



STATE OF IOWA

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

DEPARTMENT OF NATURAL RESOURCES
CHUCK GIPP, DIRECTOR

November 17, 2015

Mr. Prasad Devineni
New Heaven Chemicals LLC
18 Jenny Layne Road
Sussex, NJ 07461

RE: New Heaven Chemicals LLC, Manly, Iowa, Industrial Wastewater Treatment Project. DNR project # - S2016-0158

Subject: Variance Request from 567 IAC 64.2(3)d and Design Standards Section 14.2.3(d)- Site Approval Requirements

Dear Mr. Devineni:

After careful and thorough consideration, the Department has approved your November 17, 2015 request for a variance from Iowa Administrative Code Sub rule 567 IAC 64.2(3) and Chapter 14.2.3(d) of the Iowa Wastewater Facilities Design Standards which require a minimum 400 feet separation distance from private wells for a new wastewater treatment plant.

New Heaven Chemicals is a new Sodium Methoxide manufacturing facility currently under construction in Worth County, Iowa. This facility will generate three different streams of wastewater that will require treatment before discharging to the nearby Beaver Creek through a single outfall structure. Source water to the facility will be supplied from the recently installed well at the facility location. The requested variance is to construct a new wastewater treatment facility which will be 372 feet from their newly installed well to supply water only for the industrial process use, no potable water from this well.

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 variance. 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

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 Suresh Kumar at (515) 725-8429 or email suresh.kumar@dnr.iowa.gov if you have any questions.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Jon Tack', written in a cursive style.

Jon Tack
Water Quality Bureau Chief

C: Iowa DNR Field Office 2
Burns & McDonnell consulting engineer
New Heaven Chemicals WWTP Sewage file # 6-98-00-1-14

VARIANCE REQUEST
Iowa Department of Natural Resources

1. Date: 11/17/2015 2. Reviewer/Engr.: Suresh Kumar 3. Date Received: 11/17/2015 4. Facility Name: New Heaven Chemicals, Inc. 5. Facility Number: 69800114 6. County Number: 98, Worth 7. Program Area: CP (Wastewater) 8. Facility Type: C O5 9. Subject Area: 308, Site Separation 10. Rule Reference: 567-64.2(3)d 11. Design Std. Ref.: 14.2.3(d) 12. Consulting Engr.: Burns & McDonnell 13. Variance Rule: Variance Rule: 567-64.2(3)d	14a. Decision: <i>JEH</i> Date: <i>11/17/15</i> Expiration Date 14b. (if any): <i>Approved</i> Permanent 15. Appealed: Date:
--	---

16. Description of Variance Request:

New Heaven Chemicals is a new Sodium Methoxide manufacturing facility currently under construction in Worth County, Iowa. This facility will generate three different streams of wastewater that will require treatment before discharging to the nearby Beaver Creek through a single outfall structure. Source water to the facility will be supplied from the recently installed well at the facility location. The facility is requesting a variance to the Iowa Administrative Code Sub rule 567 IAC 64.2(3) to construct a new wastewater treatment facility which will be 372 feet from their newly installed well to supply water only for the industrial process use, no potable water from this well, instead of the required 400 feet separation.

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

Water from this well will only be utilized for industrial production, not for human consumption. Potable water for the facility will be supplied by the Manly Terminal well located over 1,500 feet north of the proposed wastewater treatment plant. Relocating the proposed wastewater treatment plant within the current property boundary is impossible due to the restraints of the way the underground gas and electric utilities are located.

18. Department's Justification:

Recommend this variance request to be approved. The well water should not have any human health and risk involved because the potable water for the facility will be supplied by the Manly Terminal well located over 1,500 feet north of the proposed wastewater treatment plant. The industrial facility property is located in a tight location with the rail roads other existing buildings makes the relocation of the proposed wastewater treatment plant difficult. Per the unique circumstance it is the department's determination to grant the variance.

