

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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May 14, 2010

In Reply, Refer to:  
BRRS # 02-41-000676, FID # 241170490

Mr. Sam Gruichich  
Sam Gruichich, Dorothy G, Corporation  
9508 West Greenfield Avenue  
West Allis, Wisconsin

Subject: Review of the NR 140.28 Exemption Request for Redi-Quick Dry Cleaners, 9508 West Greenfield Avenue, BRRTs No. 02-41-000676, FID # 241170490. West Allis. Wisconsin

Dear Mr. Gruichich:

Your consultant, Shaw Environmental Inc., submitted a document entitled "**Temporary Exemption Request for Remedial Action via Injection**" (for Redi-Quick Dry Cleaners, 9508 West Greenfield Avenue, West Allis, Wisconsin (dated December 10, 2008) to the Wisconsin Department of Natural Resources ("Department"). We have received a request from Invensys, Inc. that the Department formally review the Plan and issue an exemption to NR 140.28. The Department also received a "**Request for Initial Coverage Under Wisconsin Pollutant Discharge Elimination System (WPDES) Wastewater Discharge Permit (WI-0046566-5) for Contaminated Groundwater from Remedial Action Operations**" (WPDES Request) on December 10, 2008.

The Department issued a verbal approval on January 2009 which conditionally approved the "**Supplemental Site Investigation and Remedial Action Options Report**" (dated December 10, 2008). The report included a proposal to conduct additional investigative activities and to implement a remedial action including soil vapor extraction (SVE) and enhanced bioremediation. One of the conditions of approval was that "an injection permit and a WPDES permit are required prior to the injection of remedial materials into the subsurface".

You have proposed the injection of a bio-amendment solution (consisting of emulsified soybean oil and a microbial culture grown in an aqueous solution) into contaminated groundwater at the Redi-Quick Dry Cleaners site located in West Allis, WI. The primary contaminants at this site are tetrachloroethene (PCE) and trichloroethene (TCE) and the associated daughter products cis-1,2-dichloroethene (DCE) and vinyl chloride (VC). The injection portion of this remedial action proposal includes injection of approximately 100 gallons of 20% Newman Zone solution with some Neutral Zone to buffer the influence on pH. The remedial materials will be mixed with groundwater that will be extracted from the site from two extraction wells which have already been installed at the site. The remedial materials will be placed into the ground through 27 two inch diameter injection wells which have already been installed at the site, over a period of a few weeks.

The Department conditionally approves your proposed remedial method. A temporary exemption is granted under s. NR 140.28(5), Wis. Admin. Code, for the application and mixing of a cumulative total of 100 gallons of the emulsified soybean oil (Newman Zone Oil) and three liters of "KB-1" bacteria solution as identified in the "**140.28 Exemption Request**" (dated February 11, 2009), submitted to the Department. This exemption

is required because the application of the materials includes reinjection of water extracted from the site that is likely to exceed one or more Enforcement Standard (ES) listed in NR 140. The total amount of remedial materials injected must not be more than what is needed to sustain microbial breakdown of contaminants in the groundwater at the site.

This permit is approved for a period of 90 days. A written request for an extension should be submitted if necessary.

To maintain this exemption, you must comply with all applicable exemption requirements listed in s. NR 140.28(5)(c), Wis. Admin. Code, and the remedial action design, operation, and monitoring criteria listed in s. NR 140.28(5)(d), Wis. Admin. Code.

Your request, submitted by Shaw Environmental Inc., is approved in accordance with the provisions of the Wisconsin Well Construction and Pump Installation Code (NR 812). This approval is based on compliance with all conditions listed in this letter.

#### Regulatory Requirement

Section NR 812.05, Wis. Adm. Code, requires "the use of any well, drillhole or water system for the underground placement of any waste, surface, or subsurface water or any substance, as defined in s. 160.01(8), Stats., is prohibited unless the placement is a Department-approved activity . . . necessary for remediation of contaminated soil, groundwater or an aquifer. For the purposes of this section the term "drillhole" includes any excavation or opening that is deeper than it is wide, even if it extends less than 10 feet below the ground surface and the term "well" includes an excavation that is deeper than it is wide regardless of its depth or purpose. Circulation of water through a closed-loop heat pump system in a drillhole is not prohibited by this section. Groundwater tracers may only be used with approval."

