

Inventory Review Fee Payment Method:

Online
Order # _____

Check
Check # _____

(For DWQ use only)

Utah
Underground
Injection
Control
(UIC)
Inventory Information

Well Subclass: _____

Facility ID: UTU- _____

Date Entered: _____ **By:** _____

(For DWQ use only)

Subsurface Environmental Remediation (SER) Injection Wells

Owners / operators of existing and new Class V injection wells authorized-by-rule shall submit inventory information (UAC R317-7-6). This form is designed to assist the regulated community in complying with this requirement. Please complete all fields.

FACILITY LOCATION

Facility Name:		Date:	
Physical Address:			(City)
Mailing Address:		(City)	(Zip Code)
Geographic Location:	Select a method described in the Instructions at the end of this form to acquire a map showing the location of your UIC facility. Submit the map along with this form.		
County:			

FACILITY CONTACT

Contact Name:		Phone:		Email:	
Contact Type: (check all that apply)	<input type="checkbox"/> Owner/Operator	<input type="checkbox"/> Owner	<input type="checkbox"/> Operator	<input type="checkbox"/> Facility Manager	<input type="checkbox"/> Developer
	<input type="checkbox"/> Legal Representative	<input type="checkbox"/> Official Representative	<input type="checkbox"/> Contractor	<input type="checkbox"/> DEQ District Engineer / Project Manager	
	<input type="checkbox"/> Other _____				
Title:		Organization:			
Mailing Address:		(City)	(Zip Code)		

Contact Name:		Phone:		Email:	
Contact Type: (check all that apply)	<input type="checkbox"/> Owner/Operator	<input type="checkbox"/> Owner	<input type="checkbox"/> Operator	<input type="checkbox"/> Facility Manager	<input type="checkbox"/> Developer
	<input type="checkbox"/> Legal Representative	<input type="checkbox"/> Official Representative	<input type="checkbox"/> Contractor	<input type="checkbox"/> DEQ District Engineer / Project Manager	
	<input type="checkbox"/> Other _____				
Title:		Organization:			
Mailing Address:		(City)	(Zip Code)		

DWQ Use Only for Date Received Stamp and eDocs Number:	SWPZ? <input type="checkbox"/> Yes <input type="checkbox"/> No System Name: Contact Information:
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LAND OWNERSHIP AT FACILITY

<input type="checkbox"/> Private – For Profit	<input type="checkbox"/> Private – Not for Profit	<input type="checkbox"/> Private - Farm	<input type="checkbox"/> Private - Other
<input type="checkbox"/> Govt – Federal	<input type="checkbox"/> Govt – State	<input type="checkbox"/> Govt – Local	<input type="checkbox"/> Other

**FACILITY DESCRIPTION
(see Instructions)**

6-Digit NAICS Code:		Corresponding NAICS Title:	
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Describe the primary business activity conducted at the facility:

**REMEDIATION TYPE AND OVERSIGHT AGENCY
(see Instructions)**

Is the proposed remediation associated with a(n):	<input type="checkbox"/> RCRA Site? ID Number: _____	<input type="checkbox"/> CERCLA (Superfund) Site? ID Number: _____	<input type="checkbox"/> Voluntary Clean Up? ID Number: _____
	<input type="checkbox"/> Independent Clean Up? ID Number: _____	<input type="checkbox"/> LUST? ID Number: _____	<input type="checkbox"/> Other? Describe: _____

Regulatory Agency Providing Primary Oversight of this Remediation:

Project Manager in Oversight Agency:		Phone:	
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**REMEDIATION ACTIVITY INVOLVING INJECTION WELLS
(see Instructions)**

<input type="checkbox"/> Aquifer Test	<input type="checkbox"/> Tracer Test	<input type="checkbox"/> In-Situ Bioremediation	<input type="checkbox"/> In-Situ Chemical Oxidation	<input type="checkbox"/> Air Sparging
<input type="checkbox"/> Bioventing / Biosparging	<input type="checkbox"/> In Well Air Stripping	<input type="checkbox"/> In-Situ Flushing	<input type="checkbox"/> Remediation Waste Disposal	
<input type="checkbox"/> Other: _____				

INJECTION WELL OPERATING STATUS (indicate number of wells in appropriate category)

Proposed	Under Construction / Modification	Active	Temporarily Abandoned	Permanently Abandoned

**INJECTION WELL CONSTRUCTION AND SUBSURFACE DETAILS
(see Instructions)**

**INJECTATE CHARACTERIZATION
(see Instructions)**

HYDROGEOLOGIC CHARACTERIZATION
(see Instructions)

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COMMENTS

Use this space for additional contact information and/or other important information about these SER wells.

