



April 22, 2019

Chris Nosbisch, City Administrator  
213 First Street West  
Mount Vernon, IA 52314

RE: Wastewater Treatment Plant Improvements 2019  
City of Mount Vernon  
DNR Project No. 2017-0177A

Subject: Variance Request from 567 IAC 64.2(3)f and Design Standards Section 14.2.3.f

Dear Mr. Nosbisch:

After careful and thorough consideration, the Department has **approved** your 4/18/19 request for a variance from Iowa Administrative Code Subrule 567 IAC 64.2(3)f and Chapter 14 of the Iowa Wastewater Facilities Design Standards, which requires a minimum separation distance of 25 feet from treatment surfaces to property lines and rights-of-way, or that the new separation distance be maintained at no less than 90% of existing.

Based on the documentation presented by your Engineer, it is the determination of this Department that satisfactory justification has been presented to warrant the granting of a variance for a lesser separation distance. The requested variance is deemed to be reasonable and necessary pursuant to the Iowa Code section 455B.181.

The facts presented for the project present unique circumstances and the variance is therefore justified to provide the narrowest exception possible to the provisions of the rule in accordance with Rule 561 IAC 10.5. Since the project planning and construction may last more than one year, the variance is considered to be of a permanent nature. The validity of this variance approval shall last for a period of one year from the date of the construction permit in accordance with Rule 561 IAC 10.5.

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

Please feel free to contact Larry Bryant at 515-725-8426 or [larry.bryant@dnr.iowa.gov](mailto:larry.bryant@dnr.iowa.gov) if you have any questions.

Sincerely,

Alex Moon  
Acting Water Quality Bureau Chief

cc: Emily Linebaugh, Veenstra & Kimm, Inc., 860 22<sup>nd</sup> Ave., Suite 4, Coralville, IA 52241-1565  
DNR FO 1 (Manchester, Iowa)  
DNR Sewage File 6-57-58-0-01

**VARIANCE REQUEST**  
Iowa Department of Natural Resources

1. Date: 4/19/19 2. Reviewer/Engr.: Larry Bryant 3. Date Received: 4/19/19 4. Facility Name: City of Mount Vernon WWTF 5. Facility Number: 5758001 6. County Number: 57 (Linn) 7. Program Area: CP (Wastewater Construction) 8. Facility Type: C08 (Disinfection) 9. Subject Area: 308 (Site Separation) 10. Rule Reference: 567-64.2(3)f; 567-64.2(9)a 11. Design Std. Ref.: 11.2.9.4; 14.2.3.f 12. Consulting Engr.: Veenstra & Kimm, Inc. 13. Variance Rule: 567-64.2(9)c	14a. Decision: <u>Approved</u> Date: <u>4/22/19</u> Expiration Date 14b. (if any): N/A 15. Appealed: Date:
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**16. Description of Variance Request:**

567 IAC 64.2(3)"f" and the Iowa Wastewater Facilities Design Standards Section 14.2.3.f require a minimum separation distance from treatment water surfaces of 25 feet for property lines and rights-of-way, or that a new separation distance is no less than 90% of existing.

The City of Mt. Vernon is proposing improvements to their existing wastewater plant including new UV disinfection facilities. A DNR site survey conducted on 4/15/19 found that site separation requirements for the proposed structure would be met with the exception of the 25-foot distance from the right-of-way. The proposed structure at its furthest extent will be approximately 3 feet from the edge of a city street right-of-way.

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

- a. Distance between the existing wastewater treatment facility structures and property line/right-of-way is approximately 13 feet.
- b. This is a City street and right-of-way.
- c. Any utilities located in the right-of-way will be protected or replaced.
- d. Provisions for traffic safety are included in the plans and specifications.
- e. The area will be fenced (6-foot high chain link).
- f. The channel will be disinfecting treatment plant effluent.
- g. The site separation of 90% of the existing distance from habitable structures will be maintained as required.

