

Recd. Records January 10, 2011

Department of Energy

West Valley Demonstration Project 10282 Rock Springs Road West Valley, NY 14171-9799

January 10, 2011

DW:2011:0010

Mr. John G. McKibbin President & Project Manager West Valley Environmental Services LLC 10282 Rock Springs Road West Valley, NY 14171-9799

ACTION: DW:11397 Due 01/13/2011

ATTENTION: C. A. Biedermann, Regulatory Affairs Manager, AC-EA

SUBJECT: U. S. Environmental Protection Agency (EPA) Authorization to Inject, West Valley Demonstration Project (WVDP) Underground Injection Control (UIC) Program Tracer Well Information

- REFERENCES: 1) Letter (103930), N. Foley Kraft to B. C. Bower, "Underground Injection Control (UIC) Program Regulation, West Valley Demonstration Project (Reference UICID: 11NY00906001), 10282 Rock Springs Road, West Valley, NY 14171, Cattaraugus County, Authorization to Inject," dated November 18, 2010, Received November 29, 2010
 - 2) Letter (JMD:103794 455.3), B. C. Bower to R. Ferri, "West Valley Demonstration Project (WVDP) Underground Injection Control Program Tracer Well Information," dated November 8, 2010

Dear Mr. McKibbin:

Enclosed is the Reference 1 letter in which EPA has authorized the injection of sodium bromide tracer solution into a suite of wells in the vicinity of the North Plateau permeable treatment wall (as requested by the Reference 2 letter). Please review the letter and ensure that all conditions, rules, and regulations pertaining to the UIC Program are followed.

Additionally, via the Reference 1 letter, EPA requests the submittal of an inventory of injection wells form (EPA Form 7520-16), should the WVDP operate other facilities using underground injection wells. Please review the form and provide an updated WVDP inventory to the U.S. Department of Energy, West Valley Demonstration Project no later than January 13, 2011.

The contents of this correspondence are not intended to impact or modify scope and/or cost. If you have any questions regarding this matter, please contact Jennifer Dundas of my staff on Extension 4287.

Sincerely,

Mona Makong

Moira N. Maloney, Acting Deputy Director

West Valley Demonstration Project

Enclosure: See Page 2

See Page 2

JMD:104284 - 455.3



Enclosure: Reference 1 Letter

cc: M. A. Gilbertson, DOE-HQ, EM-50, FORS, w/enc.

M. S. Bellis, DOE-WVDP, WV-DOE, w/enc.

M. P. Krentz, DOE-WVDP, AC-DOE, w/enc.

M. N. Maloney, DOE-WVDP, AC-DOE, w/enc.

S. J. Szalinski, DOE-WVDP, AC-DOE, w/enc.

Z. Z. Zadins, DOE-WVDP, AC-DOE, w/enc.

D. P. Klenk, WVES, AC-EA, w/enc.

JMD:104284 - 455.3

File, BCB, CRR DWS, MNM+, JMD, NAGENCY MOK

DOE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2 290 BROADWAY NEW YORK, NY 10007-1866

NOV 1 8 2010

Bryan C. Bower, Director West Valley Demonstration Project 10282 Rock Springs Road West Valley, NY 14171

Re: Underground Injection Control (UIC) Program Regulation

West Valley Demonstration Project (Reference UICID: 11NY00906001)

10282 Rock Springs Road West Valley, NY 14171 Cattaraugus County Authorization to Inject

Dear Mr. Bower:

This letter serves to inform you that the U.S. Environmental Protection Agency is in receipt of inventory information addressing wells authorized by rule located at the above-referenced facility in accordance with 40 Code of Federal Regulations (CFR) §144.26. The operation of the following Underground Injection Control wells are authorized by rule, pursuant to 40 CFR §144.24:

The suite of wells in the permiable treatment wall (PTW) are authorized to inject sodium bromide tracer solution as part of remediation activities for strontium-90 remediation.

Should any conditions change in the operation of any of the wells listed above (such as injectate composition, closure of the well, injection of cooling water greater than 150 degrees Fahrenheit, construction of additional wells outside of the PTW, etc.) you are required to notify this office within five (5) days. Any accidental spills into a well should be reported within twenty-four (24) hours after the event. Change in operation information should be addressed to:

Nicole Foley Kraft, Chief
Ground Water Compliance Section
United States Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866
Re: 11NY00906001

Attn: Robert Ferri

(455.3) 103930 Should you own or operate <u>other</u> facilities using underground injection wells, please use the enclosed inventory form (EPA Form 7520-16) and instructions, copy for multiple facilities, and submit them to the address listed above. These documents can also be found on the internet at:

http://www.epa.gov/safewater/uic/pdfs/7520-16.pdf

http://www.epa.gov/region02/water/compliance/supplemental_instructions_inventory.pdf http://www.epa.gov/region02/water/compliance/wellclasstypetable_inventoryc_form

Failure to respond to this letter truthfully and accurately within the time provided may subject you to sanctions authorized by federal law. Please also note that all information submitted by you may be used in an administrative, civil judicial, or criminal action. In addition, making a knowing submission of materially false information to the U.S. Government may be a criminal offense.

