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November 3, 2021

Ms. Nina Booker
Environmental Engineer Senior, Solid Waste and Contaminated Sites Section
Iowa Department of Natural Resources
502 E. 9th Street
Des Moines, IA 50319

Subject: Request for Variance and Amendment #4 of Permit #31-SDP-01-75C
John Deere Dubuque Works Industrial Waste Landfill, Dubuque, Iowa

Dear Ms. Booker:

Per past conversations with TRC (Lydia Auner) and email exchanged October 15, 2021, TRC, on behalf of John Deere Dubuque Works, is requesting a variance request and permit amendment for the John Deere Dubuque Works Industrial Waste Landfill, Dubuque, Iowa. The current permit #31-SDP-01-75C was issued in 2012 and the latest revision was in 2018 (Amendment #3). The current permit is attached for reference. TRC is making the following request for variance and amendment to the permit:

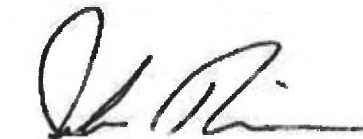
Modification to Permit #31-SDP-01-75C, Section X, Paragraph 4, Item O to change the due date of the Annual Water Quality Report from November 30 each year to January 31 each year (with reference to 567 IAC 115.26(8)"d").

If you have any questions, please contact Erica at 608-566-4957 or elawson@trccompanies.com.

Sincerely,

TRC


Erica Lawson
Project Manager


John Rice, PE (IA)
Senior Hydrologist

Attachments

cc: Daniel Mai – JDDW



IOWA DEPARTMENT OF NATURAL RESOURCES
LAND QUALITY BUREAU
502 EAST 9th STREET - DES MOINES, IA 50319-0034
Telephone: (515) 725-8200; Fax: (515) 725-8202



PETITION FOR WAIVER

Pursuant to 561 Iowa Administrative Code (IAC) Chapter 10, Waivers from Administrative Rules, a petitioner must provide comprehensive justification of a proposed request for a waiver to an administrative rule as adopted by the Department of Natural Resources (DNR).

This form will assist you in providing all pertinent information that is necessary for the DNR to grant a waiver. The form must be submitted to the DNR and must contain an adequate amount of factual and concise information. The obligation rests with the petitioner to provide convincing evidence to justify the granting of a waiver. You may provide additional information or attach additional pages if needed. The DNR reserves the right to require additional information to further support request for a waiver.

Petitions will be comprehensively evaluated by the DNR. The DNR reserves the right to place any condition on the waiver. If information is not inclusive, concise, or does not adhere to the justifications and/or proof the petitioner has submitted, the waiver may be denied. Upon review, the DNR will grant or deny the waiver in writing.

Waivers are temporary unless evidence is shown that a temporary waiver would be impracticable. Once the waiver expires the rule will be enforceable. There is no automatic renewal of waivers. The DNR may renew a waiver at its sole discretion. Please note that the DNR is not allowed to waive or alter a statutory duty or requirement.

CONTACT INFORMATION

Petitioner Name: Mark Dickson, General Manager, John Deere Dubuque Works

Address: 18600 South John Deere Road

City: Dubuque State: IA Zip: 52001

Telephone: 563-589-5082 Fax: _____

Facility Name: John Deere Dubuque Works Industrial Waste Landfill

Address: 18600 South John Deere Road

City: Dubuque State: IA Zip: 52001

PETITIONER JUSTIFICATION

Petitioner must provide clear and convincing evidence to prove the following:

1. Please describe the specific requested waiver.

Modification to Permit #31-SDP-01-75C, Section X, Paragraph 4, Item O to change the due date of the Annual Water Quality Report from November 30 each year to January 31 each year.

2. Cite the specific administrative rule from which the waiver is requested.

567 IAC 115.26(8)"d"

3. What permit is the waiver requested for?

IDNR Sanitary Disposal Project Closure Permit, Permit Number 31-SDP-01-75C.

Permit Issued Date May 24, 2012, Revised Issuance Date October 1, 2018 (Amendment #3).

4. What operation(s) will the waiver include?

Modification of the due date for reporting.