Department approval of the groundwater injection system proposed at the Redi-Quick Dry Cleaners Site, 9508 West Greenfield Avenue, West Allis, Wisconsin is appropriate because the injection system is needed for remediation of contaminated soil, groundwater or an aquifer as part of a remediation project approved by the Department under s. 292 and s. 280, Stats. The Department of Natural Resources has concluded that your proposal may be approved per the request submitted on March 3, 2009, with the following conditions.

#### WPDES Permit

This letter is an approval from the Wastewater Program, since the project involves discharge of amended water to the groundwater of the state. Your plan entitled, "**Temporary Exemption Request for Remedial Action via Injection**" (dated December 8, 2008) serves as the Discharge Management Plan required in Section 6.2 of the WPDES permit.

The WPDES General Permit can be found at: <http://dnr.wi.gov/org/water/wm/ww/gpindex/gpinfo.htm>  
The amended water will be discharged to the groundwater of the Kinnickinnic River Drainage Basin. No pollutants shall be injected into the groundwater, with the exception of those present in the groundwater which will be extracted from the site.

The WDNR wastewater program approves this application, provided that the conditions of described in this letter are met. **The monitoring and reporting described in this letter are considered to be equivalent to the requirements in the WPDES General Permit, Parts 2 & 6.** To avoid duplicative reporting and review, no separate written reports are required to be submitted directly to the wastewater program. Instead, the RR files will serve as the full repository of data associated with WPDES required approval conditions.

## GENERAL PERMIT AUTHORITY

Section 283.35, Stats., authorizes the Department to issue a general permit for discharges from categories or classes of point sources. 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, if the source is not in compliance with the permit terms and conditions, if you request it, 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 WPDES Permit No. to: # WI-0046566-05 the Department of Justice for enforcement under s. 283.89, Stats.

If you believe coverage of this facility under this permit is not appropriate, you may petition the Department for withdrawal of coverage and, where appropriate, apply for issuance of an individual WPDES permit pursuant to section 283.35(2), Stats. Issuance of such an individual permit will provide for a public comment period and, potentially, a public informational hearing and/or an adjudicatory hearing.

Alternatively, you may request judicial or administrative review of the Department's decision to cover your discharge under the enclosed general permit. Either request must be submitted no later than 30 days after this letter was mailed. To request judicial review of this decision pursuant to sections 227.52 and 227.53, Stats., a petition naming the Department of Natural Resources as respondent must be filed with the appropriate circuit court and served on the Department. To request a contested case hearing on this decision pursuant to section 227.42, Stats., a petition for hearing must be served on the Secretary of the Department of Natural Resources. This notice is provided pursuant to s. 227.48(2), Stats.

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### ***Conditions of Approval***

It is your responsibility to meet all the following approval conditions during and related to your proposed injection procedures at this site:

#### **General Conditions**

1. Any infiltration or injection of remedial material into soil or groundwater will not significantly increase the threat of contaminant exposure to the public or environment.
2. Performance of the remedial action and all test results will be documented and reported to the Department within 60 days of completing the remedial action.
3. The injection system will be abandoned with Department-approved materials no later than 30 days after it is determined that no further injection activities will be conducted.
4. The site-specific health and safety plan is to be followed.
5. Appropriate field monitoring equipment (including a photoionization detector with an 11.7 eV lamp and an explosivity meter) shall be used to monitor the ambient air in and around the injection area during all injection activities.
6. The field monitoring equipment shall be used to monitor for vapors at a) the ambient air down wind of the injection area, b) upwind of the injection area, c) in the general vicinity of the current injection area(s) and d) any other areas as directed by the Department.

