

31210



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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January 24, 2011

Mr. Ken Peterson
Ken's Auto Wash
PO Box 677
Ellensburg, WA 98926

RE: Registration with the Underground Injection (UIC) Program, Ken's Auto Wash, 1013 E. University Way, Ellensburg, WA 98926

Dear Mr. Peterson:

This letter is to acknowledge receipt of your registration form received December 8, 2010 to register the above-mentioned site with the UIC Program. The site project will:

- Include injecting the following amounts of product (diluted with water) over 4 injection events and into six monitoring wells:
 - Sodium bromide and sodium chloride salt tracers, 50 pounds total
 - OxEA-aq, 2800 pounds
 - PetroBac, 25 gallons
 - Ivey-sol, 4.8 gallons
- Begin in January 2011 and can continue through October 2011 if necessary.
- Quarterly ground water monitoring of wells MW-3, MW-4R, MW-6, MW-13, and MW- 14. If any of the product, constituents exceed the criteria of chapter 173-200 Water Quality Standards for Ground Waters of the State of Washington then Injection must stop.

Clean up actions/sites that are not approved by WA State Department of Ecology under the Model Toxics Control Act (MTCA), chapter 70.105D RCW or approved by the United States Environmental Protection Agency under the Comprehensive Environmental Response Compensation and Liability Act, 42 U.S.C. 9601 et seq are required to meet the GWQS. The injected compounds are intended to improve ground water quality and meet the Ground Water Quality Standards. There are inherent environmental risks associated with injecting compounds into ground water. The site must be carefully characterized, managed, and monitored to minimize risk and prevent unforeseen degradation of ground water quality. Mobilized metals or other substances, injected chemicals or hazardous bi-products, are not allowed to migrate beyond the plume/property boundary. A thorough discussion of risk and management options is provided in the following document: *Technical and Regulatory Guidance for In Situ Chemical Oxidation of Contaminated Soil and Groundwater*, June 2005, prepared by Interstate Technology and Regulatory Cooperation Work Group. This document is available on the internet at: <http://www.itrcweb.org/Documents/ISCO-2.pdf>.



The two UIC Program requirements for rule authorization are, registration of UIC wells (prior to use) and the discharge from the well must meet the nonendangerment standard, of WAC 173-218-080. The UIC site is number 31210. The minimum requirements to meet the nonendangerment standard are listed below. Your site is conditionally rule authorized when the following have been met:

- Meet the ground water quality standards, chapter 173-200-WAC;
- Complete a thorough site characterization including: geologic investigation, concentration and extent of contaminant plume, aquifer characteristics, and location of preferential migration pathways (natural and manmade);
- A ground water monitoring program that includes: well location and sampling sufficient to characterize the background water quality, the water quality at the point of compliance, and identify any changes in ground water quality resulting from the injected compounds;
- Develop a conceptual site model that balances the injection rate, concentration, and total mass of injected compound with that of the subsurface oxidizable material. The model should predict the expected changes in ground water chemistry over time, final ground water quality at the point of compliance, and predicted restoration timeframe;
- Hydrologically contain within the site property boundaries, the injected compounds and any regulated substances mobilized by the injected products;
- Prepare a written contingency plan that describes, in detail, the actions to be taken in case of spills, failures, equipment breakdowns and/or unforeseen environmental degradation caused by the cleanup activities; and,
- Retain all plans, modeling, monitoring results, interim and final reports. Upon request, provide these documents to the Department of Ecology.

If ground water quality does not meet the Ground Water Quality Standards at the point of compliance, you must notify the Department of Ecology within 24 hours of discovery.

At any time, the Department of Ecology may require you to apply for and obtain a Waste Discharge Permit for the continued use of these compounds to promote In Situ Chemical Oxidation.

Also, contact us when the UIC wells are no longer in use.

A formal approval for this project may be obtained through the departments' State Waste Discharge Permit Program or the MTCA Program.

Please call me at (360) 407-6143 if you have any questions. Additional information on the UIC Program can also be found at our website

<http://www.ecy.wa.gov/programs/wq/grndwtr/uic/index.html>

Sincerely,



Mary Shaleen-Hansen
UIC Coordinator
Water Quality Program

Cc: Troy Fowler, Hart Crowser