Inventory Source and Treatment Record - Form #3 Application Instructions for Form 780-1233

Water Protection Program fact sheet   12/2011

Purpose

This form is used to document information about each entity. Entity refers to a single component/facility such as: source, connection point, treatment plant, storage tank, or booster station.

- A separate form must be completed for each entitiy.

- After initial form, form only needs to be completed if there are changes such as treatment or availability.

- There must be at least one source entity for each public water system.

- The source entity must match the information on the Inventory Public Water System Record - Form #1 under the following fields:
  - Source Category.

  - Source Type.

  - Percentage Source Type.

Directions

We have made every effort to make these instructions precise and accurate. For the purpose of this form:
- "Required" means data must be supplied for that field.

- "Optional" means data is not necessarily required for that field unless the information changed or is new.

Entity Type/Information Section
New Record/Change

"New Record" should be selected when a new entity is being identified for the first time. Otherwise, select "Change".

PWS ID#

Identify the PWS ID# for the water system to which the source or other entity belongs. Leave this field blank for a new system.

PWS Name

Identify the official name of the water system or company.

County

List the primary county in which the water system is located.

Entity ID

A unique identifier for each entity of a public water system. For changes, the number already assigned to the entity must be given. For new entities, enter "new" or "99999".

Entity Name
This name should be the name most commonly used to identify the entity.

Entity Type
Indicate the type of entity for which the form is being completed. Select the type from the following choices: a source, a connection point, or a plant/facility. Select only one type; complete the section for the selected type:

1. Type of Source
Required if selected "source" as the entity type. Indicate the source type.

- If source = "S," give the river reach, whether it is on the reach (Y/N), and reach miles, if known.

- If source = "G," indicate if the well status is active or inactive. Inactive includes abandoned, plugged, or not used for an extended period of time. Well status is required.

- If the source = "P" or "W" give the PWS ID# of the public system from which the water is purchased.

Skip the parts of the form pertaining to connection point and plant/facility.

2. Type of Connection Point
Required if selected "connection point" as the entity type.

- This field is used to identify the points where a system is connected to another system.

- Indicate the type of connection point.

Skip the parts of the form pertaining to source and plant/facility.

3. Type of Plant/Facility
Required if selected "plant/facility" as the entity type.

Indicate the type of facility.

- If the facility = "R", give the type, storage capacity, and unit of measure (UOM), if known.

- If the facility = "I," give the river reach, whether it is on the reach (Y/N), and reach miles, if known.

- If the facility = "M", give the type of pump, pump capacity, and UOM, if known.

Skip the parts of the form pertaining to source and connection point.

Treatment Section
This section must be completed for source entities.

Treatment No.
This column is an ordering convenience for this part of the form. It does not become a part of the treatment data code.

Code
One or more treatment objective and process codes may be entered for each entity. If detailed treatment information is being entered for a plant, only a single treatment code needs to be entered for the source. If there is no treatment at the source, use the following codes:

- N000 = No treatment at all.

- N996 = Treatment at the purchased source.

- N997 = Treatment at the plant.

The first letter of the codes corresponds to the treatment objective; the last three digits correspond to the process. (See page 4 for a list of codes).

Availability & Location Information Section
Availability and location information should be completed every time a form is completed for an entity.

Availability
Indicate the availability of the entity described.
If availability = "Seasonal" give first and last months of seasonal operation.

Latitude & Longitude
Both latitude and longitude are to be recorded in decimal degrees. Do not use degrees, minutes or seconds, as inaccurate locations may be entered into the files.

Accuracy
List the distance and UOM for the accuracy of the latitude/longitude reading.

Method
List the code that indicates the method by which the latitude/longitude was obtained.

Feature
List the code that indicates where on site the latitude/longitude describes.

Section/Township/Range
(Optional) If possible, enter the quarter, quarter, quarter section for each location. Be certain to record E (east) or W (west) for each range value.

Entry Point
Is this an "entry point" to the distribution system, as defined by the regulations for chemical monitoring? This information will be used to determine how many sample bottles each system receives.