19. Precedents Used:

None

20. Staff Reviewer: <i>Suresh Kumar</i>	Date: <i>11/17/2015</i>
21. Supervisor: <i>Satya Chennupati</i>	Date: <i>11/17/2015</i>
22. Authorized by: <i>JEH</i>	Date: <i>11/17/2015</i>

Explanation of item numbers:

- #1 – Date starting process
- #3 – Date stamped received by Iowa DNR
- #4 – Must always be filled in, even in variance for Iowa DNR
- #11 – If doesn't apply, note "n/a"
- #13 – Rule allowing for an exception
- #14a – "Approved" or "Denied "
- #14b – If variance is permanent, note "permanent" per legal.
- #15 – Date of Decision (#14)
- #16 – Summarize (4-5 short sentences) **with** attached documentation
- #17 – Summarize (4-5 short sentences) **with** attached documentation
- #18 – Summarize (4-5 short sentences) **with** attached documentation
- #19 – Summarize (4-5 short sentences) **with** attached documentation
- #21 – Supervisor
- #22 – Bureau Chief (sometimes same as supervisor)

Note:

#16, #17, #18, & #19: the Reviewer/Engineer summary is important as the technical and knowledgeable entity for the subject matter. Including the attachments is helpful but the Customer Service Team is uncomfortable attempting to summarize the attachments on your behalf.



S2016-0158

Bill

RECEIVED

NOV 16 2015

Director's Office

November 12, 2015

Mr. Chuck Gipp
Director
Iowa Department of Natural Resources
502 E. 9th Street
Des Moines, IA 50319

Attention: Mr. Suresh Kumar, Environmental Engineer/Industrial Coordinator

Subject: New Heaven Chemicals Iowa, LLC – Manly, Iowa
Petition for Variance or Waiver for the Distance from the On-site Well to the
New Wastewater Treatment Plant

Dear Mr. Gipp:

On behalf of New Heaven Chemicals Iowa, LLC (New Heaven), we have prepared the following request for a variance to the setback distance between the proposed New Heaven Wastewater Treatment Plant (WWTP) and the newly installed on-site process water well.

On Friday, November 6, 2015, Mr. Carl Berg, Iowa Department of Natural Resources (IDNR) Mason City Field Office, performed a survey of the proposed WWTP location pursuant to Chapter 64 – Wastewater Construction and Operation Permits, of the Iowa Administrative Code (IAC), for the New Heaven WWTP. The outcome of Mr. Berg's visit was the proposed WWTP would be located such that the distance from the newly installed water well to the nearest WWTP process tank would be less than 400 feet. Based on Section 64.2(3) of the IAC (see attached), the separation distance from a treatment works to a private well (New Heaven's well) should be 400 feet or greater.

1. *Name, address and telephone number of entity requesting variance:*
New Heaven Chemicals Iowa, LLC
1585 380th Street
Manly, Iowa 50456
Attn: Prasad Devineni
(201) 506-9109
2. *Description and citation of specific rule from which a variance is requested:*
Chapter 64 – Wastewater Construction and Operation Permits, IAC Chapter 64.2(3)d
Separation distance of 400 feet from a treatment works to private wells.
3. *Specific variance requested, scope, and operative period which the variance will extend:*
A. *Specific variance requested:*

RECEIVED

NOV 16 2015

RECEIVED NOV 17 2015



November 13, 2015

Petition for Variance or Waiver for the Distance from the On-site Well to the New Wastewater Treatment Plant – New Heaven Chemicals Iowa, LLC

Page 2

Relief from the required separation distance of 400 feet between the treatment works and the on-site private well pursuant to IAC 567-64.2(3)d. The proposed separation distance would be 371 feet, 8-inches from the on-site process only (non-domestic) well to the nearest tank for the wastewater treatment plant.

B. Scope:

Relief is sought for the location of the new wastewater treatment plant to be as far south and east from the leased site boundaries, meeting the 25 feet setback distance for property lines and right-of-ways pursuant to Chapter 64.2(3)f.

C. Operative Period:

Indefinitely.

4. *Relevant facts justifying variance:*

- A. The New Heaven on-site well will be used only for process water;
- B. Potable water will be used only at the Administrative Building and will be supplied by the Manly Terminal well located over 1,500 feet north of the proposed wastewater treatment plant;
- C. The location of the nearest WWTP process tank is 371 feet 8-inches from the New Heaven well;
- D. The process wastewater projected to be generated at the site is well below 10,000 gallons per day and, given the design, is not expected to impact the on-site well;
- E. New Heaven considered relocating the wastewater treatment plant west of the proposed location; however, underground gas and electricity utilities are located at that area;
- F. There is no evidence of contamination of either the groundwater aquifer or the New Heaven leased property;
- G. If denied, the economic implications would cause New Heaven to expend additional monies, probably over \$3 million, to lease additional real estate through third-party negotiations, with no additional environmental benefit to Beaver Creek, the receiving stream;
- H. If denied, the project schedule could drastically be impacted, causing the loss of business.