Should you have any questions, please contact Robert Ferri of my staff at (212) 637-4227 or ferri.robert@epa.gov.

Sincerely,

Nicole Foley Kraft, Chief

Mused of

Ground Water Compliance Section

Enclosure

cc:

Gerry Palumbo NYSDEC, Region 9 270 Michigan Avenue Buffalo, NY 14203-2999

Eric W. Wohlers, P.E. Env. Health Director, Cattaraugus County Health Dept 1 Leo Moss Drive Olean, NY 14760-1154

USEPA REGION II SUPPLEMENTAL INSTRUCTIONS FOR COMPLETING INVENTORY OF INJECTION WELLS

EPA FORM 7520-16 (Rev. 8-01)

SECTION 2. FACILITY ID NUMBER: Leave blank. EPA will assign an ID number.

SECTION 3. TRANSACTION TYPE: Check either First Time Entry or Entry Change. If this is the first time you have submitted this form for your injection wells(s), check First Time Entry and fill in all the appropriate information. If you are modifying information you sent in before, check Entry Change, fill in the Facility Name and Location and fill in the information that has changed. (Note: If the facility name has changed, in the blank space in the upper left hand corner write the prior facility name under which the form was first submitted, and the date it was submitted.)

SECTION 4. FACILITY NAME AND LOCATION: If you know the latitude and longitude of your facility, fill in line 4C and 4D. You do <u>not</u> need to fill in 4E, Township/Range. If you know the Numeric County Code, fill in line 4I, otherwise just write in the name of the County.

SECTION 5. LEGAL CONTACT: Under 5A, if the Legal Contact you are identifying owns the land, check Owner. If the Legal Contact owns and/or operates the business but someone else owns the land, check Operator. Under 5I, "Private" means privately owned. "Public" means owned by local/municipal government. "State" and Federal" mean owned by state/federal government.

SECTION 6. WELL INFORMATION: Under 6A CLASS AND TYPE, use the attached table "USEPA Region II List of Class V Injection Well Types" to determine the CLASS V "TYPE". Enter the appropriate Type Code in 6A (the Type Code does <u>not</u> have to fit within the two boxes on the Inventory Form). Select the Class V well type(s) that most accurately fit the well(s) at your facility. When reviewing the attached table and making your determination, be sure to consider all of the fluids entering the well or having the potential to enter the well. For example, Storm Water Drainage Wells located in industrial areas which are susceptible to spills, leaks or other chemical discharges are inventoried as Industrial Drainage Wells. If Cesspools and Septic Systems are receiving fluids other than sanitary waste (human excreta), that should be noted in the Additional Information below.

IMPORTANT: ADDITIONAL INFORMATION

In order to ensure that the Class V Well(s) at your facility are accurately inventoried you must also submit on a separate piece of paper: (1) a brief description characterizing your facility and the types of activities conducted; (2) a brief description of what you use each of your injection well(s) for; (3) a brief description of the types of fluids that enter, or have the potential to enter, each of your injection well(s). (Note: wells with the same information may be grouped).

If you require assistance, please contact EPA Region II at (212) 637-3093.