Notes
(Optional) Use this box to give any special/additional information (i.e., well depth, casings).

Completed By
Name of the person completing the form.

Date
Date the form is completed.

Treatment Objective Codes

Code	Purpose / Description of Treatment	Code	Purpose / Description of Treatment
A	Additional Treatment Applied Elsewhere	N	No Treatment at Source
B	Disinfection By-products control	O	Organics Removal
C	Corrosion Control	P	Particulate Removal
D	Disinfection	R	Radionuclides Removal
E	Dechlorination	S	Softening (Hardness Removal)
F	Iron Removal	T	Taste and Odor Control
I	Inorganics Removal	X	Treatment Unknown
M	Manganese Removal	Z	Other

Treatment Process Codes

Code	Purpose / Description of Treatment	Code	Purpose / Description of Treatment
000	No Treatment / Not Applicable	370	4-Log Remove/Inactivate Crypto
001	Treatment Not Reported	371	5.0-Log Remove/Inactivate Crypto
100	Activated Alumina	372	5.5-Log Remove/Inactivate Crypto
121	Activated Carbon, Granular	380	Fluoridation (only)
125	Activated Carbon, Powder	401	Chlorination, Gaseous, Post
141	Aeration, Cascade	403	Chlorination, Gaseous, Pre
143	Aeration, Diffused	421	Chlorination, Hypo, Post
145	Aeration, Packed Tower	423	Chlorination, Hypo, Pre
147	Aeration, Slat Tray	441	Inhibitor, Bimetallic Phosphate
149	Aeration, Spray	443	Inhibitor, Hexametaphosphate
160	Algae Control	445	Inhibitor, Orthophosphate
180	Bone Char	447	Inhibitor, Polyphosphate
190	Brominization (special use)	449	Inhibitor, Silicate
200	Chloramines	455	Iodine
220	Chlorine Dioxide	460	Ion Exchange
240	Coagulation	461	Chlorination (FRDS-1.5)
300	Distillation	473	Converted (FRDS-1.5)
320	Electrodialysis	500	Lime-Soda Ash
341	Filtration, Cartridge	520	Micro-screening
342	Filtration, Diatomaceous Earth	541	Ozonation, Post
343	Filtration, Green Sand	543	Ozonation, Pre
344	Filtration, Pressure Sand	560	Permanganate
345	Filtration, Rapid Sand	580	Peroxide
346	Filtration, Slow Sand	600	Rapid Mix
347	Filtration, Ultrafiltration	620	Reducing Agents
348	Filtered	623	Reducing Agent, Sodium Bisulfate
349	Unfiltered, Avoiding Filtration	625	Reducing Agent, Sodium Sulfite
350	Unfiltered, Must Install Filtration	627	Reducing Agent, Sulfur Dioxide
351	Not Subject to SWTR	640	Reverse Osmosis
360	Flocculation	660	Sedimentation
361	4-Log Treatment of Viruses	680	Sequestration
362	3-Log Remove/Inactivate G Lamblia	700	Sludge Treatment
363	4-Log Remove/Inactivate Viruses	720	Ultraviolet Radiation
364	2-Log Remove Crypto	740	pH Adjustment
365	1-Log Treatment of Crypto	741	pH Adjustment, Post
366	1.5-Log Treatment of Crypto	742	pH Adjustment, Pre
367	2-Log Treatment of Crypto	996	Treatment Applied by Seller
368	2.5-Log Treatment of Crypto	997	Treatment Applied at Plant
369	3-Log Treatment of Crypto	998	Treatment Applied at Entry Point

Treatment Codes - Additional Treatment Applied Elsewhere
Code Treatment Process
A996   Treatment Applied by Seller
A997   Treatment Applied at Plant
A998   Treatment Applied at Entry Point

