



May 8, 2020

Bay Towel
Mr. John Butz, President
PO Box 12115
Green Bay WI 54307-2115

Subject: Infiltration/Injection Temporary Exemption Request for
Bay Towel- Solvent Investigation, 501 S. Adams St, Green Bay WI
WDNR BRRTS Activity # 02-05-237064

Dear Mr. Butz:

The purpose of this letter is to provide a temporary exemption for the injection of a remedial material into groundwater. A request for a temporary exemption to inject ORIN Technologies BAM, a pyrolyzed cellulosic carbon amendment into groundwater at the Bay Towel- Solvent Investigation was received from your consultant, Fehr Graham, on April 20, 2020. The Department also received a request for a WPDES General Permit for Contaminated Groundwater from Remedial Action Operations with the submittal. A review fee of \$700 was submitted on April 20, 2020. This temporary exemption is intended to provide assurances to Bay Towel that the environmental cleanup being conducted in response to a release of contaminants on the Property is being conducted in accordance with s. 292.12, Wis. Stats.

This remedial action is continuation of previous work and includes the excavation of soil highly contaminated with chlorinated solvents from a depth of 14 to 25 feet. After excavation, 28 cubic yards of BAM will be applied to the base of the excavation prior to backfilling. The purpose of the BAM is to facilitate the natural attenuation remediation of residual soil and groundwater in the vicinity of the remedial excavation. The ex-situ treatment of highly contaminated soils to allow landfill disposal is not covered under this permit.

Determination on the NR 812 Injection Prohibition:

The injection prohibition under s. NR 812.05, Wis. Adm. Code, is not applicable in this case because the proposed action is a Department-approved activity necessary for the remediation of groundwater. This letter serves as your approval from the Department to inject ORIN Technologies BAM, to treat chlorinated solvents in groundwater, in accordance with this temporary exemption.

NR 140 Temporary Exemption:

Department approval is hereby granted to Bay Towel for the injection of ORIN Technologies BAM to groundwater on the Bay Towel- Solvent Investigation property, with certain terms and conditions. The expiration date of this temporary exemption shall be two (2) years from the

date of this letter.

The need to obtain a temporary exemption for the injection of a remedial material for which a groundwater quality standard has not been established is required under s. NR 140.28 (1) (d), Wis. Adm. Code. Based on the information provided by your consultant, it appears the requirements for a temporary exemption for the injection of a remedial material for which a groundwater quality standard has not been established under s. NR 140.28 (1) (d) have been or will be met, in accordance with s. NR 140.28 (5) (c) and (d), Wis. Adm. Code.

Department approval is granted with the following terms and conditions:

A. General:

1. The remedial action for restoring contaminated groundwater or soil, and any infiltrated or injected contaminated water and remedial materials, shall achieve the applicable response objectives required by s. NR 140.24 (2) or s. NR 140.26 (2), Wis. Adm. Code, within a reasonable period of time.
2. The type, concentration and volume of substances or remedial material to be infiltrated or injected shall be minimized to the extent that is necessary for restoration of the contaminated groundwater.
3. Any infiltration or injection of contaminated water or remedial material into groundwater shall not significantly increase the threat to public health or welfare, or to the environment.
4. No uncontaminated or contaminated groundwater, substance or remedial material shall be infiltrated or injected into an area where a floating non-aqueous liquid is present in the contaminated groundwater.
5. There shall be no expansion of soil or groundwater contamination, or migration of any infiltrated or injected contaminated water or remedial material, beyond the edge of previously contaminated areas, except that infiltration or injection into previously uncontaminated areas may be allowed if the Department determines that expansion into adjacent, previously uncontaminated areas is necessary for the restoration of the contaminated groundwater, and the requirements of s. NR 140.18 (1), Wis. Adm. Code will be met.
6. All necessary federal, state and local licenses, permits and other approvals are obtained and compliance with all applicable environmental protection requirements is required. A WPDES general permit for Discharge of Contaminated Groundwater from Remedial Action Operations is required for this action.

B. Specific:

7. The remedial materials to be injected to the groundwater shall be limited to ORIN Technologies BAM.
8. The remedial material and injection project shall be as described in *the April 15, 2020 WPDES Permit for Soil Mixing and Treatment, Remedial Action* prepared by Fehr Graham.
9. Fehr Graham shall notify the Department of field activities no less than one (1) week

before implementation.

10. In the monitoring plan, include screening for soil vapor as a best management practice.
11. Remediation progress reports shall be submitted with the semi-annual progress reports. The progress reports shall include the groundwater monitoring results. The first report should be submitted not more than 180 days after the first injection. Recommendations as to the next phase of sampling and/or the need for additional treatment shall be included in a future report. This report shall be submitted as soon as the necessary information is available and must be submitted prior to the expiration date of this temporary approval.
12. Any significant changes based on information from the injection groundwater monitoring reports or results shall be submitted to the Department for approval prior to the changes being implemented at the Bay Towel- Solvent Investigation site. This includes, but is not limited to, adjustments to the volume/mass of the media injected, additional injection points, number of injection events, and/or changes in the type of remediation media used in the injection points.
13. Modifications to the sampling schedule may be requested.
14. In the event of future injection activities, the responsible party may apply for an extension of this approval. A request for an extension of this approval must be received by the Department before the expiration date.
15. Any permit extension approvals will be dependent on WI DNR review of site-specific data or any other information it deems necessary.
16. Upon completion of the project, the injection holes must be abandoned in accordance with s. NR 141.25, Wis. Adm. Code, and later topped off with grout or native soils if settling occurs, unless converted to NR 141 complying monitoring wells, or an alternative approved by the DNR Project Manager.