USEPA REGION II LIST OF CLASS V INJECTION WELL TYPES

TYPE CODE	NAME	DESCRIPTION								
INDUSTRIAL/COMMERCIAL/UTILITY DISPOSAL WELLS										
5X28	MOTOR VEHICLE WASTE DISPOSAL WELLS	- wells that receive or have received fluids from vehicular repair or maintenance activities, such as an auto body repair shop, automotive repair shop, new and used car dealership, specialty repair shop (e.g., transmission and muffler repair shop), or any facility that does any vehicular repair work.								
5W.20	INDUSTRIAL PROCESS WATER & WASTE DISPOSAL WELLS	- used to dispose of a wide variety of wastes and wastewater from industrial, commercial, or utility processes. Industries include refineries, chemical plants, smelters, pharmaceutical plants, laundromats and dry cleaners, tanneries, carwashes, laboratories, funeral homes, etc. Specify industry and waste stream.								
5A19	COOLING WATER RETURN FLOW WELLS	- used to inject water which was used in a cooling process.								
	DRAINAGE WELLS									
5D4	INDUSTRIAL DRAINAGE WELL	- wells located in industrial areas which primarily receive storm water runoff but are susceptible to spills, leaks, or other chemical discharges.								
5D2	STORM WATER DRAINAGE WELLS	- receive storm water runoff from paved areas, including parking lots, streets, residential subdivisions, building roofs, highways, etc.								
5F1	AGRICULTURAL DRAINAGE WELLS	- receive irrigation tailwaters, other field drainage, animal yard, feedlot, or dairy runoff, etc.								
5D3	IMPROVED SINKHOLES	- receive storm water runoff from developments located in karst topographic areas.								
5G30	SPECIAL DRAINAGE WELLS	- used for disposing water from sources other than direct precipitation—such as landslide control drainage wells, potable water tank overflow drainage wells, swimming pool drainage wells, and lake level control drainage wells.								

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DOMESTIC WASTEWATER DISPOSAL WELLS											
5W9	UNTREATED SEWAGE WASTE DISPOSAL	- receive raw sewage wastes from pumping trucks or other vehicles which collect such wastes from single or multiple sources. (No treatment)									
5W10	LARGE CAPACITY CESSPOOLS	- large capacity cesspools including multiple dwelling, community or regional cesspools, or other devices that receive sanitary wastes, containing human excreta, which have an open bottom and sometimes perforated sides. Includes non-residential cesspools which receive solely sanitary waste and have the capacity to serve greater than or equal to 20 persons a day. DOES NOT apply to single family residential cesspools.									
5W11	SEPTIC SYSTEM (UNDIFFERENTIAT- ED DISPOSAL METHOD)	- used to inject the waste or effluent from a multiple dwelling, business establishment, community or regional business establishment septic tank to an undetermined final discharge point. Includes non-residential septic systems which receive solely sanitary waste and have the capacity to serve greater than or equal to 20 persons a day. DOES NOT apply to single family residential septic systems. (Primary Treatment)									
5W31	SEPTIC SYSTEMS (WELL DISPOSAL METHOD)	- used to inject the waste or effluent from a multiple dwelling, business establishment, community or regional business establishment septic tank to a well examples of wells include dry wells, seepage pits, cavitettes, etc. The largest surface dimension is less than or equal to the depth dimension. Includes non-residential septic systems which receive solely sanitary waste and have the capacity to serve greater than or equal to 20 persons a day. DOES NOT apply to single family residential septic systems. (Primary Treatment)									
5W32	SEPTIC SYSTEMS (DRAIN FIELD DISPOSAL METHOD)	- used to inject the waste or effluent from a multiple dwelling, business establishment, community or regional business establishment septic tank to a drainfieldexamples of drainfields include drain or tile lines, and trenches. Includes non-residential septic systems which receive solely sanitary waste and have the capacity to serve greater than or equal to 20 persons a day. DOES NOT apply to single family residential septic systems. (Primary Treatment)									
5W12	DOMESTIC WASTEWATER TREATMENT PLANT EFFLUENT DISPOSAL	- dispose of treated sewage or domestic effluent from small package plants up to large municipal treatment plants. Final discharge points may include drywells or leachfields. (Secondary or further treatment)									

	GEOTH	ERMAL REINJECTION WELLS							
5A5	ELECTRIC POWER REINJECTION WELLS	- reinject geothermal fluids used to generate electric power.							
5A6	DIRECT HEAT REINJECTION WELLS	- reinject geothermal fluids used to provide heat for large buildings or developments.							
5A7	HEAT/PUMP/AIR CONDITIONING RETURN FLOW WELLS	- reinject groundwater used to heat or cool a building in a heat pump system.							
5A8	GROUNDWATER AQUACULTURE RETURN FLOW WELLS	- reinject groundwater or geothermal fluids used to support aquaculture. Non-geothermal aquaculture disposal wells are also included in this category (e.g., Marine aquariums in Hawaii use relatively cool sea water).							
		RECHARGE WELLS							
5R21	AQUIFER RECHARGE WELLS	- used to recharge depleted aquifers and may inject fluids from a variety of sources such as lakes, streams, domestic wastewater treatment plants, other aquifers, etc.							
5B22	SALINE WATER INTRUSION BARRIER WELLS	- used to inject water into fresh water aquifers to prevent intrusion of salt water into fresh water aquifers.							
5S23	SUBSIDENCE CONTROL WELLS	- used to inject fluids into a non-oil or gas producing zone to reduce or eliminate subsidence associated with overdraft of fresh water and not used for the purpose of oil or natural gas production.							
	OIL FIELD PRO	DUCTION WASTE DISPOSAL WELLS							
5X17	AIR SCRUBBER WASTE DISPOSAL WELLS	- inject waste from air scrubbers used to remove sulfur from crude oil which is burned in steam generation for thermal oil recovery projects. (If injection is used directly for enhanced recovery and not just disposal it is a Class II well.)							
5X18	WATER SOFTENER REGENERATION BRINE DISPOSAL WELLS	- inject regeneration waste from water softeners which are used to improve the quality of brines used for enhanced recovery. (If injection is used directly for enhanced recovery and not just disposal it is a Class II well.)							

