

CON 12-15 Doc #16582

DEPARTMENT OF NATURAL RESOURCES

PAUL W. JOHNSON, DIRECTOR

THOMAS J. VILSACK, GOVERNOR SALLY J. PEDERSON, LT. GOVERNOR

July 29, 1999

Mark Pitts Vogel Fertilizer Company Hamberg, Iowa 51640

RE: Sample Results for Private Wells near Vogel Fertilizer, Hamberg

Dear Mr. Pitts:

During a 1996 property assessment, nitrate-nitrogen was found above the drinking water standard in samples collected from four temporary monitoring wells installed on the Vogel Fertilizer property. The highest nitrate-nitrogen value of 521 mg/l was more than 50 times above the drinking water standard of 10 mg/l. Similar contamination has been found at many other agricultural chemical dealership sites in Iowa. These sites are of particular concern when they present a threat of contamination of an aquifer used as private or municipal water supply.

During assessment activities in 1997 and 1998 for a petroleum release, the direction of groundwater flow was indicated as being towards the east or southeast. The Hamberg city wells are located more than a half mile north of Vogel Fertilizer and do not appear to at risk of contamination from the site. However, several houses are located to the south and east of the site. The department suspected that some of these houses could have private drinking wells and were at risk of contamination from the Vogel Fertilizer site. Because of this concern the department conducted a site visit June 24, 1999. During the visit, department staff took a brief tour of the Vogel Fertilizer property and collected samples from the private wells used by three nearby residences.

The Charles Kirk residence is the closest identified home with a private drinking water well. As shown on the attached map, the Kirk well is less than 100 feet south of the Vogel Fertilizer property. The Mike Wipf residence is the next closest downgradient residence, but is connected to city water and no longer has a private well. The Clark Reid and Carl Reid residence were also found to use private drinking water wells. As shown on the attached map the two Reid wells are located 800 and 1,300 feet east of the Vogel Fertilizer property.

With the permission of the owners, samples were collected from the wells of the Kirk and two Reid residences. The samples were analyzed for nitrate-nitrogen and common Iowa

herbicides. As shown in the attached results no herbicides were found above minimum detection limits in any of the three wells. These detection limits are at least 10 times less than the drinking water standards for any of these herbicides. Nitrate-nitrogen was only found above minimum detection limit in the sample from the Kirk well. The value of 3.2 mg/l is approximately 1/3 the drinking water standard of 10 mg/l.

Because of the near absence of detectable nitrate-nitrogen and the lack of detectable herbicides in the three private wells, the department is not planning to take any further action at the Vogel Fertilizer site.

If you have any questions, please contact me (515) 242-5087.

Sincerely,

John Vedder

Uncontrolled Sites Section

ATTACHMENTS (Sample Results, Map)



Hygienic Laboratory

The University of Iowa

Date of report: 07-15-1999

Sample Number 9957342
Date Received 06-25-1999
Project WMSF

Date Collected Collection Site Collection Town Description Collection Town Description Collection Town Collection Collection

Reference Collector Phone

VEDDER JOHN (515) 242-5087

Purchase Order

Comments

Act. Code #1324; Cost Center #7335

Results of Analyses

Nitrogen Containing Herbicides in Water

	Concentration	
Analyte	ug/L	Quantitation Limit
Atrazine	<0.1	0.1
Cyanazine (Bladex)	<0.1	0.1
Metolachlor (Dual)	<0.1	0.1
Alachlor (Lasso)	<0.1	0.1
Metribuzin (Sencor)	<0.1	0.1
Butylate (Sutan)	<0.1	0.1
Trifluralin (Treflan)	<0.1	0.1
Acetochlor	<0.1	0.1
Desethyl Atrazine	<0.1	0.1
Desisopropyl Atrazine	<0.1	0.1

Date Analyzed: 07-11-1999 Method: EPA 507/8141 Date Extracted: 07-02-1999

Extraction Method: EPA 507/3510

Analyst: VR Verified: DLZ Analyst: KB,GJ Verified: EE

Inorganic Chemistry

Analyte	Concentration	Method	Analyst/ Verifier	Date Analyzed
Nitrate + Nitrite Nitrogen as N	3.2 mg/L	EPA 353.2	JF/RS	06-28-1999

Description of units used within this report

mg/L - Milligrams per Liter

Quant Limit - Lowest concentration reliably measured

ug/L - Micrograms per Liter

Iowa Laboratory Certification No. 027. AIHA, ICR, NVLAP, USEPA and other credentials available upon request.

If you have any questions please call Sherri Marine at 800/421-IOWA (4692) or 319/335-4500. Thank you.



Hygienic Laboratory

The University of Iowa

JRAL TEGOURDER

Date of report: 07-15-1999

Sample Number 9957341

Date Received 06-25-1999

Project WMSF

Date Collected Collection Site Collection Town

Collection Town
Description
Water

Reference

Collector VEDDER JOHN
Phone (515) 242-5087

Purchase Order

Comments

Act. Code #1324, Cost Center #7335

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Mary J. R. Gilchrist, Ph.D. Director

102 Oakdale Campus, #101 OH Iowa City, Iowa 52242-5002 319/335-4500 Fax: 319/335-4555

http://www.uhl.uiowa.edu

H.A. Wallace Building East Grand, Des Moines, Iowa 50319-0034 515/281-5371 Fax: 515/243-1349



Hygienic Laboratory

The University of Iowa

Date of report: 07-15-1999

JOHN VEDDER IDNR UNCONTROLLED SITE SECTION WALLACE STATE OFFICE BLDG 900 EAST GRAND AVENUE **DES MOINES IA 50319-0034**

9957343 Sample Number **Date Received**

06-25-1999 **WMSF**

Project Date Collected Collection Site

06-24-1999 10:00 carol reid residence

Collection Town Description

Hamburg water

Reference Collector

VEDDER JOHN (515) 242-5087

Phone

Purchase Order

Comments

Act. Code #1324, Cost Center #7335

Results of Analyses

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