**NC Department of Environmental Quality – Division of Water Resources (DWR)**

### NOTIFICATION OF INTENT (NOI) TO CONSTRUCT OR OPERATE INJECTION WELLS

*The following are “permitted by rule” and do not require an individual permit when constructed in accordance with the rules of* [*15A NCAC 02C .0200*](http://portal.ncdenr.org/c/document_library/get_file?uuid=6bc67e83-e925-4975-bb8a-d3084da0de4f&groupId=38364) (NOTE: This form must be received at least 14 DAYS prior to injection)

### AQUIFER TEST WELLS ([15A NCAC 02C .0220](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environment%20and%20natural%20resources/chapter%2002%20-%20environmental%20management/subchapter%20c/15a%20ncac%2002c%20.0220.pdf))

These wells are used to inject uncontaminated fluid into an aquifer to determine aquifer hydraulic characteristics.

### *IN SITU* REMEDIATION ([15A NCAC 02C .0225](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environment%20and%20natural%20resources/chapter%2002%20-%20environmental%20management/subchapter%20c/15a%20ncac%2002c%20.0225.pdf)) or TRACER WELLS ([15A NCAC 02C .0229](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environment%20and%20natural%20resources/chapter%2002%20-%20environmental%20management/subchapter%20c/15a%20ncac%2002c%20.0229.pdf)):

1) Passive Injection Systems **-** In-well delivery systems to diffuse injectants into the subsurface. Examples include ORC socks, iSOC systems, and other gas infusion methods (**Note**: Injection Event Records (IER) do not need to be submitted for replacement of each sock used in ORC systems).

2) Small-Scale Injection Operations – Injection wells located within a land surface area not to exceed 10,000 square feet for the purpose of soil or groundwater remediation or tracer tests. An individual permit shall be required for test or treatment areas exceeding 10,000 square feet.

3) Pilot Tests - Preliminary studies conducted for the purpose of evaluating the technical feasibility of a remediation strategy in order to develop a full scale remediation plan for future implementation, and where the surface area of the injection zone wells is located within an area that does not exceed five percent of the land surface above the known extent of groundwater contamination. An individual permit shall be required to conduct more than one pilot test on any separate groundwater contaminant plume.

4) Air Injection Wells - Used to inject ambient air to enhance in-situ treatment of soil or groundwater.

5) In-Situ Thermal Wells (IST) – Used to ‘heat’ contaminated groundwater to enhance remediation

***Print Clearly or Type Information. Illegible Submittals Will Be Returned as Incomplete.***

**DATE**: , **20**\_\_\_\_ **PERMIT NO.** (to be filled in by DWR)

**NOTE**- If this NOI is being submitted as notification of a modification of a previously issued NOI for this site (e.g., different injection wells, plume, additives, etc.) and still meets the deemed permitted by rule criteria, provide the previously assigned permit tracking number and any needed relevant information to assess and approve injection:

**Permit No.** **WI** **Issued Date:**

**A. WELL TYPE TO BE CONSTRUCTED OR OPERATED**

(1) Air Injection Well……………………………..….Complete sections B through F, J, M

(2) Aquifer Test Well……………………….………..Complete sections B through F, J, M

(3) Passive Injection System………………….……...Complete sections B through F, H-M

(4) Small-Scale Injection Operation………………….Complete sections B through M

(5) Pilot Test………………………………………….Complete sections B through M

(6) In-Situ Thermal (IST) Well………………………Complete all sections except K

B. STATUS OF WELL OWNER: Choose an item.

C. WELL OWNER(S) – State name of Business/Agency, and Name and Title of person delegated authority to sign on behalf of the business or agency:

Name(s):

Mailing Address:

City: State: \_\_\_\_ Zip Code: County:

Day Tele No.: Cell No.:

EMAIL Address: Fax No.:

**D. PROPERTY OWNER(S)** (if different than well owner/applicant)

Name and Title:

Company Name

Mailing Address:

City: State: \_\_\_\_ Zip Code: County:

Day Tele No.: Cell No.:

EMAIL Address: Fax No.:

**E. PROJECT CONTACT (**Typically Environmental Consulting/Engineering Firm)

Name and Title:

Company Name

Mailing Address:

City: State: \_\_\_\_ Zip Code: County:

Day Tele No.: Cell No.:

EMAIL Address: Fax No.:

**F. PHYSICAL LOCATION OF WELL SITE**

1. Facility Name & Address:

City: County: Zip Code:

1. Geographic Coordinates: Latitude\*\*: o ′ ″ or o.

 Longitude\*\*: o ′ ″ or o.

 Reference Datum: Accuracy:

 Method of Collection:

 \*\*FOR AIR INJECTION AND AQUIFER TEST WELLS ONLY: A FACILITY SITE MAP WITH PROPERTY BOUNDARIES MAY BE SUBMITTED IN LIEU OF GEOGRAPHIC COORDINATES.