MINERAL AND FOSSIL FUEL RECOVERY RELATED WELLS										
5X13	MINING, SAND, OR OTHER BACKFILL WELLS	- used to inject a mixture of water and sand, mill tailings, and other solids into mined out portions of subsurface mines whether what is injected is radioactive waste or not. Also includes special wells used to control mine fires and acid mine drainage wells.								
5X14	SOLUTION MINING WELLS	- used for in situ solution mining in conventional mines, such as slopes leaching.								
5X15	IN-SITU FOSSIL FUEL RECOVERY WELLS	- used for in situ recovery of coal, lignite, oil shale, and tar sands.								
5X16	SPENT BRINE RETURN FLOW WELLS	- used to reinject spent brine into the same formation from which it was withdrawn after extraction of halogens or their salts.								
	M	ISCELLANEOUS WELLS								
5X25	EXPERIMENTAL TECHNOLOGY WELL	- wells used in experimental or unproven technologies such as pilot scale in situ solution mining wells in previously unmined areas.								
5X26	AQUIFER REMEDIATION RELATED WELLS	- wells used to prevent, control, or remediate aquifer pollution, including but not limited to Superfund sites.								
5X29	ABANDONED DRINKING WATER WELLS	- used for disposal of fluids. Specify well purpose and injected fluids.								
5X27	OTHER WELLS	- any other unspecified Class V wells. Specify well type/purpose and injected fluids.								

SOURCE: Prepared by EPA Region II. Based on 1987 Report to Congress on Class V Wells; and 40 C.F.R. §144.81.

May 11, 2004 (3:47pm)G:/User/Share/DECADIV\DECA-WCB\GWCS\Well Class Type Table for Inventory Forms.wpd

INVENTORY OF INJECTION WELLS									1. DATE PREPARED (Year, Month, Day) 2. FACILITY ID NUMBER										
\$	EP	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY OFFICE OF GROUND WATER AND DRINKING WATER																	
	(This information is collected under the authority of the Safe Drinking Water Act)																		
PAPERWORK REDUCTION ACT NOTICE The public reporting burden for this collection of information is estimated at about 0.5 hour per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, Director, Collection Strategies Division (2822), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, and to the Office of Management and Budget, Paperwork Reduction Project, Washington, DC 20503.																			
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B. STREET ADDRESS/ROUTE NUMBER						D. L	ONGITU	DE	DEG MIN SEC										
F. CIT	Y/TOV	/N				G. STAT	Ē	Н. Z	IP CODE			I. NUMERIC COUNTY CODE			,), INDIAN LANI (mark "x")	Ye	s No	
5. LE	GAL	CONTAC	TERSON !			J.E									17.7				
A. TYPE (mark "x") B. NAME (last, first, and middle initial) Owner Operator									C. PHONE (area code and number)										
D. OR	GANIZ	ATION			E. STREET	/P.O. BO	x		***************************************	- 4		I. OWNER	RSHIP (mark "x")						
F. CITY/TOWN G. STATE H. ZIP CO					CODE	DDE			PRIVATE PUBLIC STATE FEDERAL				s	SPECIFY OTHER					
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A. CLASS B. NUMBER OF WELLS C. TOTAL NUMBER D. WELL OPERATION S'			N STATL	JS	COMMENTS (Optional):							-						
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SECTION 1. DATE PREPARED: Enter date in order of year, month, and day.

SECTION 2. FACILITY ID NUMBER: In the first two spaces, insert the appropriate U.S. Postal Service State Code. In the third space, insert one of the following one letter alphabetic identifiers

- D DUNS Number,
- G GSA Number, or
- S State Facility Number.

In the remaining spaces, insert the appropriate nine digit DUNS, GSA, or State Facility Number. For example, A Federal facility (GSA - 123456789) located in Virginia would be entered as . VAG123456789

SECTION 3. TRANSACTION TYPE: Place an "x" in the applicable

box. See below for further instructions

Deletion. Fill in the Facility ID Number.

