



STATE OF WASHINGTON  
**DEPARTMENT OF ECOLOGY**

PO Box 47600, Olympia, WA 98504-7600 • 360-407-6000

June 11, 2025

Jeanne Rea  
Private Owner  
501 Denny Way  
Seattle, WA 98121  
Sent via email: [keithlrea@gmail.com](mailto:keithlrea@gmail.com)

Re: UIC Site Number 39737 – Underground Injection Control (UIC) Program Well Registration for Voluntary or Independent Cleanup Sites, Former Faulkenbury & Wright Dry Cleaners (Site), 501 Denny Way, Seattle, WA

Dear Jeanne Rea:

Ecology's UIC Program has reviewed your UIC registration for the above-mentioned Site. Based on the information provided in the registration and the additional information provided per Ecology's request, the UIC wells are **Conditionally Rule-Authorized**, and a State Waste Discharge Permit is not required to operate the wells under WAC 173-218 authorities.

The UIC Site Number is 39737. The Site is undergoing independent remedial cleanup activities (IRCA). If the IRCA is to be eventually evaluated by the State to make a determination whether the IRCA has met the substantive requirements of the Model Toxics Control Act (MTCA), the Voluntary Cleanup Program (VCP) will make that evaluation. The Site has not been enrolled in the VCP, but the contaminant release being treated by the proposed IRCA has been reported to Ecology's Toxics Cleanup Program (TCP) as documented in the *Early Notice Letter Regarding a Release of Hazardous Substances*, dated 10, 2018, prepared by Ecology. The Facility Site Identification (FS ID) Number is 81729752 and the Cleanup Site Identification (CS ID) Number is 14831.

Review of the Proposed *In Situ* Chemical Oxidation (ISCO) and Groundwater Monitoring Plan, prepared by Landau Associates, Inc. (Landau) and other information provided in the registration application for UIC Site Number 39737, indicates that a total volume of 14,000 gallons of sodium permanganate injectate solution comprised of 2,284 pounds (500 gallons) of 40% sodium permanganate solution and 13,500 gallons of water will be injected in two injection wells. The screened intervals for the injection wells vary from the 17- to 32-foot depth range. The concentrated injectates will be mixed with onsite potable water for a concentration of 0.16 pounds of sodium permanganate per gallon of injectate. The injectate will be injected at flow rate of approximately 5 gallons per minute (gpm).

In addition to the above-mentioned injection activities, extraction of groundwater from recovery wells DRW-1, DRW-2, DRW-5, GRW-5, GRW-6, and/or GRW-7 is proposed over time to optimize the

distribution of sodium permanganate across the target treatment area and maintain groundwater capture. The proposed groundwater extraction rate is approximately 1 gpm.

The Proposed ISCO and Groundwater Monitoring Plan also provided a description of a groundwater monitoring plan. Prior to the proposed groundwater monitoring events, the groundwater recovery system will be deactivated for at least two weeks to allow the groundwater conditions to stabilize prior to sampling. The groundwater monitoring program is proposed to include the following:

- Baseline monitoring to consist of one groundwater monitoring event that will include groundwater level measurements and sampling of all shallow groundwater monitoring wells (SMW-1, SMW-2, SMW-3, SMW-4, SMW-6, SMW-7, SMW-8, SMW-11, and SMW-12). The collected groundwater samples will be analyzed for short-list halogenated volatile organic compounds (HVOCs), manganese, and sodium.
- Periodic monitoring during the injection activities will include daily monitoring for the presence of permanganate (observation of water color, use of permanganate test strips, and field measurement of dissolved oxygen [DO], oxidation-reduction potential [ORP], and specific conductance) in the active recovery wells (DRW-1, DRW-3, DRW-5, GRW-5, GRW-6, and GRW-7), in inactive extraction test well EW-1, in inactive recovery wells DRW-2 and DRW-4, and in the shallow groundwater monitoring wells (SMW-1, SMW-2, SMW-3, SMW-4, SMW-6, SMW-7, SMW-8, SMW-11, and SMW-12). Daily measurements of groundwater elevations will be collected in the shallow monitoring wells, EW-1, and in the injection wells.
- Post-injection performance monitoring activities will include monthly groundwater monitoring for a period of approximately three months. The monitoring will include measurement of groundwater levels and monitoring for the presence of permanganate (observation of water color and use of permanganate test strips) in EW-1, SMW-1, SMW-2, SMW-3, SMW-4, SMW-6, SMW-7, SMW-8, SMW-11, and SMW-12) and collection groundwater samples from SMW-1, SMW-2, SMW-3, SMW-4, SMW-11, and SMW-12 for laboratory analysis of short-list HVOCs, manganese, and sodium.
- Sitewide groundwater monitoring activities will include semiannual groundwater monitoring events for at least one year. Each monitoring event will include groundwater level measurements and sampling of all shallow groundwater monitoring wells (SMW-1, SMW-2, SMW-3, SMW-4, SMW-6, SMW-7, SMW-8, SMW-11, and SMW-12) located on and adjacent to the subject property, off-property shallow groundwater monitoring wells SMW-5, SMW-9, and SMW-10, and Edwards on 5<sup>th</sup> shallow monitoring wells MW 12, MW 14, and MW15. The collected groundwater samples will be analyzed for short-list HVOCs.