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SIGNATURE OF OWNER / OPERATOR or LEGAL REPRESENTATIVE

Name & Title (print or type)	Phone Number
Signature	Date Signed

Online Credit Card Payment of UIC Inventory Review Fee

To pay the UIC Inventory Review Fee online:

1. Go to this website: https://secure.utah.gov/cart/dwg_cart/products.html , the Products page.
2. Click on 'Payment for UIC Inventory Review Fee' under the UIC Inventory Review heading.
3. On the Product Detail page, enter the number of facilities (**not** the number of injection wells) for which you are submitting the UIC Inventory Review Fee. Click on the 'Add to cart' button.
4. On the Your Cart page, confirm the quantity and amount then click on the Checkout button.
5. On the Enter Your Shipping Address page, enter the contact information for the owner / operator of the UIC facility listed on the first page of the UIC Inventory Information Form in the Please Enter Shipping Info block even though nothing will be shipped out.
6. In the Additional Information block at the bottom of the page, enter the UIC Facility Name from the first page of the UIC Inventory Information Form.
7. Click on 'Proceed to Payment' button and complete the credit card information then click on the 'Continue' button.

Electronic Submittal of UIC Inventory Information Form

To submit the UIC Inventory Information Form using DWQ's Electronic Submissions web service:

1. Scan your completed, signed, and dated UIC Inventory Information Form and save as a .pdf document on your computer.
2. Go to this website: <https://deq.utah.gov/water-quality/water-quality-electronic-submissions>
3. Enter 'UIC Inventory Information Form' in the 'Purpose of Submission' box.
4. Complete the 'Submitted By' section.
5. Select the file you created in Step 1, and hit the 'Click here to submit' button.

Submit UIC Inventory Review Fee and Inventory Information Form by Mail

To submit both the form and fee by mail, send your completed, signed and dated form along with a check made payable to **Utah Division of Water Quality** to:

Utah Department of Environmental Quality
Division of Water Quality, ATTN: UIC
P.O. Box 144870
Salt Lake City, Utah 84114-4870

Instructions for Completing the Utah Underground Injection Control Inventory Information Form for

Subsurface Environmental Remediation (SER) Injection Wells

(UIC Well Code: 5B6)

Owners or operators of all Class V injection wells, existing and new, must submit inventory information according to Section R317-7-6.4(C) of the Utah Administrative Rules for the Underground Injection Control Program. Required information includes: facility name and location; name and address of legal contact; ownership of facility; nature and type of injection wells; and operating status of injection wells. The Utah UIC Inventory Information Form is designed to assist owners or operators to comply with this requirement, to collect sufficient information regarding the injection activity such that authorization-by-rule status can be assessed, and to coordinate UIC Program regulatory action with other agencies having regulatory authority over the subject facility. Inventory information must be submitted prior to injection for new wells.

This submission does not relieve the applicant of any liability for ground water cleanup or any claim for resource damage if ground water contamination is traced to the injection wells shown on this form. Nor does authorization-by-rule under the UIC Program relieve the applicant, in any way, of obligations to comply with other applicable regulatory requirements, or to obtain other necessary applicable permits or authorizations from local or other agencies. The applicant may contact the local health department for compliance with local requirements.

Facility Location:

Physical Address: Enter street address of facility or other description of physical location of facility that would enable someone to drive to the location of the facility. You may also choose to provide a photocopy of a road map (no greater than 11" x 17", preferably 8 ½" x 11") with the facility location indicated if a street address is not available.

