B. SV	8. Storm Water Poll VPCP.	útion Control Plan (SWPC	P) Requirements - Choose one (1) of the following options for the submittal of the
	The proposed for Sections 6 and/o within 180 days a	r 7 of HAR, Chapter 11-5	charger. A SWPCP which meets the applicable requirements as specified in 5, Appendix B, <i>is attached to this form</i> . The SWPCP will be implemented
O	Sections 6 and/o	7 of HAR, Chapter 11-5	charger. A SWPCP which meets the applicable requirements as specified in 5, Appendix B, will be submitted within 120 days of the date of NGPC and within 180 days after submittal
0	Sections 6 and/or	r 7 of HAR, Chapter 11-5	tharger. A SWPCP which meets the applicable requirements as specified in 5, Appendix B, will be submitted within 120 days of the applicant claimed implemented within 180 days after submittal
O	requirements as	i <b>existing discharger wh</b> specified in Sections 6 an nplemented within 180 da	thout an NGPC. The existing or updated SWPCP which meets the applicable id/or 7 of HAR, Chapter 11-55, Appendix B <i>Is attached to this form.</i> The sys after submittal.
0	The facility is an requirements as a continue to be im	specified in Sections 6 an	th an NGPC. The existing or updated SWPCP which meets the applicable d/or 7 of HAR, Chapter 11-55, Appendix B <i>Is attached to this form</i> and will
B.9	. Multiple Outfall o	r Discharge Point Informa	ttlon
	Outfall Number or Discharge Point	Discharge sampled & analyzed? (Yes/No)	Reason Discharge Not Sampled
- Carrie			
	<u> </u>		
1			وروري مستعمد والمتاب و
			ck the parameters which are believed to be <b>ABSENT</b> in the discharge. For those n why the parameter is believed present.
	Floating Debris	Reason Believed Present	
	Scum or Foam	Reason Believed Present	
	Color	Reason Believed Present	
	Odor	Reason Believed Present	
		1	

**B.11. Water Quality Parameters** - Parameters must be tested and reported. Provide laboratory data sheets in addition to completing the following table. \*= Fresh waters and effluent samples.

Check this box if the Water Quality Parameters Table was not completed due to a lack of a representative storm event for sampling. Complete the columns for Test Method No., Method Detection Limit, and HAR; \$11-54. The next representative storm event will be monitored and the test results as required in this Item will be submitted to the Clean Water Branch within 30 calendar days of the sampling.

Parameter (report to the nearest # of units)	Test Result	Test Method No.	Method Detection Limit	HAR, §11-54
Total Nitrogen (10 ug/l)				
Ammonia Nitrogen (1 ug/i)				
Nitrate + Nitrité († ug/l)			, , , , , , , , , , , , , , , , , , ,	
Total Phosphorus (10 hg/l)				
Turbidity (0:1 NTÜ)		( )		<del>i jojak Co. i j. j i s<u>iji jeridoje i dove</u> .</del>
Total Suspended Solids (1 mg/l)	. ,	· 3"		
pH (0.1 standard units)		<u>, , , , , , , , , , , , , , , , , , , </u>		) 10 12 12 12 12 13 14 14 14 14 14 14 14 14 14 14 14 14 14
Dissolved Oxygen (0.1 mg/l)		<u> </u>		<u> </u>
Oxygen Saturation (1%)		, ,		The state of the s
Temperature (0.1 °C)				
Salinity (0.1 ppt)	,			
or Chloride (0.1 mg/l) *				
or Conductivity (1umhos/cm)*				
Oil and Grease (1mg/l)	<del></del>			

sampling. Complete the columns for Test Method No., Method Detection Limit, and HAR, §11-54-4(b)(3) for parameters believed to be present. For parameters not believed present, indicate "N/A" for "not applicable" in the Test Result ' column. If the Test Result column is left blank, the CWB will consider the parameter to be present and test results will be required. The next representative storm event will be monitored and the test results as required in this item will be submitted to the Clean Water Branch within 30 calendar days of the sampling. Total Recoverable Metal **Method Detection** HAR, **Test Result** Test Method No. Parameter (units) Limit §11-54-4(b)(3) Aluminum (ug/J) Antimony (ug/l) Arsenic (ug/l) Beryllium (ug/l) Cadmium (úg/l) Chromium (VI) (ug/l) Copper (ug/l) Lead (ug/l) Mercury (ug/l) Nickel (ug/l) Selenjum (ug/l) Silver (ug/l) Thalllum (ug/l) Tilbutylin (ug/l) Zinc (ua/l) HAR, Organonitrogen Compound **Method Detection Test Result** Test Method No. Parameter (units) §11-54-4(b)(3) Límit Benzidine (ug/l) 2,4-Dinitro-o-cresol (ug/l) Dinitrotoluenes (ug/l) 1,2-Diphenylhydrazine (ug/l) Nitrobenzene (ug/l) Nitrosamines (ug/l) N-Nitrosodibutylamine (ug/l) N-Nitrosodiethylamine (ug/l) N-Nitrosodimethylamine (ug/l) N-Nitrosodiphenylamine (ug/l) N-Nitrosopyrrolidine (ug/l)

B.12. Toxic Parameters - Parameters must be tested and reported. Provide laboratory data sheets in addition to completing the

Check this box if the Toxic Parameters Tables were not completed due to a lack of a representative storm event for

following tables.

Pesticide Parameter (units)	Test Result	Test Method No.	Method Detection Limit	HAR, §11-54-4(b)(3)
Aldrin (ug/l)		-		
nlordane (ug/l)				
Chlorpyrifos (ug/l)	·			
DDT (ug/l)				
Demeton (ug/l)				
Dieldrin (ug/l)				100000000000000000000000000000000000000
Endosulfan (ug/l)			··· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··	**************************************
Endrin (ug/l)			100 A 10	·
Guth(on (ug/l)	<u> </u>		***	<del></del>
Heptachlor (ug/l)		1		
Lindane (ug/l)		1050 000		
Malathion (ug/l)				<u> </u>
Methoxychlor (ug/l)			**************************************	<u></u>
Mirex (ug/l)	<u> </u>			adding and a state of the state
Parathion (ug/l)			** ***********************************	al a specific and the s
TDE- metabolite of DDT (ug/l)	<u> </u>			<u></u>
Toxaphene (ug/l)				<u> </u>
Phenol Parameter (units)	Test Result	Test Method No.	Method Detection Limit	HAR, §11-54-4(b)(3)
2-Chlorophenol (ug/l)				
i-Dichlorophenol (ug/l)		-		
2,4-Dimethylphenol (ug/l)				
Nitrophenols (ug/l)				
Pentachlorophenol (ug/l)				
Phenol (ug/l)				
2,3,5,6-Tetrachlorophenol (ug/l)				20M - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
2,4,6-Trichlorophenol (ug/l)				
Phthalate Parameter (units)	Test Result	Test Method No.	Method Detection Limit	HAR, §11-54-4(b)(3)
Bis (2-ethylhexyl) phthalate (ug/l)				
Dibutyl phthalate (esters) (ug/l)		444		
Diethyl phthalate (estërs) (ûg/l)				
Dimethyl phthalate (esters) (ug/l)				
Polynuclear Aromatic Hydrocarbon Parameter (units)	Test Result	Test Method No.	Method Detection Limit	HAR, §11-54-4(b)(3)
Acenaphthene (ug/l)				
Fluoranthene (ug/l)				
Naphthalene (ug/l)			<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	
Polynuclear aromatic hydrocarbons (ug/l)				

Volatile Organic Parameter (units)	Test Result	Test Method No.	Method Detection Limit	HAR, §11-54-4(b)(3)
¹ćrolein (ug/l)				
Acrylonitrile (ug/l)				
Benzehe (ug/l)				
Carbon tetrachloride (ug/l)				
Bis(2-chloroethyl)ether (ug/l)				•
Bis(chloroethers-methyl) (ug/l)				
Bis(chlorolsopropyl)ether (ug/l)				
Chloroform (ug/l)				
Dichlorobenzenes (ug/l)				
Dichlorobenzidine (ug/l)				
1,2-Dichloroethane (ug/l)				
1,1-Dichlorgethylene (ug/l)				
Dichloropropanes (ug/l)				
1,3-Dichloropropene (ug/l)				·
Éthylbenzene (ug/l)				
Hexachlorobenzene (ug/l)				
Hexachlorobutadiene (ug/l)				
Hexachlorocyclohexane, alpha (ug/l)			·	
Hexachlorocyclohexane, beta (ug/l)				
exachlorocyclohexane, technical (ug/l)				
Hexachlorocyclopentadiene (ug/l)				
Hexachloroethane (ug/l)		_		
Isophorone (ug/I)				
Pentachlorobenzene (ug/l)				
Pentachloroethanes (ug/l)				
1,2,4,5-Tefrachlorobenzene (ug/l)				
1,1,2,2-Tetrachloroethane (ug/l)				
Tetrachloroethanes (ug/l)				·
Tetrachloroethylene (ug/l)		,		
Foluene (ug/l)				
1,1,1-Trichloroethane (ug/l)				
1,1,2-Trichloroethane (ug/l)				
rrichloroethylene (ug/l)				
/jnyl chloride (ug/l)	, , , , , , , , , , , , , , , , , , , ,			,

Other Parameter (units)	Test Result	Test Method No.	Method Detection Limit	HAR, §11-54-4(b)(3)
forine (ug/l)				- Lister Lister L
Cyanide (ug/l)			12 12 12 12	Company of the Comment
Dioxin (ug/l)			*************	
Polychlorinated biphenyls (ug/l)				حديث والمائي والمائي

B.13. Additional Information

Führlichen in Submidbysinal ve Storm Water Phase II Final Rule: Conditional No Exposure Exclusion for Industrial
Activity
"No Exposure" Certification Form



# Stormwater Phase II Final Rule

# An Overview

## Stormwater Phase II Final Rule Fact Sheet Series

#### Overview

1.0 - Stormwater Phase II Final Rule: An Overview

#### Small MS4 Program

- 2.0 Small MS4 Stormwater Program Overview
- 2.1 Who's Covered? Designation and Waivers of Regulated Small MS4s
- 2.2 Urbanized Areas: Definition and Description

#### Minimum Control Measures

- 1.3 Public Education and **Dutreach**
- 2.4 Public Participation/ Involvement
- 2.5 Illicit Discharge Detection and Elimination
- 2.6 Construction Site Runoff Control
- 2.7 Post-Construction Runoff
- 2.8 Pollution Prevention/Good Housekeeping
- 2.9 Permitting and Reporting: The Process and Requirements
- 2.10 Federal and State-Operated MS4s: Program Implementation

#### Construction Program

- 3.0 Construction Program Overview
- 3.1 Construction Rainfall Eroslvity Waiver

#### Industrial "No Exposure"

4.0 - Conditional No Exposure Exclusion for Industrial Activity

# Why Is the Phase II Stormwater Program Necessary?

Since the passage of the Clean Water Act (CWA), the quality of our Nation's waters has improved dramatically. Despite this progress, however, degraded waterbodies still exist. According to the 2000 National Water Quality Inventory (Inventory), a biennial summary of State surveys of water quality, approximately 40 percent of surveyed U.S. waterbodies are still impaired by pollution and do not meet water quality standards. A leading source of this impairment is polluted runoff. In fact, according to the Inventory, 13 percent of impaired rivers, 18 percent of impaired lake acres and 32 percent of impaired estuaries are affected by urban/suburban stormwater runoff.

(4203)

Phase I of the U.S. Environmental Protection Agency's (EPA) stormwater program was promulgated in 1990 under the CWA. Phase I relies on National Pollutant Discharge Elimination System (NPDES) permit coverage to address stormwater runoff from: (1) "medium" and "large" municipal separate storm sewer systems (MS4s) generally serving populations of 100,000 or greater, (2) construction activity disturbing 5 acres of land or greater, and (3) ten categories of industrial activity.

The Stormwater Phase II Final Rule is the next step in EPA's effort to preserve, protect, and improve the Nation's water resources from polluted stormwater runoff. The Phase II program expands the Phase I program by requiring additional operators of MS4s in urbanized areas and operators of small construction sites, through the use of NPDES permits, to implement programs and practices to control polluted stormwater runoff. See Fact Sheets 2.0 and 3.0 for overviews of the Phase II programs for MS4s and construction activity.

Phase II is intended to further reduce adverse impacts to water quality and aquatic habitat by instituting the use of controls on the unregulated sources of stormwater discharges that have the greatest likelihood of causing continued environmental degradation. The environmental problems associated with discharges from MS4s in urbanized areas and discharges resulting from construction activity are outlined below.

