



March 5, 2014

Mr. Mark Meunier
Madison Kipp Corporation
201 Waubesa Street
Madison, WI 53704

Subject: Madison Kipp Corporation – Temporary Exemption for the Injection of a Remedial Material to Groundwater under Chapter NR 140, Wisconsin Administrative Code and Injection Approval under Chapter NR 812.05, Wisconsin Administrative Code

Dear Mr. Meunier:

The Wisconsin Department of Natural Resources (“Department”) has reviewed the following documents relating to the proposed in-situ chemical oxidation (ISCO) groundwater remedial effort at the Madison Kipp Corporation (MKC) site located at 201 Waubesa Street, Madison, Wisconsin:

- Request for a Temporary Exemption for Injection of Remedial Materials for an In-Situ Chemical Oxidation Groundwater Treatment, Madison Kipp Corporation Site, 201 Waubesa Street, Madison, dated February 21, 2014; and
- The Madison Kipp Remediation and Redevelopment Program site file.

MKC has operated at the Waubesa Street location for over 100 years. Investigative activities began in 1994 and continue to the present. These activities include soil sampling, sampling of soil and groundwater using push-probe technologies, monitoring well and piezometer installation, groundwater sampling, air quality sampling and characterizing subsurface geophysics. Some soil remediation and vapor mitigation efforts have also been implemented. Soil and groundwater contamination are found on- and off-site. Identified site contaminants include chlorinated volatile organic compounds (CVOC), metals, polynuclear aromatic hydrocarbons and polychlorinated biphenyls. CVOC-impacted soil extends from the ground surface to the water table. Contaminated soil has also been detected beneath the slab of the manufacturing building. Groundwater impacts include tetrachloroethene (PCE), trichloroethene (TCE) and their degradation products. The ISCO remedial effort primarily addresses the shallow CVOC groundwater impacts in the on-site unconsolidated material.

To conduct the remedial effort, up to 2,400 gallons of 5 percent sodium permanganate solution will be injected into a shallow remedial well. The remedial solution will be injected into the on-site unconsolidated aquifer through injection well IW-1.

The purpose of this letter is to provide, in writing, a temporary exemption for the injection of a remedial material to groundwater under section NR 140.28(5), Wis. Adm. Code, and to address the applicability of an injection prohibition under s. NR 812.05, Wis. Adm. Code.

Determination

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 a remedial material, sodium permanganate, to groundwater in accordance with this temporary exemption.

Temporary Exemption

The review and approval of environmental investigations by the Department is authorized under s. 292.15(2)(a)1, Wis. Stats., and s. NR 724.07(2), Wis. Adm. Code. 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, ARCADIS, it appears that the requirements for a temporary exemption under ss. NR 140.28(5)(c) and (d), Wis. Adm. Code, have been or will be met. Department approval is required prior to issuance of a temporary exemption.

Conditions

Therefore, the Department hereby grants a temporary exemption under s. NR 140.28(5), Wis. Adm. Code, to the MKC for the injection of a remedial material to groundwater, with the following terms and conditions:

1. The type, concentration and volume of substances or remedial material to be infiltrated or injected shall be sufficient for completing the remediation.
2. Any infiltration or injection of contaminated water or remedial material into soil or groundwater shall not significantly increase the threat to public health or welfare.
3. There shall be no expansion of soil or groundwater contamination, or migration of any infiltrated or injected contaminated water or remedial material, beyond the edges 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 soil or groundwater, and the requirements of s. NR 140.28(1), Wis. Adm. Code, will be met.
4. The remedial materials to be injected to the groundwater shall be a five percent solution of sodium permanganate and water. The remedial materials and injection project shall be as described in the February 21, 2014 Request for Temporary Exemption of Remedial Materials for an In-Situ Chemical Oxidation Groundwater Treatment prepared by ARCADIS. Any significant deviations from this plan shall be promptly reported to the Department for approval.
5. All necessary federal, state, and local licenses, permits and other approvals are to be obtained and all applicable environmental protection requirements shall be complied with.

Note: The issuance of a wastewater discharge permit by the department is required prior to the infiltration or injection of substances or remedial material into unsaturated soil or groundwater. A wastewater discharge permit establishes the effluent or injection limits for substances or remedial material which may be infiltrated or injected into unsaturated soil or groundwater.

6. This temporary exemption is not valid until the Department approves coverage for this activity under the Wisconsin Pollutant Discharge Elimination System (WPDES) general remediation permit.
7. ARCADIS shall notify the Department of field activities no less than one (1) week prior to implementation of the pilot test activities and shall provide updates of the work upon completion.

8. The expiration date of this temporary exemption shall be 1 year from the date of this letter. The Department may reissue this temporary exemption if site data demonstrates that re-issuance is necessary to complete the pilot test or restore groundwater quality in accordance with ch. NR 140, Wis. Adm. Code.

Failure to adhere to the provisions of this temporary exemption may result in the Department requiring revisions to the remedial, 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.

This temporary exemption is intended to provide assurances to Madison Kipp Corporation that the environmental work being conducted in response to a release of contaminants from the Property is being conducted in accordance with s. 292.15, Wis. Stats. If you have any questions or concerns regarding this letter, please do not hesitate to write, or call me at (608) 275-3310.

Respectfully,



Linda Hanefeld
Remediation and Redevelopment Team Supervisor
South Central Region

cc: Jennine Trask, ARCADIS