



13.4.1

STATE OF IOWA

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

DEPARTMENT OF NATURAL RESOURCES
JEFFREY R. VONK, DIRECTOR

December 10, 2001

Honorable Mayor
City of Merville
326 Min Street
P. O. Box N
Merville, IA 51039

Dear Honorable Mayor:

The Iowa Department of Natural Resources (IDNR) has received and reviewed the variance request for the Wastewater Treatment Facility improvements for the City of Merville submitted by the city's consulting engineer. The request is for a variance from the Iowa Design Standards 13.4.1 that requires pumping stations to have firm pump capacity for the expected peak hour wet weather (PHWW) flow. The City is proposing to utilize the existing lift station that has pumping capacity below the current PHWW flow.

In its justification the City indicated that it will replace and up-size most of the existing force main that will increase the lift station pumping capacity, that will allow a single pump in operation to handle the existing PHWW (0.70 mgd) and both pumps in operation to handle the proposed design PHWW flow (0.76 mgd). Also, the City suggested that immediately after DOT decides on the relocation of Highway 20 through Merville, the City would replace the existing lift station to accommodate the proposed design flow and locate it to better plan for the area development.

Because of the unique situation specified in the justification and considering that the proposed design PHWW flow will not occur for a number of years the department has approved the variance on the following condition:

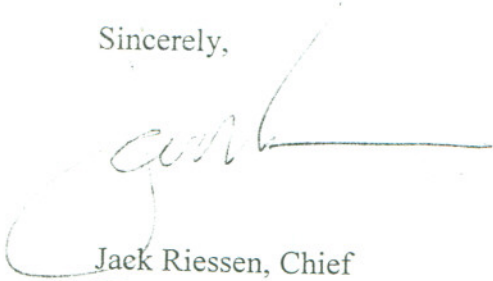
The existing lift station will be evaluated for compliance with Iowa Design Standards at the earliest of any of the following:

1. By January 1, 2007,
2. A DOT decision on the relocation right-of-way for Highway 20 through Merville,
3. Any time a sewer bypass occurs or sewer backup into houses happens as a result of the inadequate lift station capacity.

City of Menville variance letter.....

If you have any questions or comments, please contact Suresh Kumar of the IDNR at (515) 281-4527.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jack Riessen', followed by a horizontal line.

Jack Riessen, Chief
Water Quality Bureau

C: DGR & Associates
IDNR Field Office 3

✓ 9-11-06

VARIANCE REQUEST

Iowa Department of Natural Resources

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| 1. Date: December 7, 2001 2. Review Engineer: Suresh Kumar 3. Date Received: September 26, 2001 4. County Number: 97 5. Facility Name: Moville WWTP 6. Program Area: CP (Wastewater) 7. Facility Type: CO2 8. Subject Area: 370, pumping Station Capacity 9. Rule Reference: 567-64.2(9)a 10. Design Stds Ref: 13.4.1 11. Consulting Engr: DGR Engineering 12. Variance Rule: 567-64.2(9)c | 13. Decision: Denied <i>Approved</i> Date: <i>1/16/02</i> 14. Appeal: Date: |
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15. Description of Variance Request: City of Moville wastewater plant is hydraulically overloaded and has proposed improvements to the system to bring the facility under compliance. The city has requested a variance to the design standards 13.4.1 that requires pumping stations to have pumps capable of handling expected PHWW flow. The current PHWW flow of the facility is 0.70 mgd and the proposed PHWW flow is 0.76 mgd. The pumping capacity of the existing lift station is 0.36 mgd (250 gpm).

16. Consulting Engineer's Justifications

The city has proposed to replace and up-size most of the existing force main that will increase the pumping capacity to handle the existing PHWW flow (0.70 mgd) while a single pump is in operation and both pumps in operation to handle proposed design PHWW flow (0.76 mgd).
The future PHWW flow will not occur for a number of years.
Immediately after DOT decides on the relocation of Highway 20 through Moville, then the city will replace the existing lift station to accommodate the future flow.

17. Department's Justifications

1. The proposed improvements to the force main will increase the pumping capacity to meet the current PHWW flow per the design standards.
2. Also the proposed force main improvements will bring the pumping capacity of the existing lift station to slightly below the proposed design PHWW flow, however this could be achieved with both pumps in operation

Based on the above justifications we are recommending the variance to be approved with the following condition:

The existing lift station will be evaluated for compliance with Iowa Design Standards at the earliest of any of the following:

1. By January 1, 2007
2. A DOT decision on the relocation right-of-way for Highway 20 through Moville
3. Any time a sewer bypass occurs or sewer backup into houses happens as a result of the inadequate lift station capacity.

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| 1. 18. <u>Precedents Used</u> None | | |
| 19. | Staff Reviewer: | Date: 1/15/02 |
| 20. | Supervisor: | Date: 1/15/02 |
| 21. | Authorized by: | Date: 1/16/02 |