#### MS4s in Urbanized Areas

Stormwater discharges from MS4s in urbanized areas are a concern because of the high concentration of pollutants found in these discharges. Concentrated development in urbanized areas substantially increases impervious surfaces, such as city streets, driveways, parking lots, and sidewalks, on which pollutants from concentrated human activities settle and remain until a storm event washes them into nearby storm drains. Common pollutants include pesticides, fertilizers, oils, salt, litter and other debris, and sediment. Another concern is the possible illicit connections of sanitary sewers, which can result in fecal coliform bacteria entering the storm sewer system. Stormwater runoff picks up and transports these and other harmful pollutants then discharges them - untreated - to waterways via storm sewer systems. When left uncontrolled, these discharges can result in fish kills, the destruction of spawning and wildlife habitats, a loss in aesthetic value, and contamination of drinking water supplies and recreational waterways that can threaten public health.

## Construction Activity

Uncontrolled runoff from construction sites is a water quality concern because of the devastating effects that sedimentation can have on local waterbodies, particularly small streams. Numerous studies have shown that the amount of sediment transported by stormwater runoff from construction sites with no controls is significantly greater than from sites with controls. In addition to sediment, construction activities yield pollutants such as pesticides, petroleum products, construction chemicals, solvents, asphalts, and acids that can contaminate stormwater runoff. During storms, construction sites may be the source of sediment-laden runoff, which can overwhelm a small stream channel's capacity, resulting in streambed scour, streambank erosion, and destruction of near-stream vegetative cover. Where left uncontrolled, sediment-laden runoff has been shown to result in the loss of in-stream habitats for fish and other aquatic species, an increased difficulty in filtering drinking water, the loss of drinking water reservoir storage capacity, and negative impacts on the navigational capacity of waterways.

# Are Municipally Operated Sources Exempted by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 Affected by the Final Rule?

Provisions within ISTEA temporarily delayed the deadline for Phase I industrial activities (with the exception of power plants, airports, and uncontrolled sanitary landfills) operated by municipalities with populations of less than 100,000 people to obtain an NPDES stormwater discharge permit. Congress delayed the permitting deadline for these facilities to allow small municipalities additional time to comply with NPDES requirements. The Phase II Final Rule ended this temporary exemption from permitting. Since March 10, 2003, all ISTEA-exempted municipally operated industrial activities were required to obtain permit coverage.

## How Was the Phase II Final Rule Developed?

PA developed the Phase II Final Rule during extensive consultations with a cross-section of interested stakeholders brought together on a subcommittee chartered under the Federal Advisory Committee Act, and with representatives of small entities participating in an advisory process mandated under the Small Business Regulatory Enforcement Fairness Act. In addition, EPA considered comments submitted by over 500 individuals and organizations during a 90-day public comment period on the proposed rule.

# Why Does Part of the Phase II Final Rule Use a Question and Answer Format?

The provisions pertaining to operators of small MS4s are written in a "readable regulation" form that uses the "plain language" method. Questions and answers are used to create more reader-friendly and understandable regulations. The plain language method uses "must" instead of "shall" to indicate a requirement and words like "should," "could," or "encourage" to indicate a recommendation or guidance.

# Who Is Covered by the Phase II Final Rule?

The final rule "automatically" covers two classes of stormwater dischargers on a nationwide basis:

- (1) Operators of small MS4s located in "urbanized areas" as delineated by the Bureau of the Census. A "small" MS4 is any MS4 not already covered by Phase I of the NPDES stormwater program. See Fact Sheets 2.1 and 2.2 for more information on small MS4 coverage.
- (2) Operators of small construction activities that disturb equal to or greater than 1 (one) and less than 5 (five) acres of land. See Fact Sheet 3.0 for more information on small construction activity coverage.

#### Waivers

Permitting authorities may waive "automatically designated" Phase II dischargers if the dischargers meet the necessary criteria. See Fact Sheets 2.1 (small MS4 waivers overview), 3.0 (construction waivers overview) and 3.1 (construction rainfall erosivity waiver) for details.

#### Phased-in Permit Coverage

Permitting authorities may phase-in permit coverage for small MS4s serving jurisdictions with a population under 10,000 on a schedule consistent with a State watershed permitting approach.

Additional Designations by the Permitting Authority

Small MS4s located outside of urbanized areas, construction activity disturbing less than 1 acre, and any other stormwater discharges can be designated for coverage if the NPDES permitting authority or EPA determines that stormwater controls are necessary. See Fact Sheet 2.1 for more information on the designation of small MS4s located outside of urbanized areas.

# What Does the Phase II Final Rule Require?

Operators of Phase II-designated small MS4s and small construction activity are required to apply for NPDES permit coverage, most likely under a general rather than individual permit, and to implement stormwater discharge management controls (known as "best management practices" (BMPs)). Specific requirements for each type of discharge are listed below.

#### Small MS4s

- A regulated small MS4 operator must develop, implement, and enforce a stormwater management program designed to reduce the discharge of pollutants from their MS4 to the "maximum extent practicable," to protect water quality, and to satisfy the appropriate water quality requirements of the CWA. The rule assumes the use of narrative, rather than numeric, effluent limitations requiring implementation of BMPs.
- The small MS4 stormwater management program must include the following six minimum control measures: public education and outreach; public participation/involvement; illicit discharge detection and elimination; construction site runoff control; post-construction runoff control; and pollution prevention/good housekeeping. See Fact Sheets 2.3 through 2.8 for more information on each measure, including BMPs and measurable goals.
- A regulated small MS4 operator must identify its selection of BMPs and measurable goals for each minimum measure in the permit application. The evaluation and assessment of those chosen BMPs and measurable goals must be included in periodic reports to the NPDES permitting authority. See Fact Sheet 2.9 for more information on permitting and reporting.

## **Small Construction Activity**

- The specific requirements for stormwater controls on small construction activity will be defined by the NPDES permitting authority on a State-by-State basis.
- Many NPDES permitting authorities have adapted their existing Phase I general permits for large construction activity to also include small construction activity. Where this has occurred, a

stormwater pollution prevention plan is required for small construction activity. See Fact Sheet 3.0 for more information on potential program requirements and appropriate BMPs for small construction activity.

# What Is the Phase II Program Approach?

The Phase II program, based on the use of federally enforceable NPDES permits:

- Encourages the use of general permits;
- Provides flexibility for regulated operators to determine the most appropriate stormwater controls;
- Allows for the recognition and inclusion of existing NPDES and non-NPDES stormwater programs in Phase II permits;
- Includes public education and participation efforts as primary elements of the small MS4 program;
- Attempts to facilitate and promote watershed planning and to implement the stormwater program on a watershed basis; and
- Works toward a unified and comprehensive NPDES stormwater program with Phase I of the program.

# How Does the Phase II Final Rule Address the Phase I Industrial "No Exposure" Provision?

In addition to establishing a deadline for ISTEA facilities and designating two new classes of dischargers, the Phase II Final Rule revises the "no exposure" provision originally included in the 1990 regulations for Phase I of the NPDES stormwater program. The provision was remanded to EPA for further rulemaking and, subsequently, included in its revised form in the Phase II rule.

Under the Phase II Final Rule, a conditional no exposure exclusion is available to operators of *all* categories of Phase I regulated industrial activity (except category (x) construction activity) who can certify that all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. To obtain the no exposure exclusion, written certification must be submitted to the NPDES permitting authority. The final rule includes a *No Exposure Certification* form for use only by operators of industrial activity in areas where EPA is the NPDES permitting authority. See Fact Sheet 4.0 for more information on the conditional no exposure exclusion for industrial activity.

# What Resources are Available for Phase II Communities?

PA is committed to providing tools to facilitate Eimplementation of the final Phase II stormwater program in an effective and cost-efficient manner. The stormwater Web site includes fact sheets, case studies, guidance documents, the National Menu of BMPs, and the Measurable Goals Guidance, as well as other compliance assistance information. This information can be accessed at EPA's stormwater Web site at www.epa.gov/npdes/stormwater.

## What Is the Schedule for the Phase II Rule?

- The Phase II Final Rule was published in the Federal Register on December 8, 1999 (64 FR 68722).
- The Conditional No Exposure Exclusion option is available in States where EPA is the permitting authority (see <a href="http://www.epa.gov/npdes/authorization">http://www.epa.gov/npdes/authorization</a>).
- The NPDES permitting authorities were required to issue general permits for Phase II-designated small MS4s and small construction activity by December 9, 2002.
- Operators of Phase II "automatically" designated regulated small MS4s and small construction activity were required to obtain permit coverage within 90 days of permit issuance.
- The NPDES permitting authority may phase-in coverage for small MS4s serving jurisdictions with a population under 10,000 on a schedule consistent with a State watershed permitting approach.
- Operators of regulated small MS4s must fully implement their stormwater management programs by the end of the first permit term, typically a 5-year period.

### For Additional Information

#### Contacts

U.S. EPA Office of Wastewater Management http://www.epa.gov/npdes/stormwater Phone: 202-564-9545

Your NPDES Permitting Authority. Most States and Territories are authorized to administer the NPDES Program, except the following, for which EPA is the permitting authority:

Guam Alaska District of Columbia Johnston Atoll Midway and Wake Islands Idaho Northern Mariana Islands

Massachusetts New Hampshire Puerto Rico New Mexico

Trust Territories

American Samoa

A list of names and telephone numbers for each EPA Region and State is located at http://www.epa.gov/ npdes/stormwater (click on "Contacts").

# Reference Documents

EPA's Stormwater Web Site http://www.epa.gov/npdes/stormwater

- Stormwater Phase II Final Rule Fact Sheet Series
- Stormwater Phase II Final Rule (64 FR 68722)
- National Menu of Best Management Practices for Stormwater Phase II
- Measurable Goals Guidance for Phase II Small MS4s
- · Stormwater Case Studies
- · And many others



# State of Hawaii, Department of Health, Clean Water Branch

# CWB-NPDES "No Exposure" Certification Form

"No Exposure" Certification for Conditional "No Exposure" Exclusion from National Pollutant Discharge Elimination System (NPDES) Storm Water Associated with Industrial Activity Permitting

A condition of "no exposure" exists at an industrial facility when all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. A storm resistant shelter is not required for the following industrial materials and activities:

- drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak. "Sealed" means banded or otherwise secured and without operational taps or valves;
- · adequately maintained vehicles used in material handling; and
- final products, other than products that would be mobilized in storm water discharges (e.g., rock salt).

A "No Exposure" Certification must be provided for each facility qualifying for the no exposure exclusion. In addition, the exclusion from NPDES permitting is available on a facility-wide basis only, not for individual outfalls. If any industrial activities or materials are or will be exposed to precipitation, the facility is not eligible for the Conditional "No Exposure" Exclusion.

By signing and submitting this "No Exposure" Certification form, the facility owner or operator is certifying that a condition of "no exposure" exists at its facility or site and is obligated to comply with the terms and conditions of 40 CFR 122.26(g).

Provide a response for all items. Indicate "n/a" if an item is not applicable to your facility. Contact the Clean Water Branch at (808) 586-4309 if you have any questions.

	Owner Information
	Legal Name:
	Mailing Address:
	City, State and Zip Code+4:
	Street Address:
	City, State and Zip Code+4:
	Contact Person & Title:
	Phone No.: ( ) Fax No.: ( )
	Owner Type (see Guidelines for CWB-NOI Form B - Note 2)
	City County State Federal Private Other
	If "Other" is checked, specify the type below:
	ii outer is encoused, opening the type below.

