Checklist for Drinking Water Source Assessment - Ground Water Source
Transient Noncommunity Water System

Public water system: _____ ID No.: _____

Name of source: _____ ID No.: _____

Assessment date: _____ Assessment conducted by _____

Water System Contact Name: _____ Phone #: _____

Water System Contact Address: _____

The following information should be contained in the drinking water source assessment submittal.

_____ Checklist *(this form)*

_____ Delineation of groundwater protection zones

_____ Source Data Sheet (select appropriate form)

- _____ Well Data Sheet (included)
- _____ Spring Data Sheet (obtain from DHS or County office or DHS website)
- _____ Horizontal Well Data Sheet (obtain from DHS or County office or DHS website)

_____ Possible Contaminating Activities (PCA) inventory form

_____ Assessment map with source location and protection zone

_____ Means of Public Availability of Report (indicate those that will be used)

- _____ Copy in regulatory agency (DHS or LPA) office (minimum)
- _____ Posted at public water system (recommended)
- _____ Other (describe)

Submit the specified forms to the DHS district office or LPA county office. Office staff will complete the assessment.

Transient Noncommunity Water System
Delineation of Ground Water Protection Zone

Public water system:_____ID No.:_____

Name of source:_____ID No.:_____

Delineation date:_____Delineation conducted by _____

Indicate the size of the protection zones by selecting the aquifer media type:

_____Porous media aquifer = 600 feet

_____Fractured rock aquifer = 900 feet

Porous media aquifers typically consist of a mixture of interbedded sands, silts and gravels. Open spaces within the aquifer are assumed to exist between individual particles that comprise the aquifer.

Fractured rock aquifers typically consist of rock of various types. Open spaces are located along faults and fractures that formed long after the rock was formed. Such aquifers can have highly localized and complex ground water flow properties that may be difficult to characterize quantitatively.

There are more complicated methods for determining the size, shape and location of zones. Water systems interested in these methods should consult with a hydrogeologist or other knowledgeable professional.

TRANSIENT NONCOMMUNITY SYSTEM WELL DATA SHEET

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.

** Indicates items required for Source Water Assessment*

*** Indicates additional items required for assessments and Ground Water Rule*

	(separate multiple entries in field with semi-colon)	Actual, Estimated or Default?
DATA SHEET GENERAL INFORMATION		
System Name		*from DHS database*
System Number		*from DHS database*
Source of Information *(well log, DHS/County files, system, etc)*		
Organization Collecting Information *(DHS, County, System, other)*		
Date Information Collected/Updated		
WELL IDENTIFICATION		
* Well Number or Name		*from DHS database*
* DHS Source Identification Number (**FRDS ID No.**)		
DWR Well Log on File? ("YES" or "NO")		
State Well Number (from DWR)		
Well Status (Active, Standby, Inactive)		*from DHS database*
WELL LOCATION		
Street Address		
Nearest Cross Street		
City		
County		
* Neighborhood/Surrounding Area *(see Note 1)*		
Site plan on file? ("YES" or "NO")		
SANITARY CONDITIONS		
** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft)		
** Size of controlled area around well (square feet)		
* Type of access control to well site *(fencing, building, etc)*		
* Surface Seal? (Concrete slab)("YES", "NO" or "UNKNOWN")		
* Dimensions of concrete slab: Length(ft)/ Width(ft)/ Thick(in)		
* Within 100 year flood plain? ("YES", "NO" or "UNKNOWN")		
* Drainage away from well? ("YES" or "NO")		
ENCLOSURE/HOUSING		
Enclosure Type *(building, vault, none, etc.)*		
Floor material		
WELL CONSTRUCTION		
Date drilled		
Drilling Method		
Depth of Bore Hole (feet below ground surface)		
* Depth to highest perforations/screens (ft below surface) (or "UNKNOWN")		
* Total length of screened interval (ft) *(default = 10% pump capacity in gpm)* (or "UNKNOWN")		
* Annular Seal?("YES", "NO" or "UNKNOWN") *(See Note 3)*		
* Depth of Annular Seal (ft)		
Material of Annular Seal *(cement grout, bentonite, etc.)*		

AQUIFER	*(separate multiple entries in field with semi-colon)*	Actual, Estimated or Default?
* Aquifer Materials *(list all that apply: sand, silt, clay, gravel, rock, fractured rock)*		
* Effective porosity (decimal percent) *(default = 0.2)* (or "UNKNOWN")		
* Confining layer (Impervious Strata) above aquifer? ("YES", "NO" or "UNKNOWN")		
* Static water level (ft below ground surface)		
WELL PRODUCTION		
Is the well metered? ("YES" or "NO")		
Production (gallons per year)		
Frequency of Use (hours/year)		
Typical pumping duration (hours/day)		
PUMP		
Make		
Type		
Size (hp)		
* Capacity (gpm)		
Lubrication Type		

REMARKS AND DEFECTS (use additional sheets as necessary)

NOTES

1. Neighborhood/Surrounding Area (list all that apply): A= Agricultural, Ru = Rural, Re = Residential, Co = Commercial, I = Industrial, Mu = Municipal, P = Pristine, O = Other

2. Conductor Casing - Oversized casing used to stabilize bore hole during well construction. Should be removed during installation of annular seal.