#### **Conditional Rule-Authorization – Conditions of Use**

There are inherent environmental risks associated with injecting compounds into groundwater. It is incumbent upon the owner and their representative to carefully characterize, manage, and monitor the Site surface and subsurface conditions to minimize risk and prevent unforeseen degradation of groundwater quality and other environmental risks.

Ecology will Rule-Authorize a UIC registration to operate when the two UIC Program requirements for Rule Authorization are met:

1. Registration of UIC wells (prior to use), and
2. The UIC well must meet the nonendangerment standard (WAC 173-218-080).

As stand-alone UIC wells, the wells do not meet the nonendangerment standard for Rule Authorization. Additional conditions are needed to allow for conditional rule-authorization and the remedial work to proceed.

The following Site-specific UIC Program requirements for **Conditional Rule-Authorization** include:

- The injections are an approved one-time injection event. The Conditionally Rule-Authorized UIC wells are subject to the injectate type and volumes listed in the registration for the Site.
- If additional volumes or a different type of injectate are proposed to be injected, additional review and approval by the UIC Program will be required prior to the start of the injection activities. Any deviations from the approved work plans or other agreements are not allowed unless Ecology UIC has pre-approved those changes in writing.
- Onsite groundwater is not approved for use to mix with the remediation products for injection into the subsurface.
- The injections must not cause a further degradation to groundwater quality criteria at the down-gradient monitoring points per state or federal applicable criteria. If such groundwater degradation occurs, the injection activities must discontinue; any environmental release must be reported no later than 24-hours from the release discovery at [Reporting An Environmental Issue](#)<sup>1</sup> or call 1-800-645-7911.
- Additionally, notification to Ecology's UIC Program of any change in UIC well status is a required element of this registration.
- The IRCA is proposed to be completed in July 2025.

The Site will be **Conditionally Rule-Authorized** for as long as the nonendangerment standard of WAC 173-218-080 will continue to be met and the above items have been completed. Failure to capture any of the performance data required or cause a violation of the applicable cleanup standards may result in a denial, modification, or termination of the UIC registration.

The VCP Site Cleanup Manager will have final authority to determine if the IRCA described in the work plan have met the substantive requirement of the MTCA if such an opinion is requested. Ecology's UIC Program will not make that determination.

At any time if the nonendangerment standard cannot be met, Ecology may require you to apply for, and obtain, a State Waste Discharge Permit for the continued use of the proposed treatment

---

<sup>1</sup> <https://ecology.wa.gov/footer-pages/report-an-environmental-issue>

compounds. You would need to obtain a formal waste discharge approval for this project through Ecology's State Waste Discharge Permit Program or Toxics Cleanup Program.

The owner is responsible to keep the UIC registration information current and retain all registration documents, plans, modeling, monitoring results, interim, and final reports. Upon Ecology request, the owner shall provide these documents to the UIC Program.

This UIC registration was evaluated under the presumptive approach, Ecology UIC has determined the conditions described in the UIC registration and other submitted documents to be truthful and factual when making the determination the injections will be protective of the Site groundwater quality and will meet the nonendangerment standard requirements of WAC 173-218-080. Any material misrepresentations or omissions of fact supplied in this application may result in the denial or revocation of this registration authorization. Ecology's UIC Program has the authority to rescind a rule authorization if Ecology determines the system no longer meets the nonendangerment standard.

Please contact John Bhend at [UICwells@ecy.wa.gov](mailto:UICwells@ecy.wa.gov) if you have any questions. You can find additional information on the UIC Program can at our website:

[Ecology's Underground Injection Control Program](#)<sup>2</sup>

Sincerely,



John Bhend, LG  
Statewide UIC Program Coordinator  
Water Quality Program

cc: Mike Staton, Landau Associates, Inc., [mstaton@landauinc.com](mailto:mstaton@landauinc.com)  
Donna Kirkman, Ecology NWRO VCP Coordinator, [dums461@ecy.wa.gov](mailto:dums461@ecy.wa.gov)  
Frank Winslow, Ecology Expedited VCP Site Manager, [fwin461@ecy.wa.gov](mailto:fwin461@ecy.wa.gov)

---

<sup>2</sup> <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Underground-injection-control-program>