**G. TREATMENT AREA**

 Land surface area of contaminant plume: square feet

 Land surface area of inj. well network: square feet (< 10,000 ft2 for small-scale injections)

 Percent of contaminant plume area to be treated: (must be < 5% of plume for pilot test injections)

**H. INJECTION ZONE MAPS –** Attach the following to the notification.

(1) Contaminant plume map(s) with isoconcentration lines that show the horizontal extent of the contaminant plume in soil and groundwater, existing and proposed monitoring wells, and existing and proposed injection wells; and

(2) Cross-section(s) to the known or projected depth of contamination that show the horizontal and vertical extent of the contaminant plume in soil and groundwater, changes in lithology, existing and proposed monitoring wells, and existing and proposed injection wells.

(3) Potentiometric surface map(s) indicating the rate and direction of groundwater movement, plus existing and proposed wells.

**I. DESCRIPTION OF PROPOSED INJECTION ACTIVITIES AT THE SITE –** Provide a brief narrative regarding the cause of the contamination, and purpose, scope, goals of the proposed injection activity:

**J. WELL CONSTRUCTION DATA**

(1) No. of injection wells: Proposed Existing (provide NC Well

 Construction Record (GW-1) for each well)

(2) Appx. injection depths (BLS):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(3) For Proposed wells or Existing wells not having GW-1s, provide well construction details for each injection well in a diagram or table format. A single diagram or line in a table can be used for multiple wells with the same construction details. Well construction details shall include the following (indicate if construction is proposed or as-built):

 (a) Well type as permanent, Geoprobe/DPT, or subsurface distribution infiltration gallery

 (b) Depth below land surface of casing, each grout type and depth, screen, and sand pack

 (c) Well contractor name and certification number

**K. INJECTION SUMMARY**

***NOTE****: Only injectants approved by the epidemiology section of the NC Division of Public Health, Department of Health and Human Services can be injected. Approved injectants can be found online at* <http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/ground-water-protection/ground-water-approved-injectants>. *All other substances must be reviewed by the DHHS prior to use. Contact the UIC Program for more info if you wish to get approval for a different additive. However, please note it may take 3 months or longer.*

Injectant: Total Amt. to be injected (gal)/event:

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Injectant: Total Amt. to be injected (gal)/event:

Amt. Water to be injected (gal/event):

Total Amt. to be injected (gal/event):

**No. of separate injection events: Est. Total Amt. to be injected (gal):**

Source of Water (if applicable):

**L. MONITORING PLAN –** Describe below or in separate attachment a monitoring plan to be used to determine if violations of groundwater quality standards specified in [Subchapter 02L](http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environment%20and%20natural%20resources/chapter%2002%20-%20environmental%20management/subchapter%20l/subchapter%20l%20rules.pdf) result from the injection activity.

**M. SIGNATURE OF APPLICANT AND PROPERTY OWNER**

Well Owner/Applicant**:** *“I hereby certify, under penalty of law, that I am familiar with the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining said information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties, including the possibility of fines and imprisonment, for submitting false information. I agree to construct, operate, maintain, repair, and if applicable, abandon the injection well and all related appurtenances in accordance with the* [*15A NCAC 02C 0200*](http://portal.ncdenr.org/c/document_library/get_file?uuid=6bc67e83-e925-4975-bb8a-d3084da0de4f&groupId=38364) *Rules.”*

**Signature of Applicant Print or Type Full Name and Title**

Property Owner **(**if the property is not owned by the Well Owner/Applicant**):**

“*As owner of the property on which the injection well(s) are to be constructed and operated, I hereby consent to allow the applicant to construct each injection well as outlined in this application and agree that it shall be the responsibility of the applicant to ensure that the injection well(s) conform to the Well Construction Standards (*[*15A NCAC 02C .0200*](http://portal.ncdenr.org/c/document_library/get_file?uuid=6bc67e83-e925-4975-bb8a-d3084da0de4f&groupId=38364)*).”*

### “Owner” means any person who holds the fee or other property rights in the well being constructed. A well is real property and its construction on land shall be deemed to vest ownership in the land owner, in the absence of contrary agreement in writing.

**Signature\* of Property Owner (if different from applicant) Print or Type Full Name and Title**

*\*An access agreement between the applicant and property owner may be submitted in lieu of a signature on this form.*

**Please send 1 (one) hard color copy of this NOI along with a copy on an attached CD or Flash Drive at least two (2) weeks prior to injection to:**

**DWR – UIC Program**

**1636 Mail Service Center**

**Raleigh, NC 27699-1636**

**Telephone: (919) 707-9000**