

TERRY E. BRANSTAD, GOVERNOR  
KIM REYNOLDS, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES  
ROGER L. LANDE, DIRECTOR

June 17, 2011

Mr. Steve Kendall  
City Administrator  
City of Oelwein  
20 Second Avenue SW  
Oelwein, IA 50662

Subject: Variance Request from Design Standards Section 13.4.2  
First Avenue Lift Station Improvements  
City of Oelwein, Iowa  
IDNR Project No. S2010-0150

Dear Mr. Kendall:

After careful and thorough consideration, the Department has denied your June 15, 2011 request for a variance from Section 13.4.2 of the Iowa Wastewater Facilities Design Standards which requires protection from clogging to be provided for the pumps installed in wastewater pump stations. The above variance is denied due to the fact that the justification presented does not substantially demonstrate that the project resulting from the proposed variance provides equivalent or improved effectiveness. The requested variance is not deemed to be necessary and appropriate pursuant to the Iowa Code Section 455B.181.

Pursuant to Iowa Code Section 455B.181, and 561 Iowa Administrative Code (IAC) 7.4(1), as adopted by reference by 567 IAC Chapter 7, a written notice of appeal to the Environmental Protection Commission may be filed within 30 days of receipt of this letter. The notice of appeal is required to be filed with the Director of the Department, and must identify the specific portion or portions of the variance denial that are being appealed and include a short and plain statement of the reasons for appeal. A contested case hearing will then be commenced pursuant to Iowa Code Chapter 17A, 561 IAC Chapter 7, and 567 IAC Chapter 7.

If you have any questions, please call Marty Jacobs at 515-242-6148 or Emy Liu at 515-281-8509.

Sincerely,



Satya P. Chennupati, P.E.  
Wastewater Engineering Section Supervisor

cc: Steve Van Dyke, P.E., Fox Engineering Associates, Inc.  
DNR Field Office # 1  
DNR Sewage File # 6-33-53-0-01  
DNR Legal Services - Diana Hansen

# VARIANCE REQUEST

## Iowa Department of Natural Resources

1. Date:	June 17, 2011	14. Decision:	<i>Denied</i>
2. Reviewer/Engr.:	Marty Jacobs	Date:	<i>6/27/11</i>
3. Date Received:	June 15, 2011		
4. Facility Name:	City of Oelwein		
5. Facility Number:	6-33-53-0-01		
6. County Number:	33 (Fayette)	15. Appealed:	
7. Program Area:	CP (Wastewater)	Date:	
8. Facility Type:	C05 (collection/transport)		
9. Subject Area:	344 (pump clogging protection)		
10. Rule Reference:	567-64.2(9)a		
11. Design Std. Ref.:	13.4.2		
12. Consulting Engr.:	Fox		
13. Variance Rule:	567-64.2(9)c		

### 16. Description of Variance Request:

The City of Oelwein is requesting variance from the Iowa Wastewater Facilities Design Standards Chapter 13 – Wastewater Pump Stations and Force Mains – 13.4.2 (Protection Against Clogging) for installation of a wastewater lift station without a trash basket or screens.

### 17. Applicant's/Consulting Engineer's Justification:

1. Trash baskets require frequent maintenance and can result in sewer backups if not cleaned routinely.
2. Collected screenings are messy, difficult to deal with and may present an infection risk to maintenance staff if not handled properly. These materials are much better dealt with at the treatment plant, which includes automated screenings collection, washing and compaction.
3. Oelwein collection system staff members do not want the trash baskets for this lift station for the reasons listed above.
4. In our experience, a large proportion of installed trash baskets are not utilized at similar pump stations in Iowa. They are often removed by collection system staff after construction due to the maintenance issues, and cities have not experienced significant increases in pump plugging.

### 18. Department's Justification:

Recommend variance **denial**.

This variance has not been approved on previous projects and does not appear to provide equivalent effectiveness. Although the manufacturer's literature provided states that this pump design is resistant to clogging, it does not state the pumps are recommended for use without trash baskets or screens.

19. Precedents Used: Promise City, 10/27/08; Boyden, 3/6/90; New London, 8/23/99; Halbur 12/21/99;

20. Staff Reviewer: *Wentworth* Date: *6-17-11*

21. Supervisor: *Tex King* Date: *6-17-11*

22. Authorized by: *Sharon Galtier* Date: *6/27/11*

*Interim WQ Bureau Chief*

*T21C*



June 15, 2011

Marty Jacobs  
Iowa Department of Natural Resources - Wastewater Engineering Section  
Wallace Building  
502 East 9th Street  
Des Moines, Iowa 50319-0034

RE: Trash Basket Variance Request  
Oelwein 1<sup>st</sup> Avenue Lift Station Improvements  
PROJECT No. 2003-09B

Dear Marty:

The current version of IDNR Design Standard 13.4.2 requires trash baskets for all collection system pump stations. We hereby request a variance from this Standard for this project based on the following:

1. Trash baskets require frequent maintenance and can result in sewer backups if not cleaned routinely.
2. Collected screenings are messy, difficult to deal with and may present an infection risk to maintenance staff if not handled properly. These materials are much better dealt with at the treatment plant, which includes automated screenings collection, washing and compaction.
3. Oelwein collection system staff members do not want the trash baskets for this lift station for the reasons listed above.
4. In our experience, a large proportion of installed trash baskets are not utilized at similar pump stations in Iowa. They are often removed by collection system staff after construction due to the maintenance issues, and cities have not experienced significant increases in pump plugging.
5. In response to these issues, the IDNR is proposing to remove the trash basket requirement for small lift stations in their draft version of IDNR Design Standard Chapter 13.
6. We are limiting the pumps allowed for this project to three models that have an exceptional reputation for handling solids, especially rags and stringy materials which are the cause of the majority of pump plugging issues.
7. We received a similar variance for a recent project in Humbolt (May Street Pump Station constructed in 2004).

I trust that this information will be sufficient to justify a variance for this project. If you have any questions or concerns, please do not hesitate to contact me or Lance Aldrich.

Sincerely,  
FOX Engineering Associates, Inc.

*Steve Van Dyke*

Steve Van Dyke, P.E.  
Principal