3.	Operator Information				
	Legal Name:				
	Mailing Address:				
	City, State and Zip Code+4:				
	Street Address:				
	City, State and Zip Code+4:				
	Contact Person & Title:				
	Phone No.: ( ) Fax No.: ( )				
4.	Facility Information				
	Facility Name:				
	Mailing Address:				
	City, State and Zip Code+4:				
	Street Address:				
	City, State and Zip Code+4:				
	Contact Person & Title:				
	Phone No.: ( ) Fax No.: ( )				
	Island:				
	Ťax Map Key No(s)				
	Zone Section Riat Parcel(s)				
5.	Receiving State Water(s) Information (see Guidelines for CWB-NOI Form B - Note 3)				
<b>.</b>	a. Receiving State Water Name:				
	Discharge Point Coordinates into the Receiving State Water:				
	Latitude: "N Longitude: "W				
	Classification: (check the appropriate space(s))				
	Marine: Class AA Class A and Embayment				

	b. Are there additional discharge points into receiving State waters?
	No Yes If yes, provide the information requested in Item 5.a. on a separate sheet.
	c. Does the discharge initially enter a separate storm water drainage system?
	No Yes If yes, provide the following information. Attach a separate sheet with the requested information if there is more than one (1) discharge point into the separate storm water drainage system.
	i. Drainage System Owner's name:
	ii. Discharge Point Coordinates into the Drainage System:
	Latitude: N Longitude: "W
	<ol> <li>A copy of the permit, license, or equivalent written approval granted by the owner(s) of the drainage system(s) allowing the subject discharge to enter their drainage system(s) is attached.</li> </ol>
	Yes No , an explanation is attached.
6.	NPDES Permit Coverage
	a. Was the facility or site previously covered under an NPDES storm water permit?
	Yes No If yes, provide the assigned Permit/File No.:
	b. Is the facility or site currently covered under an NPDES storm water permit?
	Yes No If yes, provide the assigned Permit/File No.:
7.	North American Industrial Classification System (NAICS) United States Structure Codes (See <a href="http://www.census.gov/epcd/www/naicstab.htm#download">http://www.census.gov/epcd/www/naicstab.htm#download</a> for 1997 NAICS and 1987 SIC Correspondence Tables to determine the NAICS code(s) and description(s) for your facility. See also <a href="http://www.epa.gov/sectors/background.html#NAICS">http://www.epa.gov/sectors/background.html#NAICS</a> and <a href="http://www.census.gov/epcd/www/naics.html">http://www.census.gov/epcd/www/naics.html</a> .)
	NAICS Codes . Description
8.	Total size of the facility or site associated with industrial activity: acres

	e you paved or roofed over a formerly exposed and pervious area in order to obsure exclusion?	ualify fo	r the n
Yes	No If yes, please indicate approximately how much area or roofed over. (Completing this question does not disquestion to exposure exclusion. However, your permitting authorise information in considering whether storm water dispute your site are likely to have an adverse impact on water which case you could be required to obtain permit contribution.	ualify you hority ma ischarge er quality	u for they use s from , in
E	Less than one acre One to five acres More than five	acres	
Ехр	osure Checklist		
futu of ti	any of the following materials or activities exposed to precipitation now or in the re? (Please check either "Yes" or "No" in the appropriate box.) If you answerse questions (a) through (k), you are not eligible for the Conditional "Nusion.	er "Yes"	' to a
	Description of Materials or Activities	Yes	No
a	Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to storm water		
	Materials or residuals on the ground or in storm water inlets from spills/leaks		
Ó	Materials or products from past industrial activity		
d	Material handling equipment (except adequately maintained vehicles)		
e i	Materials or products during loading/unloading or transporting activities		
	Materials or products stored outdoors (except final products intended for outside use [e.g., new cars ] where exposure to storm water does not result in the discharge of pollutants)		
9	Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers		
	Materials or products handled/stored on roads or railways owned or maintained by the discharger		
	Waste material (except waste in covered,non-leaking containers [e.g., dumpsters])		
	Application or disposal of process wastewater (unless otherwise permitted)		
5 x 15	Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit)and evident in the storm water outflow		31
Add	itional Information		

35 TK

#### Certification

Alteration of this item will result in the invalidation of this CWB-NPDES Exclusion Form submittal. The person certifying this CWB-NPDES Exclusion Form must meet one of the following descriptions and be employed by the owner listed in Item 1. I certify that for a municipal agency, I am a principal executive officer or ranking elected official. I certify that for a state agency, I am a principal executive officer or ranking elected official. I certify that for a non-federal public agency, I am a principal executive officer or ranking elected official. I certify that for a federal agency, I am the chief executive officer of the agency, or I am the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency. I certify that I am a general partner for a partnership. I certify that I am the proprietor for a sole proprietorship. I certify that for a corporation, I am the President, Vice President, Secretary, or Treasurer of the corporation and in charge of a principal business function, or I perform similar policy or decision-making functions for the corporation. I certify that for a corporation, I am the Manager of one or more manufacturing, production, or operating facilities and am authorized to make management decisions which govern the operation of the regulated facility or facilities including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations. I can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements and authority to sign documents has been assigned or delegated to me in accordance with corporate procedures. I certify that for a trust, I am a trustee. I certify that for a limited liability company (LLC), I am the Manager or a Member authorized to make management decisions for the LLC and am in charge of a principal business function, or I perform similar policy or decision-making functions for the LLC. Certification Statement continued on next page.

# 12. Certification (continued)

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of "no exposure" and obtaining an exclusion from NPDES storm water permitting.

I certify that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility or site identified in this document (except as allowed under 40 CFR 122.26(g)(2)).

I understand that I am obligated to submit a "no exposure" certification form to the NPDES permitting authority and, if requested, to the operator of the local municipal separate storm sewer system (MS4) into which this facility discharges (where applicable). I understand that I must allow the NPDES permitting authority, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of "no exposure" and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under an NPDES permit prior to any point source discharge of storm water from the facility.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:	Date:
Printed Name & Title:	
Company/Organization Name:	
Phone No.: ( )	Fax No.: ( )

. .

App. H, Page 138 of 138

# Appendix I

Portions of HAR §11-23 (Underground Injection Control)
Application Forms for State Underground Injection Control Permit

. 198

#### Hawali Administrative Rules

Chapter 23 - Underground Injection Control

§11-201-1	Purpose
§11-201-2	Scope
§11-201-3	<u>Definitions</u>
§11-201-4	Classification of Exempted Aguifers and Underground Sources of Drinking Water
§11-201-5	Identification of Exempted Agulfers and USDW
§11-201-6	Classification of Injection Wells
§11-201-7	Prohibition
§11-201-8	Construction Conditions
\$11-201-9	Siting and Pre-Construction Repulrements
§11-201-10	Provision for Artesian Aguifer Protection
§11-201-11	Operating Conditions
§11-201-12	Application Procedures for UIC Permit
§11-201-13	Submission of Data
§11-201-14	Public Notice of Proposed Wells Injecting Into USDW
§11-201-15	Public Hearings
§11-201-16	Permit issuance
§11-201-17	Existing Injection Well Registration
§11-201-18	Monitoring and Reporting Requirements
§11-201-19	Pluoging and Abandonment Requirements
§11-201-20	Revocation, Suspension or Revision of UIC Permits
§11-201-21	Inspection and Entry
§11-201-22	Penalies
	Severability
Chapter §1	1-23-01

The purpose of this chapter is to establish a state underground injection control (UIC) program in order to protect the quality of the state's underground sources of drinking water (USDW) from poliution by subsurface disposal of fluids. Toward this end, conditions are specified to govern the location, construction and operation of injection wells so that injected fluids do not migrate and poliute USDW This chapter establishes minimum standards and counties are not precluded from establishing more stringent standards

[Eff 7/6/84; am and comp] (Auth; HRS 340E-2) (Imo; HRS 340E-2, 40 CFR \$144.1)

Back to Top

#### §11-23-02 Scope

This chapter covers any injection well as herein defined in this chapter. Excluded from this chapter are:

- 1. Individual wastewater systems (IWS) serving single family residential households which generate a volume of domestic sawage less than one thousand gallons per day (gpd);
- 2. Non-residential waste disposal systems which receive solely sanitary wastes from buildings that generate less than one thousand and of wastewater:
- 3. Test borings used for geotechnical and/or hydrologic investigations, provided that those borings are plugged with impermeable material upon completion of the investigation; and
- 4. Wells which are used for ground stabilization by the injection of a grout or by vertical relief of excess soil pore

[Eff. 7/6/84; am and comp] (Auth: HRS §340E-2) (Imp: HRS §340E-2, 40 CFR §§144.1(e), 146.1 and 146.5)

Back to Top

#### 11-23-03 Definitions as Used in this Chapter

. "Abandon" means to permanently discontinue usage; temporary or intermittent cessation of operation does not constitute abandonment An abandoned well need not necessarily be a sealed well,

- "Aquifer" means a geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well, tunnel or spring.
- "Artesian" means a hydrologic condition whereby groundwater is confined, under pressure greater than atmospheric, by overlying, relatively impermeable strata Because of hydrostatic pressure, the piezometric surface of an artesian aculifer rises above the bottom of the (upper) confining bed.
- "Building" means a structure, permanent or temporary, built, eracted and framed of component structural parts designed for the housing, shelter, workplace, enclosure or support of persons, animals or property of any kind.
- "Caprock" means a geological formation or formations composed of terrigenous or marine sediments deposited over a formation or formations of volcanic origin Caprock is substantially less permeable than volcanic formations, and is considered a "confining material".
- · "Confining materials or zone" means a geological formation or part of a formation capable of preventing or severely retarding fluid movement between different geological formations; used interchangeably with "souickide".
- "Contaminant" means any substance or matter which causes, directly or indirectly, a physical, chemical, biological, or radiological change in the existing water quality; used interchangeably with "pollutant".
- "County" means any county of the State, including Kalawao county on Molokai.
- . "Department" means the department of health, State of Hawaii.
- "Director" means the director of health or a duly authorized representative.
- . "Disposal well" means a well used for the disposal or emplacement of fluid or fluids, either by gravity flow or under pressure, into subsurface strata; often used interchangeably with "injection well".
- "Exempted aquifer" means an aquifer or a portion thereof that is exempted from being used as an USDW by the director.
- · "Existing well" means a well which was in operation or had received official sanction from all of the necessary agencies, before July 6, 1984.
- "Fluid" means any material or substance which flows or moves, whether a semisolid, liquid or gas.
- . "Formation" means a body of rock characterized by a degree of lithologic homogeneity or similarity which is prevailingly, but not necessarily, tabular and is mappable on the earth's surface or traceable in the subsurface.
- . "Geohydrologic formation" means any formation capable of transmitting fluids by saturated flow, unsaturated flow or a combination thereof.
- "Geologist" means a person with a bachelors or higher degree in geologic sciences from an accredited college or university and a minimum of one year experience in well logging and testing.
- "Ground water" means water below the land surface in a zone of saturation.
- "Grouting" means the operation whereby a cement sturry is forced behind the casing for such purposes as: sealing the casing to the walls of the hole, preventing undeskable leakage of flukts out of the hole, and preventing migration of liquids or gases into the hole; or is pumped into a drill hole or well for plugging and tramonorada
- "Hazardous waste" means a hazardous waste as defined extensively in Code of Federal Regulations (CFR), Title 40-Protection of Environment, section 261.3 dated July 1, 1990
- "HRS" means Hawaii Revised Statutes
- "Individual wastewater system (IWS)" means the facility which disposes of treated or untreated domestic wastewater generated from a room or group of rooms forming a single habitable unit, including, but not limited to, cesspools, septic tanks and household semble units.
- "Industrial" means associated with a productive enterprise using machinery and mechanical power or human power or both, including such enterprises as power generation and crop production.
- "inject" means to dispose or emplace fluids, either under pressure or by gravity flow, into a subsurface formation or formations.
- "Injection pressure" means the head increase in the well bore with respect to the static ground water level; where head refers to the total energy of the fluid at any given point; and in ground water the main components of head are elevation and pressure
- "Injection well" means a well into which subsurface disposal of fluid or fluids occurs or is intended to occur by means of injection.
- . "Makai" means toward the sea or the area outside the UIC line encircling the protected aquifer,
- "Mauka" means toward the mountains or the encircled protected aquifer.
- . "Modify" means to make a minor or a basic change in the physical characteristics or the operational status of a
- "Person" méans any individual, partnership, firm, association, public or private corporation, trust estate, the federal, state or county governments or any of their agencies, or any other legal entity.
- · "Pollute" means:
  - 1. To alter the physical, chemical, biological or radiological properties of any state waters or USDW, including but not limited to temperature, taste, potability, mineral content, turbidity, color or odor, or
  - 2. To discharge any liquid, geseous, solid, radioactive, or other substances, into any state waters as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to public health, safety or welfare, including harm, detriment, or inhary to public or private drinking water supplies.
  - . "Sewage" means waste from all plumbing fixtures in residences, institutions, public and private buildings, and other places of human habitation, employment or recreation, whether treated or not by public or private sewage

treatment plants.

