



Variance File ch. 15.

## STATE OF IOWA

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

DEPARTMENT OF NATURAL RESOURCES  
JEFFREY R. VONK, DIRECTOR

October 9, 2003

Mr. Mike Wallner  
Public Works Director  
209 Pearl Street  
Council Bluffs, Iowa 51503

Subject: Variance Request from IA 15.2.4.2.1  
WWTP Improvements Phase II & III Screening & Grit Removal, Council Bluffs, Iowa

Dear Mr. Wallner:

The Iowa Department has considered and approved your October 6, 2003 request for a variance from Rule 567-64.2(9)b of the Iowa Administrative Code and Chapter 15.2.4.2.1 of the Iowa Wastewater Facilities Design Standards, which requires a minimum 5/8 inch opening for the mechanically cleaned bar screen. Based on the documentation presented by the Engineer, it is the determination of this Department that satisfactory justification has been presented to warrant the granting of a variance to the City of Council Bluffs for using a minimum clear opening of 3/8-inch for the mechanically cleaned bar screen.

This decision is based on our review of justification presented to support the request and our concurrence that the resulting project will provide substantially equivalent effectiveness as would be provided by technical compliance with the design standard on this issue.

If you have any questions, please call Satya P. Chennupati, P.E. at 515-281-8995.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne Farrand", written over a horizontal line.

Wayne Farrand, P.E.  
Wastewater Section Supervisor

cc: Field Office #4  
Fox Engineering  
DNR File

✓ 9-8-06

## VARIANCE REQUEST

Iowa Department of Natural Resources

1. Date: October 9, 2003  
2. Review Engineer: Satya P. Chennupati  
3. Date Received: October 6, 2003  
4. Facility Name: City of Council Bluffs STP  
5. County Number: 78  
6. Program Area: CP (Wastewater Construction)  
7. Facility Type : C04 (Physical Treatment)  
8. Subject Area : 329  
9. Rule Reference: 567-64.2(9)a  
10. Design Stds Ref: 15.2.4.2.1  
11. Consulting Engr: Fox Engineering  
12. Variance Rule: 567-64.2(9)c

13. Decision: *approved*  
Date: *10/9/03*

14. Appeal:  
Date:

15. Description of Variance Request: Allow installation of a mechanically cleaned bar screen with 3/8" clear spacing instead of the minimum 5/8" clear spacing required by the Iowa Wastewater Design Standards.

16. Consulting Engineer's Justifications

- Small size screen opening to remove plastics from the influent flow and keep them out of the plant flow thereby preventing pump plugging problems.
- Removing plastics provides a better quality biosolids product for land application.
- Project includes screenings washing and pressing to wash organics from screenings into the waste stream and minimize odors.
- The smaller spacing has been successfully used on many projects in Iowa.
- The Department has approved similar screen spacing in the past for Engineer's projects in Sioux City and Grimes.

17. Department's Justifications

- Recommend Approval.
- Successful past operating history in several municipal wastewater treatment installations in Iowa.
- Mechanical screens with openings less than 5/8" are an accepted engineering design practice.
- Ten States Standards (1997) does not specify minimum size of screen openings.

18. Precedents Used

Carroll, Walford, Clear Lake S.D., Osage, Tama, Newton, Altoona, Cherokee, West Liberty, Waukee, etc.

19. Staff Reviewer: *Satya Chennupati*

Date: *10/9/03*

20. Supervisor: *[Signature]*

Date: *10/9/03*

21. Authorized by:

Date: