Registry #</th>
<th>Wt.%</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are no hazardous ingredients in this product as defined in 29 CFR 1910.1200.</td>
<td>Proprietary</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Skin: Wash with plenty of soap and water. Call a poison center or doctor/physician if you feel unwell.

Ingestion: DO NOT INDUCE VOMITING. Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.
The Hogs are Coming

- Planning for expansion: DNR offers information on regulations CAFOs face in Wisconsin

- Posted: Friday, March 21, 2014 11:43 am

- By Jim Massey, Editor | jimmassey@mhtc.net | 0 comments

- DODGEVILLE — The Wisconsin pork and dairy industries are gearing up for more large farms, and are calling on the Wisconsin Department of Natural Resources to help farmers meet the regulations they will face when they site or expand an operation......
Recommendations

- Generated manure needs to be more solids and less liquid, thus creating a healthier soil.
- No Winter Spreading - No Exceptions (Correct the Storage Capacity Shortfall)
- Manure Should Be Incorporated Into the Soil Within 24 Hours
- Increase Setback Distances From Homes, Wells, Waterways and Wetlands to 500 Feet minimum for treated waste
- Neighbor Notice - So Residents Can Make Informed Choices About Exposure
- When Drinking Water Wells are Polluted, Make the CAFO Pay - Not the Resident or the Taxpayer
- Do Not Allow Fields to be Spread on Multiple Times by Different CAFOs (Duplicate NMPs)
- Do Not Allow Outside, Industrial Wastes or Chemicals to be added to lagoons.
- Ban Irrigation of All Wastes
Living a Nightmare Animal Factories in Michigan

- **Part 1**
  https://www.youtube.com/watch?v=Uz9dYR0qpX4

- **Part 2**
  https://www.youtube.com/watch?v=6xp5z96MkPQ
Questions?

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ECCSCM

Lynn Henning
Regional Associate, Socially Responsible Agriculture Project
Recipient, 2010 Goldman Environmental Prize
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