- . "State" means State of Hawaii.
- "UIC" means the underground injection control program under Part C of the Safe Drinking Water Act (P.L. 93-523) and chapter 340E, HRS.
- "UIC line" or "the line" means the line on the department of health UIC maps which separates, in plan view, exempted equifers and USDW.
- . "Underground source of drinking water (USDW)" means an aquifer or its portion:
  - Which supplies any public or private drinking water system; or contains a sufficient quantity of ground water to supply a public water system; and
    - a. Currently supplies drinking water for human consumption; or
    - b. Contains fewer than ten thousand milligrams per liter (mg/L) total dissolved solids (TDS); and
  - Which is not an exempted aguifer.
- "Volcanic" means material originating from a volcano; often, basaltic lava.
- "Waste" means any solid, liquid or gaseous matter, whether treated or not, which, when injected, may pollute or tend to politine the lands or waters, including, but not limited to, sewage; effluent; offal; garbage; refuse; and industrial, sortcultural or radioactive fluids.
- "Waste disposal system" means an excavation in the ground receiving wastes which functions by allowing fluids to seep through its bottom, sides or both, including cesspools, septic tanks, and seepage pits.
- "Well" means a bored, drilled or driven shaft, or a dug hole, whose depth is greater than its widest surface dimension.

The publications referred to or incorporated by reference in this chapter are available from the offices of the Department of Health.

[Eff 7/6/84; am and comp] (Auth; HRS §340E-2) (Imp; HRS §340E-2, 40 CFR §§144.3 and 146.3)

Back to Top

#### 511-23-94 Classification of Exempted Aguifers and Underground Sources of Orinking Water (a)

- A. Upon request, and with concurrence of the director, the department shall review the aquifer designations The aquifer designations shall be reviewed at least every three years in its review, the department may amend the status of an aquifer in accordance with chapter 91, HRS The criteria for exempting equifers from underground source of drinking water (USDW) status is as follows:
  - 1. The aquifer does not currently serve as a source of drinking water, and
  - The aquifer cannot now and will not in the future serve as a source of drinking water because of any of the following criteria:
    - it is situated at a depth or location which currently makes recovery of water for drinking water purposes economically or technologically impractical; or
    - It is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption; or
    - c. The total dissolved solids (TDS) concentration of the ground water is more than five thousand mg/L, and it is not reasonably expected to supply a public or private drinking water system.
- B. The UIC maps shall indicate exempted aquiters and USDW, in plan view, by use of a UIC line, and such maps are an integral part of this chapter. The department's UIC maps shall be the final authority for the identification of the aquiter boundaries on the tend surface Copies of the maps and this chapter are available for examination at an office of the department's environmental protection and health services division, the district health offices and other department offices on each island.
- C. Unless expressly exempted, all aquifers are considered to be USDW [Eff 7/6/84; am and comp] (Auth: HRS§340E-2) (Imp: HRS §340E-2, 40 CFR §§144.7, 146.4 and 146.52)

Back to Top

#### 611-23-05 identification of Exempted Aquifers and USDW

- A. The department has designated the following formations as exempted portions of aquifers; in the horizontal dimension, lands which are makel of the UIC line; and in the vertical dimension:
  - 1. Where the volcanic formation is a non-artesian aquifer, the entire geologic column; or
  - Where the volcanic formation is an artesian aquiler, from the subserial ground surface down to fifty feet above the contact between the artesian volcanic aquifer and the overlying confining materials.
- B. Unless an aquifer is expressly exempted, as described above or depicted on the department-issued UIC maps, it is an underground source of drinking water

C. In areas where the UIC line is defined by a roadway, a setback of one lot or one hundred fifty feet, whichever is less, from the mauka property line of that roadway may be considered to be within the exempted area if the roadway is within a property, the setback shall extend to the mauka property line or to one hundred fifty feet from the mauka edge of said roadway, whichever is less This interpretation of the UIC line shall be subject to all other conditions of this chapter The applicant, on the permit application, shall request this interpretation, approval of which shall be based on the proximity and sensitivity of drinking water sources

[Eff 7/6/84; am and comp] (Auth: HRS \$340E-2) (Imp: HRS \$340E-2, 40 CFR §\$144.7 and 146.4)

Back to Top

#### §11-23-06 Classification of Injection Wells

- A. The department shall classify existing and proposed injection wells in accordance with the five classes of wells described in this section Wells in classes I through IV are prohibited and are defined as follows:
  - Class I Wells which inject fluids beneath the lowermost formation containing, within one quarter mile of the well bore, an underground source of chinking water and which are used by:
    - Generators of hazardous waste or owners or operators of hazardous waste management facilities;
       and
    - b. Disposers of industrial and municipal waste fluids.
  - 2. Class II Wells which inject fluids:
    - a. Which are brought to the surface in connection with conventional oil or natural gas production and may be commingled with waste waters from gas plants which are an integral part of production operations, unless those waters are classified as a hazardous waste at the time of injection;
    - b. For enhanced recovery of oil or natural gas; and
    - c. For storage of hydrocarbons which are liquid at standard temperature and pressure.
  - 3. Class III Wells which inject for extraction of minerals including:
    - a. Mining of sulfur by the Frasch process;
    - In-situ production of uranium or other metals, using unconventional techniques to mine ore bodies;
       and
    - c. Solution mining of salts or potash.
  - 4. Class IV Wells used by generators of hazardous waste or of radioactive waste, by owners or operators of hazardous waste management facilities, or by owners or operators of radioactive waste disposal sites to dispose of hazardous waste or radioactive waste into any geohydrologic formation or a formation, which, within one-quarter of a mile of the well, contains an underground source of drinking water (USDW), even if exempted.
- B. Without exception, only class V wells shall be permissible and are defined as follows:
  - Subclass A Injection wells which inject fluids into an underground source of drinking water Subclass A wells include:
    - a. Sewage injection wells; and
    - b. Industrial disposal wells other than those classified under subclasses AB or B.
  - 2. Subclass AB Injection wells which inject only into exempted aquifers Subclass AB wells include:
    - a. Sewage injection wells; and
    - Industrial disposal wells, other than those classified under subclass B, such as brine disposal wells used in a desalinization process.
  - Subclass B Injection wells which inject non-polluting fluids into any geohydrologic formation, including underground sources of drinking water Subclass B wells include;
    - a. Air conditioning return flow wells used to return the water used for heating or cooling in a heat pump;
    - b. Cooling water return flow wells used to inject water previously used for cooling;

App. I, Page 2 of 33

- c. Recharge wells used to replenish, augment, or store water in an equifer;
- d. Sait water intrusion barrier wells, used to prevent the intrusion of sait water into fresh water, if they
  inject water of equal or lesser chloride concentration as that portion of the aquifer into which
  injected;
- e. Wells used in aquaculture, if the water in the receiving formation has, either:
  - 1. An equal or greater chloride concentration as that of the injected fluid; or
  - 2. A total dissolved solids concentration in excess of five thousand mo/L
- Injection wells used in an experimental technology, which is one that has not been proven feasible under the conditions in which it is being tested; and
- g. All wells not included in subclasses A, AB, C, D, or E of class V or in classes I through IV
- 4. Subclass C injection wells which inject surface fluids, i.e., storm runoff, into any geohydrologic formation.
- Subclass D Injection wells which inject overflows, or relief flows, from potable water systems into any geohydrologic formation.
- 6. Subclass E
  - a. Injection wells associated with the development and recovery of geothermal energy, provided that the geothermal efficient will be injected at a depth that will not be detrimented to underground sources of drinking water. If injection is to occur below the basal water table, the receiving formation water shall be tested and injection allowed if the receiving water has, either:
    - 1. An equal or greater chloride concentration as that of the injected fluid; or
    - 2. A total dissolved solids concentration in excess of five thousand mg/l; or
    - 3. An equivalent or lesser water quality than the injected fluid.
  - b. Subclass E injection wells include:
    - 1. Brine injection wells for the disposal of excess water from the steam-flashing process;
    - 2. Condensate injection wells for the disposal of condensate from electric generators; and
    - Gas injection wells for the disposal of non-condensible gases entrained in an aqueous solution.

[Eff 7/6/84; am and comp] (Auth: HRS §340E-2) (Imp: HRS §340E-2, 40 CFR §§144.6 and 146.5)

Back to Top

#### §11-23-07 Prohibition

- A. Without exception, any injection well not defined by class V in section 11-23-06 shall not be permitted to be constructed, operated or to exist in the State Class V injection wells shall be permitted to be constructed, modified and operated to the extent provided by, and subject to, the requirements of this chapter.
- B. No new subclass A well shall be constructed or operated in an underground source of drinking water after July 6, 1984
- C. No injection well owner or operator shall construct, operate, maintain, or close its injection well unless authorized by this chapter, a permit, or an order to do so.
- D. No injection well owner or operator shall violate any term of any written authorization, including those relating to inspection, monitoring, recordkeeping, and reporting. [Eff 7/6/84; am and comp] (Auth: HRS §340E-2) (Imp. HRS §340E-2, 40 CFR §§144.11, 144.12, 144.24 and 44.65).

Back to Top

#### §11-23-08 Construction Conditions

- A. No injection well shall be constructed unless, prior to the start of any construction:
  - Application is made for a UIC permit and all application procedures set forth in sections 11-23-12 through 11-23-15 are completed;
  - 2. It is shown that the proposed injection well will comply with this chapter; and
  - The department, upon satisfaction of the requirements set forth in paragraphs (1) and (2), approves the start of construction.
- B. Approval of the start of the construction of any injection well shall not be construed as approval for the

operation of that injection well Further, the approval of the start of construction does not guarantee the approval to operate upon completion of the injection well Permits shall be issued only in accordance with this chapter and it is the duty of the applicant to insure compliance with the law and this chapter [Eff 7/6/84]; am and compl (Auth: HRS \$340E-2) (Imp: HRS \$340E-2)

Back to Top

#### 611-23-09 Siting and Pre-Construction Requirements

- A. Any new injection well, other than subclass D injection wells, shall be sited beyond an area which extends at least one-quarter mile from any part of a diniking water source This includes not only the surface expression of the water supply well, turnel or spring, but also all portions of the subsurface collection system which may extend laterally, either at right or inclined angles to the ground surface The area of protection shall be delineated by a reasonably smooth curve drawn to connect the points extending one-quarter mile beyond the most extensive portions of the drinking water source and its collection system.
- B. Where the surface expression of an existing drinking water source drawing from an artesian aquifer is located in an exempted caprock aquifer, a new injection well, other than a subclass Injection well, shall be located, in addition to subsection (a) of this section, outside an area measuring one-half mile wide, which is bisected by a line running hydrologically upgradient from the surface expression of the drinking water source to the UIC boundary line This condition also applies to any future drinking water source which may be sited in an exempted aquifer.
- C. For a proposed injection well which is sited mauka of the UIC boundary line, in addition to meeting the minimum distance requirement in subsection (a) of this section, the department shall require the applicant to submit water quality data representative of local conditions as part of the application Where water quality data is lacking or insufficient to determine the areal water quality, the department may require the applicant to collect representative water semples from the injection well during construction The semples shall be collected and analyzed, in accordance with standards and methods established in chapter 11-20, entitled "Rules Retaing To Potable Water Systems" The parameters for which values shall be identified are, at least, the following:
  - 1. Chloride concentration.
  - 2. Total dissolved solids (TDS), and
  - 3. Coliform Total; if found, then fecal and streptococcus determinations.
- D. The variety of injection wells and their uses dictate a variety of construction designs consistent with those uses, and precludes specific construction standards for each type of injection well outlined in this chapter However, an injection well shall be designed for its intended use, in accordance with good engineering practices as recommended by the Honolulu Board of Water Supply's "Water System Standards", dated March, 1977.
- E. Vertical migration resulting in undesirable mixing of fluids from aquifers of substantially different water quality (due to improper well construction or use of an injection well) shall be prevented by preserving the integrity of the confining zone or zones by grouting or some other method acceptable to the department.
- F. If a large void, such as a lava tube or solution cavity, is encountered during driffing, where the drift rod drops more than three feet, measures shall be taken to prevent unacceptable migration of the injected fluids. The owner shall either verify that the void does not slope inland or construct the well in such a manner that wastes are not injected directly into the void For the first option, a test boring which verifies the void's inclination inland of the wellsate shall be drilled For the second option, the section of the well casing which passes through the void shall be without openings Either the perforated casing shall be replaced with solid casing, or the holes in the casing shall be seated by grouting or in some other manner approved by the department. The owner shall notify the department to arrange discussion and approval of any corrective actions Scheduling of the procedures shall be arranged so that the departmental staff may observe the remedial operations. The final responsibility for remedial design, implementation and performance shall rest with the consuting engineer.
- G. Departmental staff shall have the right to enter property during normal working hours, without advance notification, for the purpose of observing injection well construction methods and progress. [Eff 7/6/84; am and comp] (Auth: HRS §340E-2) (Imp: HRS §§340E-2 and 340E-9, 40 CFR §§144.12, 144.51 and 146.6)

Back to Top

#### §11-23-10 Provision for Artesian Aguifer Protection

A. Where an injection well is located in a caprock formation which overfies volcanic USDW under artestan pressure, the following conditions shall be applied:

App. I, Page 3 of 33

- A buffer zone of at least fifty feet of the confining materials (caprock) or other impermeable substance, shall remain between the bottom of the injection well and the top of the volcanic aquifer, and
- Injection pressure, as measured at the feed elevation or well head, shall remain below the hydrostatic pressure of the volcanic aquifer (the artesian head) or two p.s.l., whichever is greater.
- B. The locations of ariesian aquifer areas are described generally The major areas, which have an extensive caprock formation, include:
  - 1. The southern coastal plains of Oahu, from Kahe Pt. (West Beach) to Wallea Pt. (Lanikai);
  - 2. The windward (eastern) coastal plains of Oahu, from Makalli Pt. (Punaluu) to Waialee;
  - 3. The northern coastal plains of Oahu, from Haleiwa to Mokuleia; and
  - 4. The Mana Plain on western Kausi, from Polihale to Kekaha.

