

✓ 9.8-06

VARIANCE REQUEST

Iowa Department of Natural Resources

1. Date: March 15, 2002
 2. Review Engineer: Larry Bryant
 3. Date Received: February 15, 2002
 4. Facility Name: Newton WWTP
 5. County Number: 50 (Jasper)
 6. Program Area: CP (Wastewater Construction)
 7. Facility Type: C04 (Physical Treatment)
 8. Subject Area: 329 (bar racks and screens)
 9. Rule Reference: 567-64.2(9)a
 10. Design Std Ref: 15.2.4.2.1 (bar spacing)
 11. Consulting Engr: Veenstra & Kimm, Inc./West Des Moines
 12. Variance Rule: 567-64.2(9)c

13. Decision: *Approved*
 Date: *4/2/02*

14. Appeal:
 Date:

15. Description of Variance Request:

Install a mechanical screen (to replace the existing) with 1/4" openings as opposed to the minimum size of 5/8" allowed by IA standards.

16. Consulting Engineer's Justifications

Mechanical screens with openings smaller than 5/8" are an accepted engineering design practice and there are multiple Iowa wastewater treatment facilities that successfully use mechanical screens with clear openings of less than 5/8".

17. Department's Justifications

Recommend variance approval:

The proposed sizing (1/4") has been used successfully at several other locations in Iowa. A bypass channel with manually cleaned coarse bar screen is available should the mechanically cleaned screen need to be taken out of service. 10-States Standards does not include a minimum sizing for mechanical bar screens.

18. Precedents Used

Clear Lake S.D. - Approved 7/10/96	Fort Madison - Approved 5/10/00	Winterset - Approved 8/7/92
Osage - Approved 12/18/98	Nora Springs - Approved 4/2/99	
Cherokee - Approved 1/12/99	Tama - Approved 4/6/93	

19. Staff Reviewer: *[Signature]*

Date: *3/15/02*

20. Supervisor: *[Signature]*

Date: *4/1/02*

21. Authorized by: *J. Riessen*

Date: *4/2/02*



STATE OF IOWA

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

DEPARTMENT OF NATURAL RESOURCES
JEFFREY R. VONK, DIRECTOR

April 9, 2002

City of Newton
1700 North Fourth Avenue West
Newton, IA 50208

Attn: Robert Main, Public Works Director

RE: Variance Request
2002 Wastewater Facility Improvements

Dear Mr. Main:

The Iowa Department of Natural Resources, in accordance with subrule 567 IAC 64.2(9), has reviewed the variance requested by your consulting engineer from the Iowa Wastewater Facilities Design Standards. A variance from Design Standard 15.2.4.2.1 to allow a minimum clear opening of 1/4" for the mechanical screen proposed for your project is **approved**.

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 there are any questions, please feel free to contact Larry Bryant at 515/281-8847.

Sincerely,



Jack Riessen, P.E., Chief
Water Quality Bureau

c: Veenstra & Kimm, Inc.
Field Office 5