**18. Department's Justification:**

Recommended Approval for the following reasons:

- Unique circumstances not found in most projects: Space at the existing treatment plant site is extremely limited, particularly at the location where the final clarifier effluent lines combine. The treatment plant site is bounded on the East, North and West by residential development, a cemetery and a golf course. There is no room available on the site for a southward expansion as this space is already being utilized for the treatment plant activated sludge basins, headworks and the plant office facilities. Thus, there is no other practical location available for the UV system within the boundaries of the existing site.
- Substantially equivalent effectiveness:
  - (a) The UV structure will be approximately 80 feet from the nearest intersection so should present no visibility issues for motorists.
  - (b) The UV system will be disinfecting treated effluent so there will be little potential for objectionable odors.
  - (c) This is a city street and right-of-way (the variance will not "prejudice the substantial legal rights of any person" (561 IAC 10.4(2))
  - (d) Unauthorized access to the UV facility will be restricted by the perimeter fence.
  - (e) The UV facility will not adversely affect any foot traffic in the right-of-way.
- The right-of-way is the City's so the variance will not "prejudice the substantial legal rights of any person" (561 IAC 10.4(2)).
- The provision being considered for a variance is not specifically mandated by statute.

19. Precedents Used:

City of Jefferson WWTP - Approved 4/17/03

20. Staff Reviewer:

*[Signature]*

Date:

4/22/19

21. Supervisor:

*Satya Chennupathi*

Date:

4/22/19

22. Authorized by:

*Alex Moon*

Date:

4/22/19



**VEENSTRA & KIMM, INC.**

860 22nd Avenue - Suite 4 • Coralville, Iowa 52241-1565  
319-466-1000 • 319-466-1008(FAX) • 888-241-8001(WATS)

April 18, 2019

Satya Chennupati, P.E.  
Section Supervisor  
Wastewater Engineering Section  
Iowa Dept. of Natural Resources  
502 East 9<sup>th</sup> Street  
Des Moines, Iowa 50319

**MOUNT VERNON, IOWA  
WASTEWATER TREATMENT PLANT IMPROVEMENTS 2019  
WASTEWATER CONSTRUCTION PERMIT – VARIANCE REQUEST**

Per 561 Iowa Administrative Code (IAC) Chapter 10, the City of Mount Vernon, Iowa is requesting a variance to the Iowa Department of Natural Resources (IDNR) Wastewater Facilities Design Standards for the above reference project and issuance of the related Construction Permit. The applicable Construction Permit applications, fee form and fee were submitted to you on March 12, 2019.

The following information has been provided per the IDNR's Variance Request Guidance Document:

1. Name, address and telephone number of entity requesting the variance:
  - a. City of Mount Vernon  
Representative: Chris Nosbisch  
213 1<sup>st</sup> Street W  
Mount Vernon, Iowa 52314  
Ph: (319) 895-8742
2. Description and citation of specific rule from which a variance is requested:
  - a. A variance is requested from IAC 567 64.2(3)"f" and the Iowa Wastewater Facilities Design Standards Section 14.2.3.f which require a minimum separation distance from treatment water surfaces of 25 feet for property lines and rights-of-way. The construction of the UV channel and shelter is approximately 3' from the right-of-way line and approximately 22' from the edge of the City-owned street.

3. Specific variance requested, scope, and operative period for which the variance will extend:
  - a. The variance is requested to allow construction of the UV channel and shelter at less than 25' from the property line and right-of-way.
  - b. Scope of the variance relates to the structure and associated equipment.
  - c. Variance will extend from construction through the design life of the proposed improvement.
4. Relevant facts justifying the variance:
  - a. Distance between the existing wastewater treatment facility structures and property line/right-of-way is approximately 13 feet.
  - b. This is a City street and right-of-way.
  - c. Any utilities located in the right-of-way will be protected or replaced.
  - d. Provisions for traffic safety are included in the plans and specifications.
  - e. The area will be fenced (6-foot high chain link).
  - f. The channel will be disinfecting treatment plant effluent.
  - g. The site separation of 90% of the existing distance from habitable structures will be maintained as required.
5. Contact history with the Department:
  - a. Larry Bryant was assigned to handle the facility plan and construction review of this project. There are no other known prior contacts between the petitioner and the Department within the last five years regarding this variance request, including any notices of violation, administrative orders, contested case proceedings, and/or lawsuits.
6. Known Department's treatment of similar cases:
  - a. City of Jefferson requested a variance for a final clarifier which did not meet the required property line and right-of-way separation. Variance was granted in 2003.
7. Name, address, and telephone number of any public agency or political subdivision(s) that might be affected by granting the variance:
  - a. None.
8. Name, address, and telephone number of any person or entity that might be affected by granting the variance:
  - a. None.
9. Identity of those having knowledge of relevant facts concerning the variance:
  - a. Alex Volkov, Wastewater Superintendent, City of Mount Vernon.
  - b. Chris Nosbisch, City Administrator, City of Mount Vernon.
  - c. Emily Linebaugh, P.E., Veenstra & Kimm, Inc.