Geographic Location: Submit a map from Atlas Utah (<https://atlas.utah.gov>) or another online map service ([Bing Maps](#), [Google Maps](#), [MapQuest](#))

To use the Atlas Utah to locate your facility, go to this web site <https://atlas.utah.gov>. Use the stacked layer symbol in the upper right hand corner of the map to select the base map (Hybrid, Lite, Terrain, Topo, or Color IR) you would like to use in locating your facility. Then locate your facility by using the Find Address, Find Point of Interest or Find City in the search fields at the left of the map. Use the + and – signs in the upper left hand corner of the map to zoom to your facility boundary. Using the ‘pull down’ menu for the blue Print button in the upper left hand corner of the screen, select either Portrait or Landscape orientation for the map of your facility. While the service is preparing the printout the Print button will be gray and read ‘Printing’. Once the Printout is finished the button will read ‘Printout’. Click on Printout to open the map.

Facility Contact:

At least one of the contacts listed must be the owner/operator or legal representative of the owner/operator of the Class V injection well(s) for which the UIC Inventory Information is being submitted. The owner/operator or the legal representative must be the signatory for the form. Provide additional contacts capable of providing reliable information regarding the operation of the facility.

Land Ownership at Facility:

Self-explanatory

Facility Description:

Enter the 6-digit 2017 North American Industry Classification System (NAICS) code and the title of the 6-digit code describing the primary activity at your facility. You can find your NAICS code using the search tools at: <https://www.naics.com/search/> or you can download 2017 NAICS files at: <https://www.census.gov/eos/www/naics/downloadables/downloadables.html>

Include a description of the business activities performed at the facility. You may include the NAICS code description. You may wish to include additional narrative for clarity.

Remediation Type and Oversight Agency

Subsurface environmental remediation projects are conducted under the statutory authority of the federal Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund; or some other statutory authority. Check the box that corresponds to the remediation type for this project and enter the ID number the regulatory oversight agency has assigned to this remediation project.

Primary regulatory oversight of subsurface environmental remediation projects is provided by programs and agencies other than the UIC Program and DWQ. Enter the oversight agency for the remediation project. Provide the name and contact information for the project manager in that agency.

Remediation Activity Involving Injection Wells:

Descriptions of a few of the commonly employed subsurface environmental remediation technologies involving injection wells are given below.

Air Sparging - Air sparging involves the injection of air or oxygen through a contaminated aquifer. Injected air traverses horizontally and vertically in channels through the soil column, creating an underground stripper that removes volatile and semivolatile organic contaminants by volatilization. The injected air helps to flush the contaminants into the unsaturated zone. SVE usually is implemented in conjunction with air sparging to remove the generated vapor-phase contamination from the vadose zone. Oxygen added to the contaminated groundwater and vadose-zone soils also can enhance biodegradation of contaminants below and above the water table.

Bioventing / Biosparging - Bioventing is a common form of in situ bioremediation. Oxygen is delivered to contaminated unsaturated soils by forced air movement (either extraction or injection of air) to increase oxygen concentrations and stimulate biodegradation.

In-Situ Bioremediation - Bioremediation uses microorganisms to degrade organic contaminants in soil, sludge, and solids either excavated or in situ. The microorganisms break down contaminants by using them as a food source or co-metabolizing them with a food source. Aerobic processes require an oxygen source, and the end products typically are carbon dioxide and water. Anaerobic processes are conducted in the absence of oxygen, and the end products can include methane, hydrogen gas, sulfide, elemental sulfur, and dinitrogen gas. In situ techniques stimulate and create a favorable environment for microorganisms to grow and use contaminants as a food and energy source. Generally, this means providing some combination of oxygen, nutrients, and moisture, and controlling the temperature and pH. Sometimes, microorganisms that have been adapted for degradation of specific contaminants are applied to enhance the process.

In-Situ Chemical Oxidation - Chemical oxidation typically involves reduction/oxidation (redox) reactions that chemically convert hazardous contaminants to nonhazardous or less toxic compounds that are more stable, less mobile, or inert. Redox reactions involve the transfer of electrons from one compound to another. Specifically, one reactant is oxidized (loses electrons) and one is reduced (gains electrons). The oxidizing agents most commonly used for treatment of hazardous contaminants in soil are ozone, hydrogen peroxide, hypochlorites, chlorine, chlorine dioxide, potassium permanganate, and Fentons reagent (hydrogen peroxide and iron). Cyanide oxidation and dechlorination are examples of chemical treatment. This method may be applied in situ or ex situ, to soils, sludges, sediments, and other solids, and may also be applied for the in situ treatment of groundwater.