7. The ambient air monitoring shall begin prior to injection and shall continue throughout all injection activities. The wind direction should be noted throughout the day and the ambient air monitoring location should be modified as conditions warrant.
8. The remaining field monitoring shall begin prior to injection and shall continue at no less than 60-minute intervals until injection is completed for the day. After the first three days, if the PID and LEL levels have not exceeded background levels, the monitoring frequency may be reduced to no less than every four hours.
9. If at any time, the background level is exceeded, the original sampling frequency (no less than every 60 minutes) shall be reinstated.
10. A log of all field monitoring results shall be maintained.
11. Access to the injection area shall be restricted. If at any time, any unauthorized person enters the injection area, all injection activities shall cease.
12. The actual volume of reagent injected, as well as the injection start and stop times shall be recorded.
13. Post-treatment sampling shall be conducted a minimum of 30 days after injection.
14. That if 25% of the LEL is reached at any time and at any monitoring point:
  - a. Cease injection operations immediately.
  - b. Evaluate cause of vapors.
  - c. ~~Implement measures to reduce the vapor concentration to acceptable levels.~~
  - d. Increase monitoring frequency.
15. That if vapor levels are detected at or above 25% of LEL within any buildings or structures:
  - a. Evacuate the building or structure.
  - b. Shut down all electrical power.
  - c. Vent the building or structure by opening all doors and windows.
  - d. Follow response measures listed above in Section 1.
16. A summary report shall be forwarded to the Department at the following email addresses ([andrew.boettcher@dnr.state.wi.us](mailto:andrew.boettcher@dnr.state.wi.us) and [sharon.schaver@dnr.state.wi.us](mailto:sharon.schaver@dnr.state.wi.us)). The report shall include the volume of reagent injected and a summary of events.

#### **Notification Requirements**

1. That in the event that a sustained exceedance of the 25% of LEL level is present for more than 1 minute, or if 50% of LEL is reached at any time at any monitoring point, then immediate notification of the local fire department is required.
2. That the Department is to be notified immediately of any system breakdown or shutdown.
3. That the Department is to be notified of any groundwater quality enforcement standard exceedance.
4. That all owners of utilities located on or adjacent to the property, the local fire department and the Department's Project Manager, Binyoti Amungwafor are notified prior to injection activities, and that their representatives be allowed to observe the injection activities.

## Notice of Appeal Rights

If you believe that you have a right to challenge this decision, you should know that Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, 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. Such a petition for judicial review must name the Department of Natural Resources as a respondent.

To request a contested case hearing pursuant to section 227.42, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department of Natural Resources. The filing of a request for contested case hearing is not a prerequisite for judicial review and does not extend the 30-day period for filing a petition for judicial review.

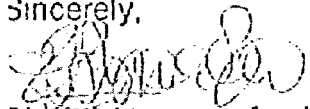
All hearing requests must be made in accordance with s. NR 2.05(2), Wis. Adm. Code, and must identify the grounds for the petition and the desired modification or changes to the Order and include specific information demonstrating the following:

1. The substantial interest of the petitioner which is injured in fact or threatened with injury by Department action or inaction.
2. That there is no evidence of legislative intent that this interest is not to be protected.
3. That the injury to the petitioner is different in kind or degree from injury to the general public caused by the Department action or inaction and
4. That there is a dispute of material fact. You must specify the disputed facts.

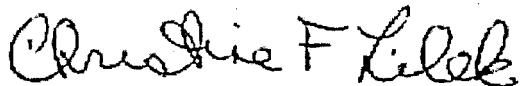
This notice is provided pursuant to section 227.48(2), Stats.

Please contact Binyoti Amungwafor at 414-263-8607 if there are any questions about this letter.

Sincerely,



Binyoti Amungwafor, Hydrogeologist  
WDNR, Remediation and Redevelopment



Christine Lilek  
WDNR, Water

Cc: Timothy P. Welch, Shaw Environmental Inc.  
Richard Roth, UIC Coordinator – DG/2  
William Phelps – DG/2

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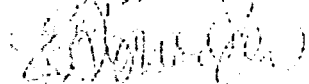
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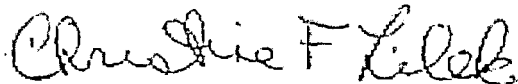
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