5. *Contact History with the Iowa Department of Natural Resources*

New Heaven strategically identified its Sodium Methoxide Manufacturing facility in Manly, Iowa, and applied for project funding with third-parties. Burns & McDonnell has

November 13, 2015

Petition for Variance or Waiver for the Distance from the On-site Well to the New Wastewater Treatment Plant – New Heaven Chemicals Iowa, LLC

Page 3

been contracted to secure environmental permits for New Heaven. Once project funding appropriations were secured, New Heaven and its consultants engaged the Iowa DNR to work with New Heaven to secure the necessary permits. Air permits have been secured for this project and no violations of any environmental regulation are known for this site.

6. *Any information known to the petitioner regarding the Department's treatment of similar cases:*

None.

7. *Name, address, and telephone number of any public agency or political subdivision that might be affected by granting this variance:*

None.

8. *Name, address, and telephone number of any person or entity that might be affected by granting this variance:*

None.

9. *Identity of those having knowledge of relevant facts concerning the variance.*


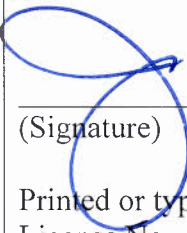
A. Prasad Devineni, New Heaven Chemicals Iowa, LLC

B. Carl Berg, Iowa Department of Natural Resources, Mason City Field Office

C. Eduardo Gasca, P.E., Burns & McDonnell Engineering Company, Inc.

D. Jeffery Pope, P.E., Burns & McDonnell Engineering Company, Inc.

10. *Signed release:*

	<p>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.</p> <p> _____ (Signature)</p> <p><u>11/13/15</u> _____ (Date)</p> <p>Printed or typed name: Jeffery L. Pope, P.E. License No. <u>21253</u> My license renewal date is December 31, <u>2015</u>. Pages or sheets covered by this seal: <u>Variance Request</u></p>
---	---



November 13, 2015

Petition for Variance or Waiver for the Distance from the On-site Well to the New Wastewater Treatment Plant – New Heaven Chemicals Iowa, LLC

Page 4

Please contact Prasad Devineni at (201) 506-9109, or Eduardo Gasca of Burns & McDonnell at (312) 223-9599, with any questions pertaining to this variance request.

Cordially,

A handwritten signature in blue ink, appearing to be "Jeffery L. Pope", is written over the printed name and title.

Jeffery L. Pope, P.E.
Department Manager
Burns & McDonnell Engineering Company, Inc.

JP/eg

cc: Suresh Kumar, Iowa DNR
Prasad Devineni, New Heaven
Joseph Darlington, Burns & McDonnell

Kumar, Suresh [DNR]

From: Gasca, Eduardo <egasca@burnsmcd.com>
Sent: Monday, November 16, 2015 9:51 AM
To: Kumar, Suresh [DNR]
Cc: Prasad Devineni, (New Heaven); Prasad Devineni; 79895; Darlington, Joseph
Subject: FW: FedEx Shipment 774976645311 Delivered

Dear Mr. Kumar

The original signed and executed New Heaven variance request was mailed via overnight delivery to Mr. Gipp last Friday. The package was just delivered.

Please let me know if there are questions.

Thank You,

Eduardo Gasca, PE \ Burns & McDonnell
Senior Environmental Engineer
O 312-223-9599 \ M 773-412-7334 \ F 312-223-9664
egasca@burnsmcd.com \ burnsmcd.com
200 W. Adams St. Suite 1600 \ Chicago, IL 60606



Proud to be one of *FORTUNE's* 100 Best Companies to Work For

Please consider the environment before printing this email.

*Registered in: IL

This email and any attachments are solely for the use of the addressed recipients and may contain privileged client communication or privileged work product. If you are not the intended recipient and receive this communication, please contact the sender by phone at 816-333-9400, and delete and purge this email from your email system and destroy any other electronic or printed copies. Thank you for your cooperation.