Other artesian aquifer areas are found in valleys, where alluvium or other sedimentary material has been deposited to significant depths.

C. If the ratio of the depth of the proposed injection well, to the estimated depth of caprock less fifty feet, is 1:2 or less, the applicant need not extend the depth of the injection well or wells in order to verify caprock thickness, prior to completion at the shallower proposed depth The department shall estimate the depth of caprock by comparing lithology from logs of borings in the vicinity If, however, artesian aquifer conditions are encountered, the applicant shall have the options as set forth in subsection (f) The following is a table showing the depths needed to achieve the 1:2 ratio:

Proposed den					
injection well:	10 15 20 25 3	30 40 50	60 70	80 9	100

Minimum depth 70 80 90 100 110 130 150 170 190 210 230 250 of caprock:

- D. If the ratio of the depth of the proposed injection well, to the estimated depth of caprock less fifty feet, is greater than 1:2, the applicant shell have the depth of the injection well temporarily extended by fifty feet to verify that artesian aquifer conditions are not encountered within that range The fifty feet of extended hole shall be property sealed by the tremie method, with a cement sturry that contains no more than five gallons of water per rinety-four pound sack of cement.
- E. Where a test well is planned for either a single injection well or a multiple well field, the depth of the test well shall be extended fifty feet into confining materials beyond the proposed depth of the deepest well if the test well is intended to be operational, the lower fifty feet shall be properly sealed as detailed in subsection (d) of this section.
- F. Where artesian agulfer conditions are unexpectedly encountered, the applicant may choose to:
  - 1. Abandon and properly seal the injection well with neat cement and request approval for a new location;
  - Modify the depth of the injection well or wells so that it conforms with subsection (a)(1)
    [Eff 7/8/84; am and comp] (Auth: HRS §340E-2) (Imp: HRS §340E-2, 40 CFR §§144.11 and 144.12)

Back to Top

#### 611-23-11 Operating Conditions

- A. No Injection well shall be operated, modified or otherwise utilized without a UIC permit issued by the department. Only subclass C wells that meet the requirements of section 11-23-12(f) shall be exempt from obtaining a UIC permit to operate.
- B. No person shall construct, operate, maintain, convert, plug, abandon or conduct any other injection activity in a manner which allows the movement of fluid containing a contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any national or state primary drinking water rule or may otherwise adversely affect the health of one or more persons.
- C. All injection wells shall be operated in such a manner that they do not violate any of the department's

App. I, Page

4

administrative rules under title 11, Hawarii Administrative Rules, reguleting various aspects of water quality and pollution, and chapters 342-B, 342-D, 342-F, 342-H, 342-J, 342-L, and 342-N, HRS The rules include:

- 1. Chapter 11-20, "Rules Relating To Potable Water Systems"
- 2. Chapter 11-62, "Wastewater Systems" and
- 3. Chapter 11-55, "Water Pollution Control"
- D. The operation of all injection wells shall also conform to any limitations on quantity and quality of the injected fluid as are deemed appropriate by the director for the purposes of this chapter.
- E. If at any time the department learns that an injection well may cause a violation of primary drinking water rules, the department shall order the injector to take such actions as may be necessary to prevent the violation, including, where required, cessation of operation of the injection well.
- F. Notwithstanding any other provision of this section, the department shall issue a cease and dealst order, effective immediately, upon receipt of information that a contaminant which is present in, or likely to enter, a system, or underground source of drinking water, supplying water for human consumption, poses an imminent and substantial danger to the health of a person or persons [Eff 7/6/84; am and comp] (Auft: HRS §340E-2) (Imp: HRS §§340E-2 and 340E-4, 40 CFR §§144.11, 144.12, 144.25, 144.31, 144.40 and 146.52)

Back to Top

#### §11-23-12 Application Procedures for UIC Permit

- A. No person shall operate, modify or abandon an injection well or wells without first obtaining a UIC permit from the department Only subclass C wells that meet the requirements in subsection (f) of this section shall be exempt from obtaining a UIC permit to operate. Further, no person shall start construction of an injection well without first applying for a permit and obtaining the department's approval for the start of construction.
- B. All permit applications shall be made by the injection well owner on authorized departmental forms which shall be available at department offices in the case of leasehold land, the applicant shall submit written proof of the consent of the land owner in the case of a modification, the legal operator, with the written consent of the owner, may submit the application.
- C. An applicant may apply for a system permit rather than apply for each individual injection well if the wells meet all of the following conditions:
  - 1. Are owned by the same person;
  - 2. Are operated by the same person:
  - 3. Are similarly designed;
  - 4. Serve the same purpose; and
  - 5. Inject into the same equifer or injection zone at the same property.
- D. All applications shall be submitted with a filing fee of \$100 for each application Any government agency shall be exempt from paying this filing fee Additionally, when public notice is required, as provided in section 11-23-14, the applicant shall pay all fees assessed for publishing legal notice or notices for each application requiring public notice. If a public hearing is required, as provided in section 11-23-15, the applicant shall pay all fees assessed for publishing legal notice or notices for each application requiring such notice.
- E. The department shall not consider any incomplete application An application is deemed complete when:
  - All requested information has been submitted, including the application form, plans, maps and other exhibits:
  - 2. All fees have been paid; and
  - 3. All public notice and hearing requirements under sections 11-23-14 and 11-23-15 have been satisfied.
- F. All applications for the use of subclass C wells to inject storm runoff shall be reviewed by the department for the determination of whether or not an applicant shall be required to obtain a UIC permit to operate the wells. The determination for an exemption of a UIC permit for such wells shall be made by the director and shall be predicated on the conditions submitted in the UIC application if an exemption is granted, the operating conditions as submitted in the application shall remain unchanged for the subclass C wells if any of the operating conditions should change over time, a new application shall be submitted by the owner of the wells for review by the department for the purpose of determining the need for a UIC permit The determination for a permit exemption shall be based on, but not limited to:

- 1. The location and design of the injection wells;
- 2. The surrounding land areas contributing runoff to the injection wells;
- 3. The potential for the inclusion of conteminants in the runoff;
- 4. The impact on underground sources of drinking water; and
- 5. The comments received during the public notice period or public hearing, or both, for proposed subclass C wells injecting into underground sources of drinking water.

[Eff 7/8/84; am and comp] (Auth: HRS §340E-2) (Imp: HRS §340E-2, 40 CFR §§144.24 and 144.33)

Back to Top

#### 511-23-13 Submission of Data

- A. Each applicant shall provide the following:
  - 1. Facility name and description;
  - 2. Facility location, including street address and zip code:
  - 3. Tex map key (TMK) number and map at the most detailed scale available, showing the location of the proposed injection well or wells on the property, the correct scale and north arrow;
  - 4. USGS topographic quadrangle map or good copy (scale 1:24,000) indicating the location of the proposed injection well or wells, and all other injection and withdrawal wells within one-quarter mile of the facility houndary:
  - 5. Ownership of facility;
  - 6. Name and address of lessor, if applicant is a lessee, and written consent of the property owner,
  - 7. Name and address of legal contact;
  - 8. Name of proposed operator,
  - 9. Nature and source of injected fluid;
  - 10. Proposed design capacity and operating volume of injected fluid;
  - 11. Number and type of injection wells, including construction materials and procedures:
  - 12. Elevation section for proposed well or wells, as found on the application form;
  - 13. Description of injection system, including emergency standby or monitoring wells, if any, and system blueprints:
  - 14. Details of proposed injection testing, the duration of which shall be for not less than twelve hours, and preferably for twenty-four hours;
  - 15. For injection wells sited mauka of the UIC line, water quality data, including, at a minimum, values for chloride, total dissolved solids, and coliform, from several of the nearest water supply wells;
  - 18. Number of each type of injection well actually constructed, including emergency standby and monitoring wells, if anv:
  - 17. Well log maintained by a geologist, including:
    - a. Lithology of injection interval or intervals and confining formation or formations;
    - b. Physical and structural characteristics of the formations encountered;
    - c. Initial water level, and subsequent water levels as fluctuations occur, especially for artesian conditions; and
    - d. Tidal fluctuations and efficiency;
  - 18. Elevation section, as found on the application form, showing exact final dimensions for each of the injection wells and materials used in construction;
  - 19. Complete results of injection testing, including maximum capacity;
  - 20. Water quality data, if required;
  - 21. Nature and source of formation water;
  - 22. Description of operating plans, including Identification of legal operator, maximum and average volumes of injected fluids, number of hours per day of use, and degree and type of treatment, if any.
- B. When the application is for a proposed injection well, the applicant shall first submit the information required under subsection (a)(1) to (a)(15) of this section This submittel shall be prepared and signed by a licensed professional engineer or a geologist When an application is prepared by an engineer it shall also bear the professional seal of the engineer No authorization to construct shall be Issued until the information is provided
- C. Upon completion of the proposed injection well(s), the applicant shall submit the information required in subsection (a)(16) to (a)(22) of this section This submittal shall be signed by the licensed professional engineer and peclopist who prepared the documents and bear the professional seal of the engineer No authorization to operate shall be issued until the information is provided.
- D. Applicants for proposed subclass C or subclass D injection wells shall not be required to submit the information required in subsection (a)(10), (a)(14), (a)(15), (a)(17), (a)(19), (a)(20), and (a)(21) of this section, unless any or all of these subsections are deemed appropriate and are specifically requested by the director

[Eff 7/8/84; am and comp] (Auth: HRS §340E-2) (Imp: HRS §\$340E-2 and 340E-9, 40 CFR §\$144.25, 144.28

Back to Top

#### 511-23-14 Public Notice of Progosed Wells Injecting into USDW

- A. The director shall notify the public of every application for a well proposing to inject into an underground source of drinking water in a manner designed to inform interested and potentially interested persons Public notice procedures shall include at least the following:
  - 1. Notice shall be circulated within the geographical area in which the proposed injection is located The circulation shall, at the discretion of the director, include either or both of the following:
    - a. Posting in the post office and public places of the municipality nearest the premises of the applicant in which the injection well facility is located; and
    - b. Publishing in local newspapers and periodicals or in a daily newspaper of general circulation;
  - 2. Notice shall be mailed to any person or group upon request; and
  - 3. The director shall add to a mailing list the name of any person or group who requests copies of notices for all UIC applications which propose the use of a USDW for injection purposes within the State or a certain geographical area.
- B. The director shall provide a period of not less than thirty days following the date of the public notice, during which time interested persons may submit their written views with respect to the UIC application All written comments submitted during the thirty-day comment period shall be retained by the director and considered in the formulation of the final determination with respect to the UIC application The period for comment may be extended at the discretion of the director.
- C. The public notice shall include at least the following:
  - 1. Name; address and phone number of the agency issuing the public notice;
  - 2. Name and address of each applicant:
  - 3. Brief description of each applicant's activities or operations which intend to utilize the injection wells described in the UIC application
  - 4. A brief description of the procedures for the formulation of final determinations, including the thirty-day comment period required by subsection (b) of this section and any other means by which interested persons may influence or comment upon those determinations; and
  - 5. Address and phone number of the state agency premises at which interested persons may obtain further information; and may inspect and copy UIC forms and related documents. [Eff 7/6/84; am and comp] (Auth: HRS §340E-2) (Imp: HRS §340E-2, 40 CFR §145.31)

Back to Too

#### §11-23-15 Public Hearings

- A. An applicant or any interested person or group of persons may request or petition the department for a public hearing with respect to UIC applications which have been publicly noticed pursuant to section 11-23-14 Within thirty days of the publication date of the public notice in the major daily newspapers, an applicant or any interested person or persons may request or petition for a public hearing, and shall indicate the interest of the party filing the request and their reason or reasons why a hearing is warranted.
- B. A hearing may be held if the director determines that there is significant public interest. Any hearing brought pursuant to this section shall be held in the geographical area of the proposed injection or other appropriate area, at the discretion of the director, and may, as appropriate with respect to geographic area, consider more than one UIC permit application.
- C. The public shall be given public notice of any hearing held pursuant to this section The notice for the hearing shall include at least the following:
  - 1, Notice shall be published at least once in a newspaper of general circulation within the geographical area of the injection site:
  - 2. Notice shall be sent to all persons who received a copy of the notice for the UIC permit application;
  - 3. Notice shall be mailed to any person or group upon request; and
  - 4. Notice shall be issued at least thirty days in advance of the hearing.