In-Situ Flushing - For in situ soil flushing, large volumes of water, at times supplemented with surfactants, co-solvents, or treatment compounds, are applied to the soil or injected into the groundwater to raise the water table into the contaminated soil zone. Injected water and treatment agents are isolated within the underlying aquifer and recovered together with flushed contaminants.

Co-solvent flushing involves injecting a solvent mixture (e.g., water plus a miscible organic solvent such as alcohol) into either vadose zone, saturated zone, or both to extract organic contaminants. Co-solvent flushing can be applied to soils to dissolve either the source of contamination or the contaminant plume emanating from it. The co-solvent mixture is normally injected upgradient of the contaminated area, and the solvent with dissolved contaminants is extracted downgradient and treated above ground.

Recovered ground water and flushing fluids with the desorbed contaminants may need treatment to meet appropriate discharge standards prior to recycle or release to local, publicly owned wastewater treatment works or receiving streams. To the maximum extent practical, recovered fluids should be reused in the flushing process. The separation of surfactants from recovered flushing fluid, for reuse in the process, is a major factor in the cost of soil flushing. Treatment of the recovered fluids results in process sludges and residual solids, such as spent carbon and spent ion exchange resin, which must be appropriately treated before disposal. Air emissions of volatile contaminants from recovered flushing fluids should be collected and treated, as appropriate, to meet applicable regulatory standards. Residual flushing additives in the soil may be a concern and should be evaluated on a site-specific basis.

In-Situ Thermally Enhanced Recovery - Thermally enhanced recovery is an in situ treatment process that uses heat to increase the volatilization rate of organics and facilitate extraction. Volatilized contaminants are typically removed from the vadose zone using soil vapor extraction. Specific types of thermally enhanced recovery techniques include Contained Recovery of Oily Waste (CROWTM), radio frequency heating, conductive heating, steam heating, in situ steam stripping, hot air injection, dynamic underground stripping, in situ thermal desorption, and electrical resistance heating. Thermally enhanced recovery is usually applied to contaminated soil but may also be applied to groundwater.

In Well Air Stripping - Air is injected into a double screened well, lifting the water in the well and forcing it out the upper screen. Simultaneously, additional water is drawn in the lower screen. Once in the well, some of the VOCs in the contaminated ground water are transferred from the dissolved phase to the vapor phase by air bubbles. The contaminated air rises in the well to the water surface where vapors are drawn off and treated by a soil vapor extraction system.

Injection Well Operating Status

Self explanatory.

Injection Well Construction and Subsurface Details

Submit a plan view (not to exceed 11" x 17") of the facility property showing the location of the injection well(s). Also, submit a vertical cross-section (not to exceed 11" x 17") showing the details of the injection well(s). Include such details as unique injection well ID number; construction type; if pre-fab construction, indicate type; construction dimensions; depth of well if vertical construction; screened interval if vertical construction; and depth of engineered bottom if horizontal construction.

Injectate Characterization

In the space provided or on an attached sheet, provide a narrative describing what is being injected to achieve subsurface environmental remediation.

Hydrogeologic Characterization

In the space provided or on an attached sheet, provide information regarding the hydrogeology in the vicinity of the proposed remediation project such that DWQ can assess the potential for impact to groundwater and surface water resources. Include information such as depth to groundwater, distance to nearest surface water body, description of subsurface material, proximity to utility trenches, proximity to drinking water wells (public and private), etc.

Comments

Include additional contact information and/or any other relevant information not already addressed in the other sections of this form.

Signature of Owner / Operator

In keeping with the requirement of Section R317-7-6.4(C) of the Utah Administrative Rules for the Underground Injection Control Program that the owner or operator must submit inventory information, the UIC Inventory Information Form **must** be signed by the **owner or operator (or his/her legal representative)** of the injection well(s) for which the inventory information is being submitted.