5. Pursuant to 567 IAC 10.5(17A,455A) a waiver will not be permanent. Is a temporary waiver impractical? If so, how?

This is a closed disposal facility, and the request is for the duration of the permit and not temporarily. The current Permit Expiration Date is May 24, 2042.

6. Requested time extent of waiver?

Duration of the permit.

7. Please list relevant facts that justify the waiver.

The semi-annual groundwater sampling events are conducted in April and October each year. It is difficult to collect the October samples, receive the results of the third-party laboratory analysis, and complete the report by the November 30 deadline. Changing the report deadline to January 31 will allow for collection of the semi-annual groundwater samples with adequate time to receive the laboratory analytical results and prepare the annual water quality report.

8. How and why is the absence of the waiver posing an undue hardship?

Refer to Question 7.

9. How will equal protection of public health, safety, and welfare be maintained if the waiver is granted? Provide any analytical data and/or studies to support your justification.

There is no impact to protection of public health, safety, and welfare.

10. In the past 5 years:

Has the petitioner been issued an NOV? ☐ Yes ☒ No

If yes, please explain:

11. Administrative Order? ☐ Yes ☒ No

If yes, please explain:

12. Involved in contested case proceedings? ☐ Yes ☒ No

If yes, please explain:

13. In a court of law? ☐ Yes ☒ No

If yes, please explain:

14. Are there any public agencies, political subdivisions of the state or federal government, person or entity that may be affected by the granting of the waiver? ☐ Yes ☒ No

If yes, please explain and provide the name(s), address(es), telephone number(s), and other relevant contact information.

15. If the waiver is granted, would it adversely affect any person's rights? ☐ Yes ☒ No

If yes, please explain and provide the name(s), address(es), telephone number(s), and other relevant contact information.

16. Do you know how the DNR has treated similar situations? ☒ Yes ☐ No

If yes, describe how similar situations were handled:

The Project Manager for this site, Nina Booker, has indicated that we should file this petition for modification of our permit.

PETITIONER CERTIFICATION

The DNR shall grant or deny a petition for a waiver with 120 days of the receipt of the petition. Failure of the DNR to grant or deny a petition within the required time period shall be deemed a denial of that petition by the DNR. A waiver is void if the material facts are not true or if facts have been withheld. The DNR reserves the right to cancel a waiver at any time if the DNR finds that the facts as stated in the request are not true, material facts have been withheld, the alternative means of compliance provided in the waiver have failed to achieve the objectives of the statute, or the requester has failed to comply with the conditions of the waiver or variance.

By signing this petition, I certify that all information listed on this petition and any attached information is factual and accurate.

Signature:



Date:

05 Nov 21

Name: Mark Dickson

Position: General Manager, John Deere Dubuque Works



Con 12-1-1
Doc # 93369

October 1, 2018

MARK DICKSON, GENERAL MANAGER
JOHN DEERE DUBUQUE WORKS
18600 SOUTH JOHN DEERE ROAD
DUBUQUE IA 52001

RE: John Deere Dubuque Works Industrial Waste Landfill
Amendment #3
Permit #31-SDP-01-75C

Dear Mr. Dickson:

Enclosed is a revised closure permit that contains Amendment #'s 1, 2, and 3 to the permit issued May 24, 2012, for the John Deere Dubuque Works Industrial Waste Landfill. The permit and the approved plans must be kept at the sanitary disposal project in accordance with 567 IAC 115.26(2)'c'. Please review this revised closure permit with your operators, as they must become familiar with it.

Amendments #1 and 2 have previously been approved. The enclosed Amendment #3 approves the updated/revised *Hydrologic Monitoring System Plan*, dated July 30, 2018, as submitted by TRC Environmental Corporation, and incorporates it as part of the permit documents.

Note that the revised permit contains special provisions that may require a response or action by you, which if not properly complied with, may prompt enforcement action by this department.

If you have any questions, you may contact me at (515) 725-8309.