Monitoring Conditions:

1. That the actual volume of BAM applied each day of the project be recorded.
2. Historical groundwater sampling data from the monitoring well network is to be used as baseline for evaluation of the BAM application.
 - a. During BAM application, headspace measurements for percent oxygen, percent carbon dioxide, hydrogen sulfide and percent of the lower explosive limit will be taken prior to BAM application and upon completion of BAM application each day of the project.
 - b. at monitoring wells: All site monitoring wells except for SMW-1 which is to be abandoned as part of this remedial action.
3. That after completion of the injection phase of the remedial action (between 30 to 40 days), all monitoring wells be sampled for the parameters listed in #2.a, VOCs and ethane/ethene.
4. That a Site Specific Health and Safety Plan be followed.

Failure to adhere to the provisions of this temporary exemption may result in the Department requiring revisions to the remedial action design, operation or monitoring procedures, or the revocation of this exemption and the implementation of an alternative remedial action to

restore soil or groundwater quality, or both.

WPDES Permit

Your proposed discharge is eligible for coverage under the general Wisconsin Pollutant Discharge Elimination System (WPDES) permit WI_0046566-06 for Discharge of Contaminated Groundwater from Remedial Action Operations. You are responsible for compliance with the conditions contained in this permit. The permit and factsheet can be downloaded from the DNR website at <http://dnr.wi.gov/topic/wastewater/GeneralPermits.html>. The amended water will be discharged to the groundwater. No pollutants shall be injected into the groundwater, with the exception of those present in the groundwater which will be extracted from the site.

Discharges under this permit are required to be consistent with a discharge management plan that has been approved by the Department. Your plan, titled *WPDES Permit for Soil Mixing and Treatment, Remedial Action* prepared by Fehr Graham dated April 15, 2020 will be considered as the required discharge management plan. The analysis results would indicate that monitoring is required for all parameters from ch. NR 140, Tables 1 – 3, detected in the discharge, as specified in part 2.3 of the WPDES permit.

Treatment will be provided by augmented natural attenuation. The ORIN Technologies BAM will be discharged to the groundwater. Any significant system changes will require Department approval.

The Department hereby authorizes your pollutant discharge under the general WPDES permit for Discharge of Contaminated Groundwater from Remedial Action Operations, (WI-0046566-6). The following conditions are highlighted for your information:

Monitoring and Reporting Conditions:

Note: These monitoring conditions are in addition to monitoring required by the RR Program for evaluation of remedial action effectiveness.

1. That after completion of the injection phase, quarterly monitoring shall continue for one year from injection completion, with sample collection and analysis completed according to #2 above (baseline monitoring) and the requirements of the accompanying WPDES discharge permit for this site.
2. The discharge limits which must be met are included in the permit as follows:
 - a. Section 5 of the general permit WI-0046566-7
3. The monitoring results shall be sent to David Hass using the DMRS form.

Section 283.35, Wisconsin Statutes, authorizes the Department to issue general permits for discharges from categories or classes of point sources. If a permittee believes coverage of a facility under a general WPDES permit is not appropriate, the permittee may apply for issuance of an individual WPDES permit pursuant to section 283.35 (2) and may petition the Department for withdrawal of coverage under the general permit. The individual permit

application should indicate which site specific factors would justify alternate WPDES limits for the operation. Issuance of such a site specific WPDES permit will provide for a 30 day public comment period, and potentially a public informational hearing and/or an adjudicatory hearing. The Department may withdraw a facility from coverage under a general permit if it is determined that a discharge is a significant contributor of pollutants to waters of Wisconsin, or in certain other cases set out in s. 283.35, Stats. In lieu of general permit withdrawal, the Department may refer any violation of this permit to the Department of Justice for enforcement under s. 283.89, Stats. In order to avoid any enforcement action, please read the WPDES permit carefully and comply with the permit requirements.

If you believe you have a right to challenge the Department decision to cover this facility with a WPDES general permit, you should know that Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. To request a contested case hearing pursuant to section 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. Such a petition should identify pollutant(s) that are believed to be not appropriately regulated by the general permit for the specific site. All requests for contested case hearings must be made in accordance with section NR 2.05 (5), Wis. Adm. Code, and served on the Secretary in accordance with section NR 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing is not a prerequisite for judicial review and does not extend the time period for filing a petition for judicial review.

For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. A petition for judicial review must name the Department of Natural Resources as the respondent.

If you have any questions regarding this letter, please contact me at 920-366-5455 or kevin.mcknight@wisconsin.gov.

Sincerely,



Kevin D. McKnight
Hydrogeologist
Remediation & Redevelopment Program

cc: Dillon Plamann, Fehr Graham (dplamann@fehr-graham.com)
Brian Austin, DG/5
Bill Phelps, DG/5
David Hass, NER