- D. The public notice of any hearing held pursuant to this section shall include at least the following information:
  - 1. Name, address and phone number of agency holding the public hearing;
  - 2. Name and address of each UIC applicant whose application will be considered at the hearing;
  - Name of USDW area where injection is proposed and a short description of the underground source of drinking water aquifer;
  - A brief reference to the public notice issued for each UIC application being considered, including identification number and date of issuance;
  - 5. Information regarding the time and location of the hearing;
  - 6. The purpose of the hearing;
  - 7. A concise statement of the issues raised by the persons requesting the hearing;
  - Address and phone number of the stale agency premises at which interested persons may obtain further information, and inspect and copy UIC forms and related documents; and
  - A brief description of the nature of the hearing, including the rules and procedures to be followed [Eff 7/6/84; comp] (Auth: HRS §340E-2) (Imp: HRS §340E-2, 40 CFR §145.31)

Back to Top

#### 11-23-16 Permit Issuance

- A. The director shall issue a UIC permit for wells which propose to inject into exempted aquifers on the following basis:
  - Existing or new injection wells do not or will not endanger the quality of underground sources of drinking
    water
  - Existing or new injection wells are designed and are or will be constructed or modified to operate without causing a violation of these rules or other applicable laws.
  - Proposed injection wells are designed and built in compliance with the standards and limitations stated in sections 11-23-07 to 11-23-10.
- B. The issuance of a UIC permit for wells which propose to inject into USDW shall be based, in addition to subsection (a)(1) to (a)(3) of this section, upon the evaluation of the contamination potential of the local water quality by the injection fluids and the water development potential for public or proposed project. The public shall have an opportunity to present information about these aspects of the proposed project.
- C. The director may issue a UIC permit for any period of time, not to exceed five years.
- D. The director shall review applications for reissuance of UIC permits Applications for reissuance must be filled at least 180 days prior to UIC permit expiration UIC permits may be reissued based upon the submission and review of data, as outlined in section 11-23-13, as deemed appropriate by the director at that time.
- E. The UIC permit shall not be transferable from the injection well owner to any other person without the approval of the director Request for transfer from one person to another shall be made on an application form furnished by the director along with any other data deemed appropriate [Eff 7/6/84; am and comp] (Auth: HRS §340E-2) (Imp: HRS §§340E-2 and 340E-9, 40 CFR §§144.11, 144.12, 144.36, 144.39 and 144.41)

Back to Top

#### §11-23-17 Existing Injection Well Registration

- A. The application procedures for a UiC permit, as stated in section 11-23-12, shall apply to owners of existing injection well facilities.
- B. By August 6, 1984, the owner of any existing injection well or wells shall notify the department of the existence of the well, whether or not in use, and shall provide the department with the information required by section 11-23-13(a)(1) through (a)(7).
- C. The owner or operator of any existing injection well or wells shall further, by January 8, 1985, submit to the department information concerning the construction and operating characteristics of such existing wells as required by section 11-23-13(a)(16) through (a)(22).
- D. No existing injection well, including those sited in exempted aquifers, shall be permitted to operate without a UIC permit from the department The owner of an existing injection well shall obtain a UIC permit by July 6.

1985 The permit shall be issued upon demonstration by the injection well owner that the well's operation does not violate the conditions stated in sections 11-23-10(a), 11-23-11(b) and 11-23-16(a)(1).

- E. By July 6, 1967, the state shall assess all existing injection wells to determine their impact on underground sources of drinking water. Subclass A wells shall be issued a permit until such time that a sewage collection system serves the area if they meet the following provisions:
  - 1. The application is properly completed;
  - 2. The injected fluids remain non-polluting to drinking water sources; and
  - 3. The existing treatment facility design capacity is not exceeded.
- F. Existing wells of any subclass, which are determined to be poliuting underground sources of drinking water shall have one year from the time of determination to effect corrective actions if the poliution is not abated, the permit shall not be renewed or shall be suspended or revoked. [Eff 7/6/64; am and comp] (Auth: HRS §340E-2) (Imp: HRS §340E-2, 40 CFR §§144.15, 144.26, 144.31, 144.33 and 148.52)

Back to Top

#### 11-23-18 Monitoring and Reporting Requirements

- A. The operator of any injection well or wells shall keep detailed records of the operation of the well or wells, including, but not limited to, the type and quantity of injected fluids, and the method and rate of injection for each well.
- B. if the operation of the injection well or wells is additionally regulated by other pollution control programs, e.g., National Pollution Discharge Elimination System (NPDES), the adherence to their monitoring and reporting requirements shall be considered a requirement of this chapter.
- C. The owner of any injection well or wells shall within one month report any change in ownership to the director in writing Units such time as the notice of change in ownership is submitted, the registered owner shall be responsible for the operation of the well or wells and for damages resulting from improper operation of the well or wells.

[Eff 7/6/84; comp] (Auth: HRS §340E-2) (Imp: HRS §340E-2, 40 CFR §§144.51 and 144.54)

Back to Top

#### 11-23-19 Plugging and Abandonment Regulrements

- A. Any owner who wishes to abardon an injection well shall submit an application, in accordance with section 11-23-12, containing the details of the proposed abandonment The department may require an abandoned well to be plugged in a manner which will not allow detrimental movement of fluids between formations if required, plugging shall be completed by grouting with the transle method in accordance with the Honolulu Board of Water Supplys "Water System Standards", dated March, 1977; or by some other method found appropriate and acceptable to the department.
- B. The department may order an injection well to be plugged and abandoned when it no longer performs its intended purpose, or when it is determined to be a threat to the ground water resource. The owner shall schedule the plugging so that departmental staff may be present to monitor the abandonment operation. [Eff 7/6/84; comp.] (Auth. HRS §340E-2) (Imp. HRS §340E-2, 40 CFR §§144.40 and 144.52(a)).

Back to Top

#### 511-23-20 Revocation, Suspension or Revision of UIC Permits

- A. Each UIC permit shall be subject to revocation, suspension or revision by the director if, after notice and
  opportunity for a contested hearing, it is determined that:
  - 1. There is a violation of any term or condition of the UIC permit; or
  - 2. The UIC permit was obtained by misrepresentation, or failure to fully disclose all relevant facts; or
  - 3. The UIC permit was willfully defaced, altered, forged or falsified; or
  - There is a change in any condition that requires either a temporary or permanent reduction or elimination
    of the permitted injection; or
  - 5. There is a failure to comply with these rules or any other applicable rules or laws.

App. I, Page 6 of 33

B. In taking any action the director may consider operating records, compliance investigations, or other information regarding the injection well facility or impact on the USDW aquifer IEff 7/8/84; compl (Auth: HRS 340E-2) (Imp: HRS 340E-2, 40 CFR §145.31) Back to Top 11-23-21 Inspection and Entry The director shall have the right: 1. To enter premises on which any injection well system is located; 2. To inspect any equipment, operation, or sampling of any injection well system; 3. To take effluent samples from any injection well system; and 4. To have access to and copy any record required to be kept pursuant to this chapter [Eff. and comp ] (Auth: HRS 340E-2, 340E-9) (Imp. HRS 340E-2, 340E-9; 40 CFR 144.51) Back to Top 611-23-22 Penalties Any person who violates any provision of this chapter shall be subject to the penalties provided in section 340E-8, HRS. Compliance with a corrective order shall not excuse the basic violation. [Eff 7/6/84; am, comp and ren §11-23-21 ] (Auth: HRS §340E-7) (Imp; HRS §340E-8, 40 CFR §§144.11 and 145.13) Back to Top 11-23-23 Severability If any provision of this chapter or its application to any person or circumstances is held invalid, the application of such provision to other persons or circumstances, and the remainder of this chapter, shall not be affected thereby." [Eff 7/6/84; comp and ren §11-23-22 ] (Auth: HRS §340E-9) (Imp: HRS §340E-9) The amendments to and compilation of Hawali Administrative Rules, Title 11, Chapter 23, Underground Injection Control, on the Summary Page dated \_ \_ were adopted on \_ following a public hearing conducted on June 13, 1991 by means of a tele-video conference communication held on Oahu with simultaneous transmission to Hilo, Hawali and Lihue, Kaual, after the public notice was printed in the Honolulu Advertiser, Hawaii Tribune-Herald, West Hawaii Today, Maul News, and Kauai Times, on April 24, 1991. These rules shall take effect ten days after filing with the Office of the Lieutenant Governor. JOHN C. LEWIN, M.D. Dated: Director of Health Approved:

Approved to as Form:

Deputy Attorney General

JOHN WAIHEE

Governor State of Hawaii

Filed

Dated:

App. I, Page 7 of 33

App. I, Page 8 of 33

# January 17, 2002

TO:

USERS OF THE UNDERGROUND INJECTION CONTROL (UIC)

APPLICATION FORMS

SUBJECT: REPRODUCTION OF THE UIC APPLICATION FORMS

UIC application submittals must be made on the application forms provided by the UIC program. If application forms are reproduced, the reproductions must be exactly the same. Wording, line spacing, and page numbering should not be changed; additions or deletions should not be made to the forms. Current and appropriate application forms must be used.

If application forms are altered or used for the wrong purpose, the submitted application will be deemed invalid and be returned for correction. When using the application forms, please follow the application instructions in order to produce a satisfactory application for UIC program review.

Submitted applications may be subject to public review as well as review by other agencies. The use of the appropriate application forms will help to prevent technical and processing difficulties.

Thank you for bearing with this requirement. We are committed to applying the UIC application forms fairly among all applicants and to assure that the content and quality of the forms are not compromised in a manner that may affect the validity of an application.

2001

# UNDERGROUND INJECTION CONTROL (UIC) INSTRUCTIONS FOR COMPLETING THE GENERAL APPLICATION FOR A UIC PERMIT TO OPERATE

(October 2000)

Attached are instructions to assist in completing the general application. The listed instructions correspond to the numbered items in the application. The general application is used for a new injection well, or to modify an injection well in use or to revise an existing UIC permit condition.

Do not use the general application to file for permit renewal, change of owner/operator, or existing injection well registration. Instead, obtain the appropriate application for these actions.

All items must be accurately and completely answered. An inaccurate or incomplete application is not acceptable. If an item does not apply, please enter "Not Applicable" to show that the item was given consideration.

The services of a professional consultant are typically necessary to complete and service the application throughout the permitting process. Professional services enhance efficient processing.

The general application to construct a new injection well must be submitted under the signature of a geologist or professional engineer. The general application to modify an injection well, or to revise an existing UIC permit condition, need not have this requirement; however, the services of a qualified environmental consultant, such as an engineer or geologist, to complete and service the application are recommended. Such services will generally result in efficient application processing.

The general application should be submitted six months before the anticipated date of injection well construction. Six months accommodate evaluation, corrections, public notice, and inspection. An approval to construct and test the injection well is issued by departmental letter after the application is satisfactorily processed.

Construction of an injection well is followed by injection testing. Injection test results, geologic logs, and other information as requested must be submitted collectively as a final engineer/geologist report. A UIC permit to operate the injection well is issued after the final report is satisfactorily completed. (The UIC permit is a document of approximately 23 pages and contains monitoring and reporting requirements and permit conditions.)

If the project site is located mauka (inland) of the UIC line, submit two complete copies of the general application. The second copy will be used for public notification.

A filing fee of \$100.00 payable to the State of Hawai'i is required to initiate the application. Governmental agencies are exempt from the filing fee.

Questions about the general application can be directed to either Jaime Rimando, Norris Uehara, or Chauncey Hew at the Safe Drinking Water Branch. Please call 808-586-4258 (Honolulu) or call direct toll free: Kaua'i 274-3141, ext. 64258; Maui 984-2400, ext. 64258; Big Island 974-4000, ext. 64258; Molokai and Lana'i 1-800-468-4644, ext. 64258.