3. Annular Seal - Seal of grout in the space between the well casing and the wall of the drilled hole. Sometimes called "sanitary seal".

Please Note:

The information on this Well Data Sheet is considered confidential. To allow the information to be included in the permit report, or made available subject to a public information act request, the waiver clause below has to to be signed and dated by the owner (public water system). In lieu of this signature, the WDS has to be retained in a confidential file, or the information shown in the shaded rows has to be "blacked out."

I/We, *(Name)*_____,
certify that I/Weam/are the present owners of the well described on this well data sheet. I/We have reviewed the information presented on this well data sheet and I/We take no exception to having the information inlcuded in the Department of Health Services' Engineering Report. I/We understand that by including the well data sheet in the Engineering Report, it will be part of a public document that can be reviewed and copied subject to the public information act request.

_____ _____

(Signature) (Date)

Transient Noncommunity System Ground Water Source Possible Contaminating Activity (PCA) Inventory Form

Water system name:_____ ID No._____

Source Name:_____ ID No._____

Inventory date:_____ Inventory conducted by:_____

Transient Noncommunity Water System PCA Inventory – Ground Water Source

PCA (Risk Ranking)	PCA in Zone? (Y, N or U)	*	Comments
Automobile - Gas stations (VH)			
Chemical/petroleum processing/storage (VH)			
Dry cleaners (VH)			
Metal plating/ finishing/fabricating (VH)			
Plastics/synthetics producers (VH)			
Sewer collection systems (H)			
Airports - Maintenance/ fueling areas (VH)			
Landfills/dumps (VH)			
Septic systems - high density (>1/acre) (VH)			
Wastewater treatment plants (VH)			
Septic systems – low density (<1/acre) (H)			
Lagoons / liquid wastes (H)			
Agricultural Drainage (H)			
Fertilizer, Pesticide/ Herbicide Application (M)			
Sewage sludge/biosolids application (M)			
Underground Injection of Commercial/Industrial Discharges (VH)			
Historic gas stations (VH)			
Historic waste dumps/ landfills (VH)			
Injection wells/ dry wells/ sumps (VH)			
Known Contaminant Plumes (VH)			
Military installations (VH)			
Mining operations - Historic (VH)			
Mining operations – Active (VH)			
Confirmed leaking Underground storage tanks (VH)			
Grazing (> 5 large animals or equivalent per acre) (H)			
Concentrated Animal Feeding Operations (CAFOs) (see Note 1) (VH)			
Animal Feeding Operations (See Note 2) (VH)			
Other Animal operations (H)			

Risk Ranking of PCAs: VH = Very High Risk, H = High Risk, M = Moderate Risk, L = Low Risk

***** A contaminant potentially associated with this PCA has been detected in the water supply

Transient Noncommunity System
Possible Contaminating Activity (PCA) Inventory Form
Ground Water Source

Instructions:

1. For each PCA listed, indicate whether that type of activity exists within the protection zone by entering a Y (Yes), N (No) or U (Unknown) in the column indicated.
2. If a contaminant has been detected in the water supply that is potentially associated with that PCA, enter an asterisk in the column indicated.
3. In the Comments column, identify detected contaminants.

Notes:

1. Concentrated Animal Feeding Operation: Animal Feeding Operation (requires NPDES permit) with greater than:

If pollutants discharged (directly or indirectly) to navigable waters	**If pollutants not discharged**
300 slaughter or feeder cattle	1,000 slaughter or feeder cattle
200 mature dairy cows	700 mature dairy cows
750 swine	2500 swine
150 horses	500 horses
3000 sheep or lambs	10,000 sheep or lambs
16,500 turkeys	55,000 turkeys
9,000 laying hens or broilers (liquid manure system)	30,000 laying hens or broilers (liquid manure system)
1500 ducks	5000 ducks
300 animal units	1000 animal units

2. Animal Feeding Operation: lot or facility where animals (other than aquatic) have been or will be stabled or confined and fed or maintained for total of 45 days or more in any 12 month period.

Transient Noncommunity Water System
Instructions for Groundwater Assessment Map

The assessment map for a transient system groundwater source should be submitted on USGS topographic maps ("quad maps") at 1:24,000 scale. The map should show:

- Location of the source
- Protection Zone
- Significant Possible Contaminating Activities (PCAs) within the zone (optional, but recommended)

The protection zone for a transient system groundwater source is a circle surrounding the source. The radius of the protection zone is determined in the Delineation section of the assessment and depends upon the aquifer material.

USGS quad maps may be obtained from map or backpacking retailers. There are also several computer software programs that include USGS quad maps.

At the discretion of the regulatory agency, the water system may request that the regulatory agency prepare a map displaying the source and zones.

Example map for a well source is shown below.