

IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL SERVICES DIVISION

Field Office 6,
1023 West Madison, Washington, IA 52353-1623
Tel: (319) 653-2135 Fax: 2856

REPORT OF INVESTIGATION

INVESTIGATION DATES: Current: 5-27-2010
Last Inspection: 4-13-2010

TO: Wastewater Engineering PERSONS CONTACTED:
DNR Rebecca Nott, Environmental Compliance Mgr.
Des Moines

RE: Wastewater Site Survey for Land Application Fields C-39 through C-45
Facility # 6-90-00-1-05
Work Request # 2040

INSPECTOR:

Paul Brandt

DATE: 7-13-10

REVIEWER:

James T. Hewitt

DATE: 7-13-10

DISTRIBUTION: FIELD OFFICE: CENTRAL OFFICE

OBSERVATIONS/RECOMMENDATIONS:

On 5-27-2010, I conducted a wastewater site survey at Chamness' Eddyville facility. Purpose of the survey was to check on 7 new areas for wastewater land application. These are all located several miles south of the Chamness facility in the "Munterville" area; 5 in Wapello County and 2 in Monroe County.

The site survey was conducted using the separation distances taken from the Iowa Wastewater Facilities Design Standards, Chapter 21.

The Design Standards, 21.2.1 requires 1000' from any shallow public water supply well; 500' from any public lake or impoundment and half a mile from any public lake or impoundment used a raw water source by a potable water supply.

There are no public water supply wells, nor any public lakes or impoundments in this area.

Section 21.1.1.2 of the design standards requires:

- A. 300' of dwellings or public use areas (roads are not public use areas)
- B. 50' of property lines if surface applying or possibly less if injecting (5')
- C. 400' of potable water wells not on the property
- D. 300' of a structure, continuous flowing stream, or other physiographic feature that may provide direct connection between the ground water table and the surface.

In addition, the operating permit (#90-00-1-05), Item 13, requires 200' from a potable water supply well located on the premises.

Page 2

These 7 tracts range from 80 to 230 acres. They are all very rolling terrain, mostly pasture, with no row crop on them. All have creeks, waterways and hills on portions of the property. Some of the flatter, upland areas will be suitable for land application, but other portions will not be.

Compliance with the above noted design standards and the NPDES operating permit will result in considerably less of the total plot being available for land application. Steep slopes are an issue on all the properties. A quick check of the soil type maps shows the parcels having the most flat land to be C-41, C-42, C-45 and to a lesser extent C-43.

All of the 7 sites have useful areas for land application, and areas that are unsuitable. This becomes an issue of proper site management for maintaining the required separation distances and proper application practices to avoid any wastewater runoff.

NOTE: Since the time of this site survey, Chamness has met with DNR Wastewater Permits staff to discuss new procedures for permitting land application sites. This site survey was conducted prior to that meeting. The 5 Wapello County sites are within the boundaries of DNR Region 6. However, the other 2 are in Monroe County and are part of Region 5 and may require input from that office.

J:/pbrandt/ww/chamn0510-roi-land-app