First Time Entry. Fill in all the appropriate information.

Entry Change. Fill in the Facility ID Number and the information that has changed.

Replacement.

SECTION 4. FACILITY NAME AND LOCATION:

- A. Name. Fill in the facility's official or legal name.
- B. Street Address. Self Explanatory
- C. Latitude. Enter the facility's latitude (all latitudes assume North Except for American Samoa).
- D. Longitude. Enter the facility's longitude (all longitudes assume West except Guam).
- E. Township/Range. Fill in the complete township and range.

 The first 3 spaces are numerical and the fourth is a letter

 (N,S,E,W) specifying a compass direction. A township is North or South of the baseline, and a range is East or West of the principal meridian (e.g., 132N, 343W).
- F. City/Town. Sch Explanatory
- G. State. Insert the U.S. Postal Service State abbreviation.
- H. Zip Code. Insert the five digit zip code plus any extension.

SECTION 4. FACILITY NAME & LOCATION (CONT'D.):

- Numeric County Code. Insert the numeric county code from the Federal Information Processing Standards Publication (F1PS Pub 6-1) June 15, 1970, U.S. Department of Commerce, National Bureau of Standards For Alaska, use the Census Division Code developed by the U.S. Census Bureau.
- J. Indian Land. Mark an "x" in the appropriate box (Yes or No) to indicate if the facility is located on Indian land

SECTION 5. LEGAL CONTACT:

- A. Type. Mark an "x" in the appropriate box to indicate the type of legal contact (Owner or Operator). For wells operated by lease, the operator is the legal contact.
- B. Name. Self Explanatory.
- C. Phone. Self Explanatory.
- D. Organization. If the legal contact is an individual, give the name of the business organization to expedite mail distribution.
- E. Street/P.O. Box. Self Explanatory.
- F. City/Town. Self Explanatory.
- G. State. Insert the U.S. Postal Service State abbreviation.
- H. Zip Code. Insert the five digit zip code plus any extension.
- Ownership. Place an "x" in the appropriate box to indicate ownership status.

SECTION 6. WELL INFORMATION:

- A. Class and Type. Fill in the Class and Type of injection wells located at the listed facility. Use the most pertinent code (specified below) to accurately describe each type of injection well. For example, 2R for a Class II Enhanced Recovery Well, or 3M for a Class III Solution Mining Well, etc.
- B. Number of Commercial and Non-Commercial Wells. Enter the total number of commercial and non-commercial wells for each Class/Type, as applicable.
- C. Total Number of Wells. Enter the total number of injection wells for each specified Class/Type.
- Well Operation Status. Enter the number of wells for each Class/Type under each operation status (see key on other side).

CLASS I Industrial, Municipal, and Radioactive Waste Disposal Wells used to inject waste below the lowermost Underground Source of Drinking Water (USDW).

TYPE 11 Non-Hazardous Industrial Disposal Well.

1M Non-Hazardous Municipal Disposal Well.

1H Hazardous Waste Disposal Well injecting below the

Iowermost USDW.

1R Radioactive Waste Disposal Well.

IX Other Class I Wells.

CLASS II Oil and Gas Production and Storage Related Injection Wells

TYPE 2A Annular Disposal Well.

2D Produced Fluid Disposal Well.

2H Hydrocarbon Storage Well.

2R Enhanced Recovery Well.

2X Other Class II Wells.

CLASS III Special Process Injection Wells.

TYPE 3G In Situ Gasification Well

3M Solution Mining Well.

CLASS III (CONT'D.)

TYPE 3S Sulfur Mining Well by Frasch Process.

3T Geothermal Well.

3U Uranium Mining Well.

3X Other Class III Wells.

CLASS IV Wells that inject hazardous waste into/above USDWs.

TYPE 4H Hazardous Facility Injection Well.

4R Remediation Well at RCRA or CERCLA site.

CLASS V Any Underground Injection Well not included in Classes I through IV

TYPE 5A Industrial Well.

5B Beneficial Use Well.

5C Fluid Return Well.

5D Sewage Treatment Effluent Weil.

5E Cesspools (non-domestic).

5F Septic Systems.

5G Experimental Technology Well.

5H Drainage Well.

51 Mine Backfill Well.

5J Waste Discharge Well.

bcc: C. A. Biedermann AC-EA

J. D. Chamberlain AC-COMM

D. P. Klenk AC-EA

J. G. McKibbin AC-PRES

L. M. Michalczak AC-ENG

Letter Log AC-ESHQ