Sincerely,

Nina M. Booker
Environmental Engineer Senior
Land Quality Bureau

cc: DNR Field Office #1

Scott Hemasath
John Deere Dubuque Works
18600 South John Deere Road
Dubuque, IA 52001

Douglas R. Genthe, P.E.
TRC Environmental Corporation
708 Heartland Trail, Suite 3000
Madison, WI 53717

**IOWA DEPARTMENT OF NATURAL RESOURCES
SANITARY DISPOSAL PROJECT CLOSURE PERMIT**

- I. Permit Number:** 31-SDP-01-75C
- II. Permitted Agency:** John Deere Dubuque Works
- III. Project Location:** Lot 1 of Lot 1; Lot 2 of Lot 1; and that portion of Lot 2 encompassing landfill development (including ingress and egress); all in the SW ¼ of Section 27, T90N, R2E, Dubuque County, Iowa
- IV. Responsible Official**
- Name: Mark Dickson, General Manager
John Deere Dubuque Works
Address: 18600 South John Deere Road
Dubuque, IA 52001
Phone: 563-589-6317
- V. Licensed Design Engineer**
- Name: Douglas R. Genthe, P.E.
Address: TRC
708 Heartland Trail, Suite 3000
Madison, WI 53717
Phone: 608-358-1756
Fax: 608-826-3941
- License Number: 13469
- VI. Date Permit Issued:** May 24, 2012
Revised Issuance Date: October 1, 2018 **Amendment #3**
- VII. Permit Expiration Date:** May 24, 2042
- VIII. Issued by:** Nina M. Booker
Environmental Protection Division
for the Director

IX. General Provisions

The above named permitted agency is hereby authorized to close the sanitary disposal project at the described location in conformance with Chapter 455B of the Code, the rules pursuant thereto existing at the time of issuance, and any subsequent new rules which may be duly adopted, and any provisions contained in Section X of this permit.

The facility shall be maintained according to the engineering plans and specifications approved by the Department of Natural Resources and these shall become a part of this permit. Any modifications or deviations from the engineering plans and specifications must have prior approval by the Department and an amendment to this permit issued.

The issuance of this permit in no way relieves the applicant of the responsibility for complying with all other local, state, and federal statutes, ordinances, and rules or other requirements applicable to the closure and maintenance of this closed sanitary landfill.

No legal or financial responsibility arising from the closure and post closure of the approved project shall attach to the State of Iowa or the Department of Natural Resources due to the issuance of this permit.

If title to this project is transferred, the new owner must apply to the Department for a transfer of this permit within thirty days of the date of title transfer. This transfer is void sixty days after the date of title conveyance unless the Department has transferred the permit.

This facility shall be surveyed as necessary and inspected on an annual basis, as described in the Special Provisions of this permit. Annual reports shall be prepared containing a brief summary describing the site's conformance and nonconformance with the permit and the approved plans and specifications during the inspections. These reports shall be submitted by November 30 each year to both the Field and Main Offices of the Department. The Department shall be notified if any inspection reveals any nonconformance with the permit and approved plans and specifications.

Failure to comply with Chapter 455B of the Code, or any rule of order promulgated pursuant thereto, or any or all provisions of this permit may result in a civil penalty of up to \$5000 for each day of violation, pursuant to Section 455B.307 of the Code.

X. Special Provisions

1. The thirty-year postclosure period for this facility begins on the date of issuance of this renewed Closure Permit.
2. This site shall be closed and maintained in accordance with this permit, and the approved Landfill Closure Permit Application, dated October 28, 2011; including the Closure/Postclosure Plan, the Specifications, and the Construction Quality Assurance Plan, all dated November 2011 and submitted by IIW, P.C; and the following:
 - a. This site shall be inspected annually with all inspection data summarized in the annual report required in the General Provisions. The report shall include the status of conformance or nonconformance with the criteria defined in Subrules 115.26(13) and 115.26(14) IAC.
 - b. All diversion and drainage systems must be maintained to the approved specifications to prevent run-on and runoff erosion, or other damage to the final cover. These diversion and drainage structures must be designed to meet a 25-year, 24 hour rainfall event.
 - c. The vegetative cover shall be reseeded as necessary to maintain good vegetative growth. Any invading vegetation whose root system could damage the compacted soil layer shall be removed or destroyed immediately.
 - d. The integrity and effectiveness of the final cover must be maintained by making repairs as necessary to correct the effects of settling, subsidence, erosion, or other events. If damage to the final cover compacted soil layer occurs, repairs shall be made to correct the damage and return it to original specifications.
 - e. The review comments, dated January 16, 2002 from the Dubuque Soil & Water Conservation District relative to compliance with wind and soil loss limit regulations, in accordance with 567 IAC 115.26(1)"j" for all development areas, is incorporated as part of the permit documents.
3. The permit holder is prohibited from any additional waste disposal or other related landfill activities unless they are specifically approved through an amendment to this permit.
4. Hydrologic monitoring at the site shall be conducted in accordance with the hereby approved *Hydrologic Monitoring System Plan* (HMSP), dated July 30, 2018, as submitted by TRC Environmental Corporation, and the following:
(Amendment #3)
 - a. The HMSP shall include upgradient groundwater monitoring point MW-1; and downgradient groundwater monitoring points MW-2 and MW-3.