From: trackingupdates@fedex.com [mailto:trackingupdates@fedex.com]
Sent: Monday, November 16, 2015 9:23 AM
To: Gasca, Eduardo
Subject: FedEx Shipment 774976645311 Delivered



Your package has been delivered

Tracking # 774976645311

Ship date:

Fri, 11/13/2015

Joan Wiegand

BURNS & MCDONNELL

Downers Grove, IL 60515

US

Delivery date:

Mon, 11/16/2015

9:16 am

Chuck Gipp, Director

Iowa Dept. of Natural

Resources

502 E. 9th Street

DES MOINES, IA 50319

US




Delivered

Shipment Facts

Our records indicate that the following package has been delivered.

Tracking number:	<u>774976645311</u>
Status:	Delivered: 11/16/2015 09:16 AM Signed for By: W.NGUYEN
Reference:	88245 12970 J Wiegand
Signed for by:	W.NGUYEN
Delivery location:	DES MOINES, IA
Delivered to:	Mailroom
Service type:	FedEx Priority Overnight
Packaging type:	FedEx Envelope
Number of pieces:	1
Weight:	0.50 lb.
Special handling/Services:	Deliver Weekday

 Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 9:23 AM CST on 11/16/2015.

To learn more about FedEx Express, please go to fedex.com.

All weights are estimated.

To track the latest status of your shipment, click on the tracking number above, or go to fedex.com.

This tracking update has been sent to you by FedEx at your request. FedEx does not validate the authenticity of the requestor and does not validate, guarantee or warrant the authenticity of the request, the requestor's message, or the accuracy of this tracking update. For tracking results and terms of use, go to fedex.com.



NEW HEAVEN CHEMICALS

November 11, 2015

Mr. Suresh Kumar
Environmental Engineer/Industrial coordinator
Iowa Department of Natural Resources
502 E. 9th Street
Des Moines, IA 50319

Subject: Variance for the Location of the New Wastewater Treatment Plant
New Heaven Chemicals Iowa LLC – Manly, Iowa.

Dear Mr. Kumar:

This letter is to request a variance for the setback distance between the proposed New Heaven Chemicals Iowa LLC (NHC) Wastewater Treatment Plant (WWTP) and the newly installed on-site process water well.

On Friday November 6, 2015 Mr. Carl Berg from the Iowa Department of Natural Resources (IDNR) Mason City Field Office performed the survey of the proposed WWTP location pursuant to Chapter 64 – Wastewater Construction and Operation Permits - of the Iowa Administrative Code (IAC) for the NHC WWTP. The outcome of Mr. Berg's visit was that the proposed WWTP would be located such that the distance from the newly installed water well to the nearest WWTP process tank was less than 400 feet. Based on Section 64.2(3) of the IAC (see attached) the separation distance from a treatment works to a private well (NHC well) should be 400 feet or greater.

NHC and its consultants evaluated the options available to address this discrepancy and will implement the following:

1. The newly installed well will be used only for process water and will exclude any potable water use;
2. The potable water will be supplied to the NHC Administrative Building from the Manly Terminal water well which is located north of the NHC site, over 1,500 feet away from the proposed WWTP;
3. The location of the WWTP will be moved to the south, as much as possible, keeping the 25 feet setback distance to the south leased property boundary. This will cause the final distance from the NHC well to the nearest WWTP process tank corner to be 371'-8".

62328 NOV12'15 AM10:20

RECEIVED NOV 16 2015



NEW HEAVEN CHEMICALS

4. The process wastewater generated at the site comes from the manufacturing areas and is less than 10,000 gallons per day. Given the design and topography of the NHC site, the potential for the process water to impact the NHC well is considered minimum; and
5. There is no evidence of known contamination of the groundwater aquifer and the NHC leased property.

NHC considered relocating the WWTP to the west but underground utilities are located at that area. NHC also considered moving the location of the WWTP further south to meet the required distance setback and secure additional land for lease. However, the lease agreement involves third parties and given that the rail road tracks Right-of-Way must also be considered, a rather time consuming and convoluted review and approval process for leasing the additional land will be required placing this project schedule under jeopardy.

NHC trust that the Iowa DNR will find this setback distance variance request acceptable.

Please contact me at (201) 506-9109 or via e-mail (pdevineni@newheavenchemicals.com) if you have questions or need additional information for this variance request to be granted.

Cordially,

Prasad Devineni
Managing Director
New Heaven Chemicals Iowa LLC

EG/eg

Attachment: Chapter 64 of the IAC – 2 pages

cc: Carl Berg, Iowa DNR Mason City Field Office
Jeff Held, CMM
Joseph Darlington, Burns & McDonnell