General Application (10/00)

# **UIC GENERAL APPLICATION APPLICATION INSTRUCTIONS**

(October 2000)

- 1. Provide the full facility name. This name will appear on all correspondence, official files, and the UIC permit.
- 2. Provide a comprehensive description of the facility. Facilities that use injection wells vary widely. Thus, the facility description should describe either products or services generated by the facility that reflect the nature or function of the facility. For a subdivision, the description should include the total project area, total number of lots, range of lot sizes, type of subdivision and zoning, number of roadways, and areas of rainfall runoff.
- 3a. Enter a street <u>number</u> and <u>name</u>. If no number is available, then give street boundaries and approximate dimensions of the parcel, and the location of the parcel relative to street boundaries.
- 3b. Provide a map of the entire island with the project location highlighted. A simple map will suffice such as the type found in textbooks that show an entire island on one page, and can be photocopied on an 8-1/2" x 11" sheet.
- 3c. Provide a copy of the TMK map showing TMK numbers and the exact location of the injection well(s) and well numbers. Highlight the injection wells. Provide Division, Zone, Section, Plat, and Parcel numbers.
- 3d. Provide a site plan of the facility showing the injection well(s) with pertinent details.
- 3e. Provide a copy of the 1:24,000 scale USGS map: this is the 7-1/2 minute quadrangle map. The entire quadrangle map is not necessary, but give a portion large enough to identify the surrounding areas and surrounding pertinent features. Plot on the map other wells, especially drinking water wells or sources, within a 1/4 mile radius of the facility.

Recommendation: plot the nearest drinking water well(s) even if it is more than 1/4 mile away. Remember, one of the primary concerns of UIC is the location of drinking water wells in proximity to an injection well.

Maps showing drinking water wells are located at:

(1) Safe Drinking Water Branch, Department of Health State agency, Oahu;

General Application (10/00)

App. I, Page 11 of 33

La rober

(2) Commission on Water Resource
Management, Department of Land
& Natural Resources

State agency, Oahu;

(3) Department of Water Supply

County agency.

The extent of current information may vary between agencies.

3f. Provide the latitude and longitude of the injection well(s) as plotted on the 7-1/2 minute quadrangle map. For a system of injection wells, provide a latitude and longitude of a representative point which is central to all wells.

Injection wells situated far apart from one another may require separate permits instead of a single permit.

List coordinates to the nearest 2 seconds. Remember, every second changes your map distance by about 95 feet in longitude and 100 feet in latitude.

Indicate whether the reference datum is the North American Datum of 1983 (NAD 83) or the Old Hawaiian Datum. (The UIC maps are based on the Old Hawaiian Datum.)

- 4. Provide the name and address of the person, company, or corporation that owns the injection well.
- 5. Provide the name and address of the business operator of the injection well. (The operator is often the owner of the injection well. The operator is not a service-provider contractor.)
- 6. Provide the name, position, company, address and telephone number of the person legally responsible for the injection facility. All UIC correspondence will be made to this person. (Courtesy copies of correspondence will be sent to the consultant, if any, who is processing the application.)
- 7. Check the appropriate box to describe the facility's interest in the land on which the facility is built. Fee simple refers to direct ownership. Leasehold refers to a lease agreement between the facility and the fee simple owner of the property.
- 8. Provide the requested information about the consultant who is servicing the application. For a new injection well application, include the professional seal of the engineer next to the name.
- 9., 10. & 11.

Provide the requested information. Please call the UIC program if questions arise.

12. Provide the name of the drilling contractor and a description of the method and drill equipment. Typical drilling methods are rotary, percussion, washing, or excavating.

General Application (10/00)

- 13. Provide a description of the injection test. The data obtained from this must be used by the applicant to complete the engineer/geologist report for a UIC permit. The duration of the injection test must be at least 12 hours. Shorter durations need departmental approval.
- 14. Provide the requested information. Potable water is commonly provided by counties' water departments. Nonpotable water comes typically from on-site water wells which are used for irrigation or business activities not related to drinking water.

# Diagram for Injection Well Dimensions:

Complete the diagram by answering all the blanks. Do not just refer to an attachment diagram unless the attachment diagram has equivalent details that are explicitly shown.

# Signatory and Certification Statement:

This statement must bear the original signature and identity of the applicant. Typically this signature corresponds to the person described in item No. 6.

# Remarks:

Multiple rainfall runoff drainage injection wells should be presented in table form as suggested below. Specific details may be shown by an attachment diagram.

	Depth	Diameter	Grd. Elev.	Bottom Elev.	Proposed Discharge	Etc.
Well #1						
Well #2						
Well #3						

App. I, Page 13 of 33

# UNDERGROUND INJECTION CONTROL (UIC)

Department of Health State of Hawaii

# General Application For A UIC Permit To Operate

(Reference: Chapter 23 of Title 11, Hawaii Administrative Rules, Titled Underground Injection Control)

# \$100.00 Filing Fee Required

(Revised October 2000)

	Submit Application and attachments to:	For Office Use:
	Safe Drinking Water Branch Environmental Management Division Department of Health 919 Ala Moana Blvd., Room 308 Honolulu, Hawaii 96814	File No.  New injection well construction  Injection well modification  Permit condition revision
1.	Facility Name:	
2	Facility Description:	
	·	

3.	Fac	cility Location:			
	∂a.	Street Address		,	
		Town		District	
		Island		State	Zip Code
	b.	Attach island map	showing the gene	eral location of the fa	cility.
	,c.	Attach <u>TMK map</u> high well(s).	alighting the p	roperty and showing the	location of injection
		Tax Map Key No			
	d.	Attach Site Plan.			
	e.			e 1:24,000) showing the ater sources within 1/4	location of the property, the mile of the facility.
	f.	Coordinates: Latit	udeo	" N Long	itude
		Refer	ence datum:	NAD 83	Old Hawaiian Datum
	)				
5.	Ope	rator of the facilit	у:		
	(Re	peat the entry even			
	if	same as item No. 4)			
		·			
6.				on for the facility (No managing agents are no	ote: person the correspondence applicable.):
	Ful	l Name			
	Pos	ition			
	Com	pany			
	Per	manent Address			
	Tel	ephone Number		FAX Number	

7.	Check appropriate box.
	Fee Simple property. Owner:
	Leasehold property. Owner (Lessor):
	If the facility is on leasehold property, attach a written acknowledgement and consent of this application from the fee simple owner (lessor) of the property.
8.	Consultant servicing this application:
	Contact person
	Position
	Company Name
	Address
	Telephone Number FAX Number
9.	Injection System:
	a. Number of injection wells
	b. Source of injected fluid (check appropriate box):
	Rainfall Runoff Water Aquaculture Filter Backwash
	Private WWTP Industrial Pond, Pool or Tank Drainage
	Municipal WWTP Geothermal Potable Water
	Other:

9.

1 . .

_	
_	
_	
_	
	·
( I	Describe in detail the wastestream process and chemical composition of the injectal (Attach appropriate schematic flow diagrams showing how the wastestream is general of the wastestream is generated from various sources, list the percent contribution each source.)
-	
_	
<u>-</u>	•
_	
_	
_	
_	
_	·
_	
N	ote:Regarding rainfall runoff drainage injection wells, provide drainage calcula
	as an attachment to this application.

10. Proposed Injection: Manne. Quantity, Rate, Duration, and Pr ure. Answer all that apply for the injection well system. Provide more information for clarity, if needed. If individual injection wells within the injection well system differ in use, complete a separate column for each use. Make additional copies of this table if more than two uses need to be described.

Injection Well(s) No.	
<pre>Injection Manner: continuous, intermittent, batch, seasonal, or other (please specify).</pre>	
Average Injection Quantity in gallons per day (gpd): representative average over a calendar week.	
Maximum Injection Quantity in gallons per day (gpd): representative maximum for one day.	
Injection Rate: fixed or variable.	
Average Injection Rate in gallons per minute (gpm): representative average over 24 hours.	
Maximum Injection Rate in gallons per minute (gpm): representative maximum for one day.	
Average Injection Duration in hours per day: representative average over a calendar week.	
Maximum Injection Duration in hours per day: representative maximum for one day.	
Injection Pressure: gravity fed or pump fed.	
Wellhead: <u>open to atmosphere</u> (vented), or <u>closed to atmosphere</u> (unvented).	
Wellhead terminus elevation in feet above (+) or below (-) ground surface.	
If pump fed and unvented, average injection pressure in pounds per square inch (psig) at the wellhead: representative average over time of use.	
If pump fed and unvented, maximum injection pressure in pounds per square inch (psig) at the wellhead: representative maximum for one day.	· ·

5

45.

11. Complete the attached "Diagram For Injection Well Dimensions"; OR, provide a detailed cross-sectional drawing of the injection well. Complete the following table.

Injection Well No.		
Latitude:		
Longitude:		
Elevations: Ground Surface Bottom of Well		
Total Depth of Well Below Ground Surface		
Diameter of Boring		
Well Cellar: Lateral Dimensions Depth Material		
Solid Casing: Diameter Stick Up Total Length Material	v.	
Perforated Casing: Diameter Perforation Stick Up Total Length Material		
Open Hole: Diameter Total Length		
Annular Backfill: Capping Solid Casing Separation Perforated Casing Open Hole		
Approximate Depth of Groundwater		

6

Prilling contractor and proposed injection well construction method:	
Describe proposed injection test.	
Water Quality: Provide the following information.	,
O Source of potable water serving the facility.	
O Source(s) of nonpotable water serving the facility.	
O Available groundwater quality from within the boundaries of the project. (Sa and analyses may be required during the construction of the injection well.)	mpling
[Office use:	
ì	

## DIAGRAM FOR INJECTION WELL DIMENSIONS

Casing Stick Up (If any) ft.	Top of Casing Elevation  ft., msl	
Diameter of Boring	Ground Elevation ft., msl Solid Casing:	
in.	Length	ft.
	Diameter	
	Wall Thickness	
	Material	
Cement Grout: Length ft.		
	Perforated Casing:	
Rock Packing:		
Lengthft.	Length	
Grain Size	Diameter	
	Wall Thickness	
	Openings	_ Sq. III./II.F.
<b>S</b>		
18.	Open Hole: (if any)	
	Length	
	Diameter	_ in.
	Total Depth of Boring	ft.
L	Bottom Elevation	
	of Boring	ft., mel

App. I, Page 21 of 33

## SIGNATORY AND CERTIFICATION STATEMENT

#### FOR UNDERGROUND INJECTION CONTROL (UIC) SUBMITTALS

(submitted Statement shall bear an original signature and date photocopy signatures are unsatisfactory.)

I certify that:

#### (for a municipal, state, federal or other public agency)

I am a principal executive officer or ranking elected official; or

In the case of Federal agencies, I am the chief executive officer of the agency, or I am the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

#### (for a partnership or sole proprietorship)

I am a general partner (partnership) or a proprietor (sole proprietorship).

#### (for a corporation)

I am President, Vice President, Secretary or Treasurer of the corporation and in charge of a principal business function, or I perform similar policy or decision making functions for the corporation; or

I am the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), and authority to sign documents has been assigned or delegated to me in accordance with corporate procedures.

\*\*\*\*\*\*\*\*\*\*\*\*\*

I rtify under penalty of law that this document and all attachments were prepared under my stion or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

#### Description of Document

Application

Type of Organization (please circle):	Туре	of	Organization	(please	circle):
---------------------------------------	------	----	--------------	---------	----------

Number ( )\_\_\_\_\_\_

- 1. Sole proprietorship 2. Partnership 3. Corporation

FAX Number (

4. Municipal	5. State, federal or other public agency	
Signature		
ritle		
Date		
Company Name		-
Addroga		,

App. I, Page 22 of 33

# UNDERGROUND INJECTION CONTROL (UIC) INSTRUCTIONS FOR COMPLETING THE GENERAL APPLICATION FOR A UIC PERMIT TO OPERATE

#### DRAINAGE INJECTION WELL

(July 2003)

Attached are instructions for completing the general application for a drainage injection well (DIW). The listed instructions correspond to the numbered items in the application. This application should only be used for the disposal of rainfall runoff water. For other types of discharge, the standard injection well application (General Application) is appropriate.

The DIW application is used for new drainage injection well construction, or to modify a drainage injection well in use, or to revise certain UIC permit conditions if a UIC permit has already been issued.

Do not use the general application to file for permit renewal, change of owner/operator, or to register an existing drainage injection well. Instead, obtain the appropriate application forms for these actions.

All items must be accurately and completely answered. An inaccurate or incomplete application is not acceptable. If an item does not apply, please enter "Not Applicable" to show that the item was given consideration.

The services of a professional consultant are typically necessary to complete and service the application throughout the permitting process. Professional services enhance efficient processing.