Satya Chennupati, P.E.  
April 18, 2019  
Page 3 of 3

10. Signed release:

I attest to the accuracy of the facts provided in the petition and the reasons as listed to justify issuance of the variance request.



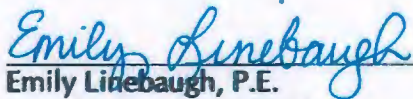
Chris Nosbisch, City of Mount Vernon

I attest to the accuracy of the facts provided in the petition and the reasons as listed to justify issuance of the variance request.

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Signed:

Date:



4/18/2019

Emily Linebaugh, P.E.

Iowa License No. 18986

My license renewal date is December 31, 2019

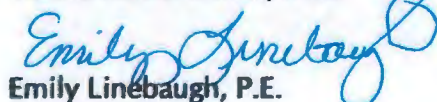


Detailed parts covered by this seal:

Entire document

We would request your timely review and granting of this variance so that the project may continue as planned. Please contact us at 319-466-1000, if you should have any questions regarding this request.

VEENSTRA & KIMM, INC.



Emily Linebaugh, P.E.

51321

cc: Larry Bryant, IDNR

<b>IOWA DEPARTMENT OF NATURAL RESOURCES</b> ENVIRONMENTAL SERVICES DIVISION Field Office 1 909 West Main Suite 4, Manchester, Iowa 52057 Phone: (563) 927-2640 FAX: (563) 927-2075	
<b>REPORT OF INVESTIGATION</b>	
INVESTIGATION DATE	CURRENT: 04/15/19 LAST: N/A
TO: Larry Bryant, DNR Wastewater Section	
SUBJECT: Mount Vernon Wastewater Treatment Facility Expansion Site Survey NPDES # 57-58-0-01	
PERSONS CONTACTED: Emily Linebaugh – Veenstra & Kimm Alex Volkov – Mount Vernon WW Operator-in-charge	
<b>AUTHENTICATION</b>	
INSPECTOR: <i>Chris Gelner</i> Chris Gelner, Environmental Specialist	DATE: 4/17/19
REVIEWER: <i>Amber Sauser</i> Amber Sauser, Environmental Specialist Senior	DATE: 4/17/19

File Name: 57 WW Mount Vernon Site Survey 041519 csg

**OBSERVATIONS/RECOMMENDATIONS:**

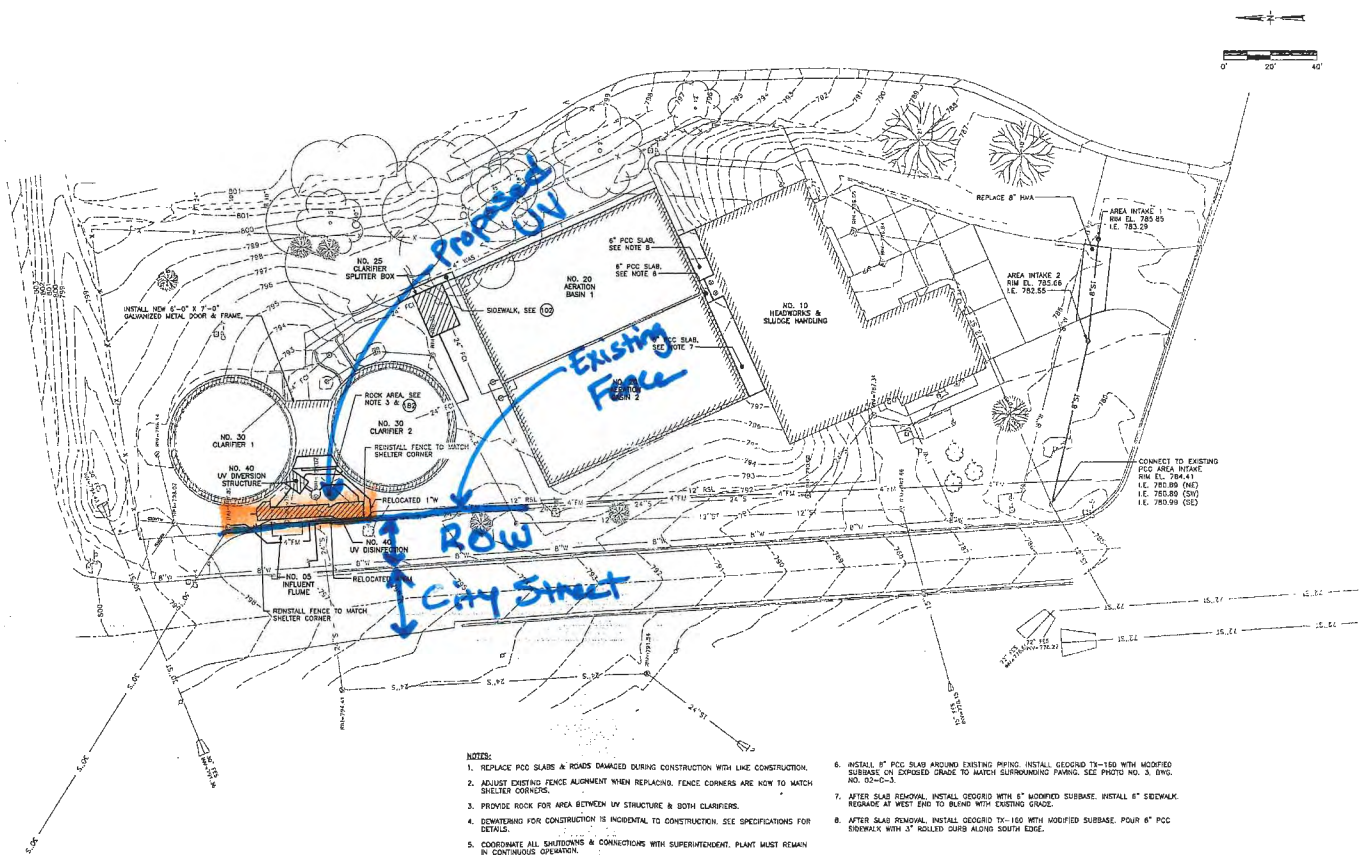
The Mount Vernon wastewater treatment plant (WWTP) currently consists of two screw pumps, a traveling bar screen, two extended aeration basins, two final clarifiers, and two aerated digester tanks and one aerated storage tank. Plans are to add a new splitter box following the clarifiers, a UV disinfection system, and rehab the existing screw pumps.