- b. Monitoring points not used for water quality analysis may be retained as water level measuring points.
- c. In lieu of surface water monitoring, the permit holder shall divert all surface water that comes in contact with the waste to the leachate collection system. This shall be accomplished through the use of perimeter berms.
- d. Department construction documentation form 542-1277 and boring logs for all monitoring wells and piezometers shall be submitted within 30 days of installation. Department construction documentation form 542-1323 shall be submitted within 30 days of establishing surface water monitoring points.
- e. Quarterly sampling of the approved monitoring points was completed in January of 1992.
- f. First year quarterly samples shall be collected from any designated new monitoring well, dewatering system, and any monitoring point which lacks four quarterly samplings and analyzed for the parameters listed in 567 IAC 115.26(4) "d", "e" and "f". Baseline testing for the parameters listed in 567 IAC 115.26(4) "f" shall be conducted during the fall. All statistical evaluations shall include the updated baseline and subsequent sampling documentation.
- g. Continued semiannual sampling shall take place in April and October of each year and be analyzed for the parameters listed in 567 IAC 115.26(4) "e". Routine annual testing for the parameters listed in 567 IAC 115.26(4) "f" shall be conducted during October of each year.
- h. Supplemental sampling and analysis of monitoring points MW-1, MW-2, and MW-3 for fluorides, nitrates, barium, and magnesium shall take place in April and October of each year in addition to the routine test parameters. The additional testing shall be conducted until otherwise approved by the Department.
- i. The elevation of water in each monitoring well shall be measured and recorded on a monthly basis.
- j. The Method Detection Limit (MDL) for the test parameters shall not exceed action levels as defined in 567 IAC Chapter 133. If the action levels cannot be feasibly achieved using procedures described in 567 IAC 115.26(5), then the MDL shall not exceed the lowest feasible level.
- k. In accordance with the variance, dated May 29, 2018, the permit holder is authorized to conduct sampling and analysis of total recoverable metals in lieu of sampling for dissolved metals as required by 567 IAC 115.26(4) "d".

- l. In accordance with the variance, dated May 29, 2018, the permit holder is authorized to remove total organic halogen (TOX) from the required sampling parameter list, as required by 567 IAC 115.26(4)"f".
 - m. If laboratory results exceed the upgradient mean plus two standard deviations or the Maximum Contaminant Level (MCL) for any parameter, the Department shall be notified within 30 days of receipt of the analytical results.
 - n. Results of all analysis and the associated Department sampling forms 542-1322 and 542-1324 shall be submitted to the Department's Main and local Field offices within 45 days of the sample collection.
 - o. An Annual Water Quality Report (AWQR) summarizing the effects the facility is having on groundwater and surface water quality shall be submitted to the Department's Main and local Field offices by November 30 each year. This report shall be prepared in accordance with 567 IAC 115.26(8) "d" by a Professional Engineer licensed in the State of Iowa. The AWQR shall include the results of the monthly groundwater measurements and the routine groundwater analyses conducted at the monitoring points.
5. The permit holder shall operate the Leachate Control System in accordance with the approved plans, dated January 28, 2008, as submitted by IIW Engineers and Surveyors, P.C., and the following:
- a. The permit holder shall collect leachate from the leachate control system and properly dispose of the leachate either by treatment in an on-site facility, discharge with an NPDES permit; or by discharge to the John Deere Dubuque Works Wastewater Treatment Plant. If the discharge is to a POTW with a pretreatment program approved by the Department, the discharge must comply with the terms and conditions of a local permit issued for the discharge by the POTW. If the discharge is to a POTW without an approved pretreatment program a completed treatment agreement form shall be submitted to the Department's Wastewater Section. Copies of the local permit or treatment agreement shall be provided to the Department's Solid Waste Planning, Permitting & Engineering Services Section and the local Field office. The treatment agreement must be on DNR Form 31 (542-3221) and must comply with the requirements of subrule 64.3(5).
 - b. The permit holder shall monthly measure leachate head levels and elevations at all piezometers and record the volume of leachate collected and transported to the treatment works. Records of leachate contaminants testing required by the treatment works and any NPDES permit for on-site treated leachate discharges shall be maintained.
 - c. The leachate control system shall be operated and maintained in accordance with the approved permit documents. After implementation of the leachate control