The DIW application to construct a new injection well must be submitted under the ignature of a geologist or professional engineer. If the DIW application is for an injection well modification or permit revision, the signatures may not be required. However, the services of a qualified environmental consultant, such as an engineer or geologist, to complete and service the application are recommended.

The DIW application should be submitted six (6) months before the anticipated date of injection well construction. Six months accommodate evaluation, corrections, public notice, and inspection activities.

An approval to construct and test the drainage injection well is issued by departmental letter after the application is satisfactorily processed.

Construction of a drainage injection well is followed by injection testing. Injection test results, geologic logs, and other information as requested must be submitted collectively as a final engineer/geologist report. A UIC permit to operate the drainage injection well is issued after the final report is satisfactorily completed. (The UIC permit is a document of approximately 23 pages and contains monitoring and reporting requirements and permit conditions.)

If the project site is located mauka (inland) of the UIC line, submit two complete copies of the DIW application. The second copy will be used for public notification.

A \$100 filing fee payable to the State of Hawai`i is required. Government agencies are fee exempt.

Questions can be directed to either Jaime Rimando, Norris Uehara, or Chauncey Hew at the Safe Drinking Water Branch. Please call 808-586-4258 (Honolulu) or call toll free: Kaua`i 274-3141 ext. 64258; Maui 984-2400 ext. 64258; Big Island 974-4000 ext. 4258; Molokai and Lana`i 1-800-468-4644 ext. 64258.

Drainage Injection Well Application (7/03)

App. I, Page 23 of 33

# UIC DRAINAGE INJECTION WELL APPLICATION INSTRUCTIONS

(July 2003)

- 1. Provide the full facility name. This name will appear on all correspondence, official files, and the UIC permit.
- 2. Check the appropriate box and provide a complete description of the facility. Facilities that use drainage injection wells vary widely. For example, if the facility is a residential subdivision, the facility's description should at least contain the total project area, total number of lots, range of lot sizes, type of subdivision and zoning, number of roadways, and areas generating rainfall runoff.
- 3a. Enter a street <u>number</u> and <u>name</u>. If no number is available, then give street boundaries and approximate dimensions of the parcel, and the location of the parcel relative to street boundaries.
- 3b. Provide a map of the entire island with the project location highlighted. A simple map will suffice such as the type found in textbooks that show an entire island on one page, and can be photocopied on an 8-1/2" x 11" sheet.
- 3c. Provide a copy of the TMK map showing TMK numbers and the exact location of the drainage injection well(s) and well numbers. Highlight the injection well(s). Provide Division, Zone, Section, Plat, and Parcel numbers.
- 3d. Provide a site plan of the facility showing the injection well(s) with pertinent details.
- 3e. Provide a copy of the 1:24,000 scale USGS map: this is the 7-1/2 minute quadrangle map. The entire quadrangle map is not necessary, but give a portion large enough to identify the surrounding areas and surrounding pertinent features. Plot on the map every drinking water well or source, within a 1/4 mile radius of the facility.

Recommendation: plot the nearest drinking water well(s) even if it is more than 1/4 mile away. Remember, one of the primary concerns of UIC is the location of drinking water wells in proximity to an injection well.

Maps showing drinking water wells are located at:

(1) Safe Drinking Water Branch, State agency, Oahu;

Department of Health

- (2) Commission on Water Resource State agency, Oahu;
  Management, Department of Land
  & Natural Resources
- (3) Department of Water Supply County agency.

The extent of current information may vary between agencies.

3f. Provide the latitude and longitude of the drainage injection well as plotted on the 7-1/2 minute quadrangle map. For a system of drainage injection wells, provide a latitude and longitude of a representative point which is central to all drainage injection wells.

Drainage injection wells that are situated far apart from one another may require separate permits instead of a single permit.

List coordinates to the nearest second. Remember, every second changes your map distance by about 95 feet in longitude and 100 feet in latitude.

Please use the Old Hawaiian Datum (similarly, NAD 27). (The UIC maps are based on the Old Hawaiian Datum.)

- 4. Provide the name and address of the person, company, or corporation that owns the drainage injection well.
- 5. Provide the name and address of the business operator of the drainage injection well. (The operator is often the owner of the injection well. The operator is not a service-provider contractor.)
- 6. Provide the name, position, company, address and telephone number of the person legally responsible for the drainage injection facility. All UIC correspondence will be made to this person.
- 7. Check the appropriate box to describe the facility's interest in the land on which the facility is built. Fee simple refers to direct ownership. Leasehold refers to a lease agreement between the facility and the fee simple owner of the property.
- 8. Provide the requested information about the consultant who is servicing the application. For professional engineers, affix the P.E. stamp. For construction of a new drainage injection well, the consultant must be a geologist or profession engineer. Having the same consultant service the application

<sup>-2-</sup> Drainage Injection Well Application (7/03)

from start (planning & designing) to finish (submitting the final engineering & geological report) is recommended.

- 9. & 10.

  Provide the requested information. Please call the UIC program if questions arise.
- 11. Describe the injection well construction method. Typical construction methods are rotary drilling, percussion, excavating, or combinations thereof.
- 12. Provide a description of the injection test. The data obtained from this test must be used by the applicant to complete the engineering/geological report for a UIC permit.
- 13. Without the \$100 filing fee, the UIC application is not complete. Please make checks payable to the State of Hawai`i. Governmental agencies are fee exempt.
- 14. Fill in the current date. This date should typically coincide with the date on the <u>Signatory and Certification Statement</u>.
- 15. <u>Diagram For Drainage Injection Well Dimensions</u>:

  Complete the diagram by answering all the blanks. Do not just refer to an attachment diagram unless the attachment diagram has equivalent details that are purposefully organized and explicitly clear.
- 16. Signatory and Certification Statement:
  This statement must bear the original signature and identity of the applicant. This signature usually corresponds to the person described in item No. 6. Please remember to date this statement (see item no. 14).

#### UNDERGROUND INJECTION CONTROL (UIC)

Department of Health State of Hawai'i

# DRAINAGE INJECTION WELL

General Application For A UIC Permit To Operate

(Reference: Chapter 23 of Title 11, Hawai`i Administrative Rules, Titled Underground Injection Control)

\$100.00 Filing Fee Required

(July 2003)

I	Safe Drinking Water Environmental Managemer Department of He 919 Ala Moana Blvd., Honolulu, Hawai`i	at Division alth Room 308	□ New injection	D New injection well construction D Injection well modification D Permit condition revision		
	ility Name:					
aci	llity Description (Chec	ek all that a	re applicable.):			
]	Agriculture		Golf Course		School	
]	Airport		Industrial	· 🛮	Shipyard, Harbor	
	Commercial		Military		Utility	
	Field or Park	. 🗖	Residential		Other	
	ribe the characteristi				ication purposes, this	

	Street Addres	s			
	Town		District		
•	Island		State		Zip Code
b.	Attach <u>island</u>	<u>map</u> showing the	general location of the fac-	ility.	
c.	Attach TMK mawell(s).	p highlighting th	he property and showing the	location of	injection
	Tax Map Key N	0			
d.	Attach Site P	<u>lan</u> .		,	
е.			scale 1:24,000) showing the ing water sources within 1/4 p		
f,	Coordinates:	(centralized), un	nder the Old Hawaiian Datum	(NAD 27):	
	·	Latitudeo	'" N Longitu	ıdeo	'
Own	er of the facil	.ity:	-		
	,		· .		
Ope	rator of the fa	cility:			
(Rep	peat the entry	even			
if	same as item N	io. 4)			
	al contact or o	official contact			he correspondence
_			person for the facility (Not and managing agents are not		<del>-</del>
will	l be addressed		and managing agents are not		<del>-</del>
wil] Full	be addressed	to; contractors	and managing agents are not		<del>-</del>
will Full Posi	be addressed Name	to; contractors	and managing agents are not		<del>-</del>
will Full Posi Comp	L be addressed  Name  Ltion  Dany	to; contractors	and managing agents are not		<del>-</del>
will Full Posi Comp	L be addressed  Name  Ltion  Dany	to; contractors	and managing agents are not	applicable.	):

Check appropriate box.	
Leasehold property. Owner (Lessor)	:
If the facility is on leasehold property	v, attach a written acknowledgment and consent of er (lessor) of the property. (An acknowledgment/
Consultant servicing this application:	
Contact person	Affix P.E. stamp here, for engineers:
Position	
Company Name	
Address	
Telephone Number	FAX Number
Tadaatdaa Quatana	
. Injection System:	
a. Number of injection wells	
b. Source of injected fluid (check appro	opriate box):
☐ Rainfall Runoff Water	└─ Potable Water
U Other	
c. Identify the surface areas from which percent contribution (totaling 100%)	h the runoff will be generated and estimate the :
Parking Lot%	□ Roof %
Pavement	Yard or Field
Roadway%	Other:%

Proposed	Injection	for	the E	ntire	Draina	age	System	a:	Manner,	Rate,	Pressure,	Duration,	and
Quantity.	Provide	more	info	rmatio	n for	cla	rity,	if	needed.			•	

Injection Manner: continuous, intermittent, or other (please specify).	
Injection Rate: fixed or variable.	
Injection Pressure: gravity fed or pump fed.	
Wellhead: open to atmosphere (vented), or closed to atmosphere (unvented).	
If injection is via pump fed pressure, maximum injection pressure in pounds per square inch (psig) at the wellhead:	
hen estimating runoff using the "Rational Form	ıla" (Q=CIA):
Drainage Area in acres (A):	
Runoff Coefficient (C):	
Storm recurrence interval (Tm):	
Intensity of 1-hr Rainfall (inches):	
Time of Concentration (Tc):	
Adjusted Rainfall Intensity (I):	
Peak Discharge in cfs (Q):	
OR, When estimating runoff using (identify): _	
Maximum Injection Rate in gallons per minute (gpm):	
Maximum Injection Duration in hours per day:	
Maximum Injection Quantity in gallons per day (gpd):	

	Proposed injection well construction method:
	. <u> </u>
12.	Describe proposed injection test.
13.	\$100.00 Filing Fee: Attached Not required, operated by government agency.
4.	Date of this application:
.5.	Complete the "Diagram For Drainage Injection Well Dimensions"; OR provide a detailed cross-sectional drawing of the injection well having the equivalent information.
	Attach Signatory and Certification Statement. Fill all items completely.

# DIAGRAM FOR DRAINAGE INJECTION WELL DIMENSIONS

Ground Surface Elevation					
ft., msl.	(    -				
give range, if more than one)	)÷		1		
(H)	1-0		6.	Circle Solid Casing: Yes or No	
	0	Inside		Length_	ft.
	0 2	Diameter	+·	Inside Diameter	_in.
			L .	Wall Thickness_	_in.
			7:1	Material	
Diameter of Hole (Excavation)	E7		0		
in,			7		_
		-	10		
			Pal		
				Circle Perforated Casing: Yes or No	
	2		•	Length	
	5		اة	Inside Diameter	
-	0 2		F-1	Material	
	*		= 2	Material	
				<del></del>	-
1	.=		18		
	0		4		
	0	er man		124,000	
			= 0		
	-		0		
	°				
			180		
	>		3		
	7		- 1	Open Hole: Yes or No	
	3		,	Length	fi,
	7		1	Diameter_	
Total Depth of Hole (Excavatio	n)		1	Diameter	, 111.
ft,	1		{		
	1		3		
Bottom Elevation	7				
ft., msl					

Drainage Injection Well Application (7/03)

App. I, Page 32 of 33

#### SIGNATORY AND CERTIFICATION STATEMENT

#### FOR UNDERGROUND INJECTION CONTROL (UIC) SUBMITTALS

(submitted Statement shall bear an original signature and date - photocopy signatures are unsatisfactory.)

I certify that:

#### (for a municipal, state, federal, or other public agency)

I am a principal executive officer or ranking elected official; or

In the case of Federal agencies, I am the chief executive officer of the agency, or I am the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

#### (for a partnership or sole proprietorship)

I am a general partner (partnership) or a proprietor (sole proprietorship).

#### (for a corporation)

I am President, Vice President, Secretary or Treasurer of the corporation and in charge of a principal business function, or I perform similar policy or decision making functions for the corporation; or,

I am the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), and authority to sign documents has been assigned or delegated to me in accordance with corporate procedures.

#### \*\*\*\*\*\*\*\*\*\*\*\*\*

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

#### Description of Document

Application

Type of Organization 1. sole proprietorship 4. municipal	p 2	-			3. corpor	
Signature			·····			
Name (Print)						
ritle						
Date		·				
Company Name						
Address					7 - Tues	,
Phone Number ( )		F A	X Number(	<b>Y</b>		_

App. I, Page 33 of 33