On April 15, 2019, I met with operator-in-charge Alex Volkov at the plant. Mr. Volkov showed me the locations of the proposed construction. The following observations were made based on the documents provided and a site visit.

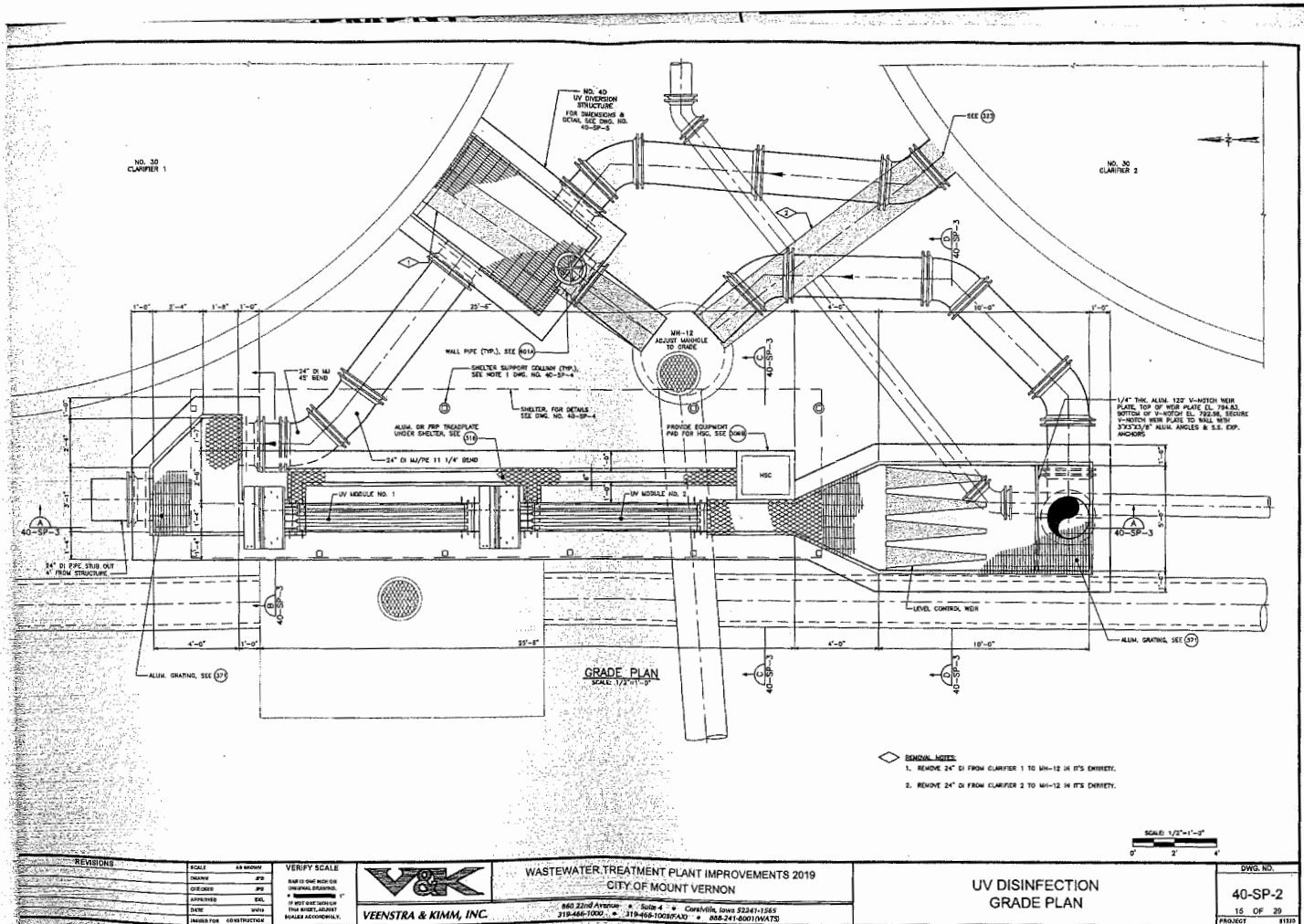
There are several residences and businesses within the 1,000 ft separation distance, all of which will still meet 90% of current distances.