system, the permit holder shall routinely collect the necessary information and evaluate the effectiveness of the system in controlling the leachate. All documentation shall be summarized in a Leachate Control System Performance Evaluation (LCSPE) Report. Effective control shall be considered as maintaining compliance with maximum leachate head as defined in 567 IAC 115.26(11)"a"(1), achieving the lowest possible leachate head as required in 567 IAC 115.26(12)"b"(2), and maintaining surface and groundwater quality standards at compliance monitoring points.

- d. The permit holder shall annually submit the LCSPE Report, including record data, as a supplement to the facility Annual Water Quality Report, as defined in 567 IAC 115.26(8)"d". The performance evaluation shall include proposed additional leachate control measures and an implementation schedule in the event that the constructed system is not performing effectively
6. In accordance with the variance approval, dated September 14, 1989, the permit holder is exempted from determining the vertical groundwater flow component in accordance with 567 IAC 115.16(1); and is authorized to install well screens that are longer than the expected water table fluctuation, as required by 567 IAC 115.23(3) "c".
7. In accordance with the variance approval of April 1, 1996 the permit holder is not required to monitor or report site methane gas concentrations, as required by 567 IAC 115.26(15). If the waste stream is modified to include organic materials which may produce methane during degradation, this variance approval is no longer valid unless an extension is specifically requested and approved by the Department.
8. In accordance with the January 20, 2010 request and the February 2, 2010 approval, the permit holder is exempted from the following:
 - a. The permit holder is not required to perform pumping tests on the downgradient bedrock wells since the hydrogeologic properties of the site bedrock would not yield any additional useful information or accurate data.
 - b. The permit holder is not required to install the minimum of three downgradient groundwater monitoring wells, as required by 567 IAC 115.22(2). There are currently two bedrock wells installed that provide adequate information to detect and monitor groundwater flow and groundwater quality. The installation of another downgradient well between MW-2 and MW-3 would not yield any additional useful information.
 - c. The permit holder is not required to install a downgradient monitoring well within 50-feet of the waste boundary. Placing a well within the required 50-feet of the waste boundary would require the well to be constructed within the 3:1 foreslope of the landfill. This construction would be impractical.

9. The Emergency Response and Remedial Action Plan (ERRAP) contained in Appendix 6 of the approved plans, dated January 28, 2008, as submitted by IIW Engineers and Surveyors, P.C. in compliance with 567 IAC 115.30(455B) is incorporated as part of the permit documents. The permit holder shall follow the approved ERRAP procedures during all emergencies pursuant to subrule 115.30. An updated ERRAP shall be submitted at the time of any significant changes in facility closure operations that require modification of the currently approved ERRAP.
10. The Landfill Closure Clay Cap Hydraulic Conductivity Results, dated September 20, 2012 and submitted by IIW P.C., and approved on September 24, 2012 is incorporated as part of the permit documents. **(Amendment #1)**
11. The Closure Compliance Report, dated November 13, 2012 and submitted by IIW P.C., and approved on January 14, 2013, is incorporated as part of the permit documents.

The report includes a copy of the notation filed with the county recorder showing, for the purposes of title abstract, the existence of a landfill on the property, and is incorporated as part of the permit documents. **(Amendment #2)**