Currently the west side of the plant is approximately 12 ft from the west property line. The proposed expansion will put the UV structure approximately 3 ft from the west property line. This separation distance does not currently, nor will the expansion, meet the requirement of 25 ft to property line. It should be noted that the property line is between the City wastewater treatment facility and a City-owned roadway.

All of these concerns mentioned above as well as the requirements listed in 567 IAC 64.2(3) were discussed with Mr. Volkov on site and Ms. Linebaugh by telephone.



REVISIONS		DATE	BY	VERIFY SCALE	WASTEWATER TREATMENT PLANT IMPROVEMENTS 2019 CITY OF MOUNT VERNON	SITE PLAN - IMPROVEMENTS	DWG. NO. 02-C-2
NO.	DESCRIPTION						
1	ISSUED FOR PERMIT	07/10/2019	JPD	AS SHOWN	<b>VEENSTRA &amp; KIMM, INC.</b> 860 22nd Avenue • Suite 4 • Coralville, Iowa 52241-1188 319-466-1000 • 319-466-1000(PAD) • 888-241-8001(MHATS)	PROJECT	5 OF 25
2	DESIGNED	07/10/2019	JPD	AS SHOWN			
3	APPROVED	07/10/2019	JPD	AS SHOWN			
4	DATE	07/10/2019	JPD	AS SHOWN			
5	DATE	07/10/2019	JPD	AS SHOWN			
6	DATE	07/10/2019	JPD	AS SHOWN			
7	DATE	07/10/2019	JPD	AS SHOWN			
8	DATE	07/10/2019	JPD	AS SHOWN			
9	DATE	07/10/2019	JPD	AS SHOWN			
10	DATE	07/10/2019	JPD	AS SHOWN			



VARIANCE REQUEST NOTIFICATION  
Iowa Department of Natural Resources

**All Fields are Required**

- |                          |                    |
|--------------------------|--------------------|
| 1. Reviewer/Engr.: _____ | 7. Decision: _____ |
| 2. Date Received: _____  |                    |
| 3. Facility Name: _____  |                    |
| 4. Program Area: _____   |                    |
| 5. Subject Area: _____   |                    |
| 6. Rule Reference: _____ |                    |

8. Description of Variance Request: **Summarize (250 characters)**

9. Department's Justification: **Summarize (250 characters)**

10. Type name: \_\_\_\_\_

\_\_\_\_\_  
Supervisor/Bureau Chief/DA

\_\_\_\_\_  
Date

\*The original, approvals, letters, code and other supporting documentation is to be maintained by the program in accordance with the [Records Retention Schedule](#).

**To Submit: Attach this form to an email and send it to [Webmaster@dnr.iowa.gov](mailto:Webmaster@dnr.iowa.gov) with the subject line: Variance Submittal (542-0541)**