Disinfection By-Products Control

Code	Treatment Process	Code	Treatment Process
B121	Activated Carbon, Granular	B345	Filtration, Rapid Sand
B125	Activated Carbon, Powder	B360	Flocculation
B141	Aeration, Cascade	B500	Lime-Soda Ash
B143	Aeration, Diffused	B541	Ozonation, Post
B145	Aeration, Packed Tower	B543	Ozonation, Pre
B147	Aeration, Slat Tray	B600	Rapid Mix
B149	Aeration, Spray	B640	Reverse Osmosis
B160	Algae Control	B660	Sedimentation
B200	Chloramines	B720	Ultraviolet Radiation
B220	Chlorine Dioxide	B741	pH Adjustment, Post
B240	Coagulation	B742	pH Adjustment, Pre
B344	Filtration, Pressure Sand		

Corrosion Control

Code	Treatment Process	Code	Treatment Process
C360	Flocculation	C500	Lime – Soda Ash Addition
C441	Inhibitor, Bimetallic Phosphate	C600	Rapid Mix
C443	Inhibitor, Hexametaphosphate	C620	Reducing Agents
C445	Inhibitor, Orthophosphate	C680	Sequestration
C447	Inhibitor, Polyphosphate	C740	pH Adjustment
C449	Inhibitor, Silicate	C741	pH Adjustment, Post
C473	Converted (FRDS-1.5)	C742	pH Adjustment, Pre

Disinfection

Code	Treatment Process	Code	Treatment Process
D190	Brominization (special use)	D369	3-Log Treatment of Crypto
D200	Chloramines	D370	4-Log Remove/Inactivate Crypto
D220	Chlorine Dioxide	D371	5.0-Log Remove/Inactivate Crypto
D346	Filtration, Slow Sand	D372	5.5-Log Remove/Inactivate Crypto
D361	4-Log Treatment of Viruses	D401	Chlorination, Gaseous, Post
D362	3-Log Remove/Inactivate G Lamblia	D403	Chlorination, Gaseous, Pre
D363	4-Log Remove/Inactivate Viruses	D421	HypoChlorination, Post
D364	2-Log Remove Crypto	D423	HypoChlorination, Pre
D365	1-Log Treatment of Crypto	D455	Iodine
D366	1.5-Log Treatment of Crypto	D461	Chlorination (FRDS-1.5)
D367	2-Log Treatment of Crypto	D541	Ozonation, Post
D368	2.5-Log Treatment of Crypto	D543	Ozonation, Pre
		D720	Ultraviolet Radiation

Dechlorination

Code	Treatment Process	Code	Treatment Process
E121	Activated Carbon, Granular	E149	Aeration, Spray
E141	Aeration, Cascade	E620	Reducing Agents
E143	Aeration, Diffused	E623	Reducing Agent, Sodium Bisulfate
E145	Aeration, Packed Tower	E625	Reducing Agent, Sodium Sulfite
E147	Aeration, Slat Tray	E627	Reducing Agent, Sulfur Dioxide

Iron Removal

Code	Treatment Process		Code	Treatment Process
F141	Aeration, Cascade		F460	Ion Exchange
F143	Aeration, Diffused		F543	Ozonation, Pre
F145	Aeration, Packed Tower		F560	Permanganate
F147	Aeration, Slat Tray		F580	Peroxide
F149	Aeration, Spray		F600	Rapid Mix
F300	Distillation		F640	Reverse Osmosis
F343	Filtration, Green Sand		F660	Sedimentation
F344	Filtration, Pressure Sand		F680	Sequestration
F345	Filtration, Rapid Sand		F700	Sludge Treatment
F403	Gaseous Chlorination, Pre		F740	pH Adjustment
F423	HypoChlorination, Pre		F742	pH Adjustment, Pre

Inorganics Removal

Code	Treatment Process		Code	Treatment Process
I100	Activated Alumina		I360	Flocculation
I121	Activated Carbon, Granular		I460	Ion Exchange
I147	Aeration, Slat Tray		I500	Lime-Soda Ash
I180	Bone Char		I600	Rapid Mix
I240	Coagulation		I640	Reverse Osmosis
I300	Distillation		I660	Sedimentation
I320	Electrodialysis		I680	Sequestration
I344	Filtration, Pressure Sand		I700	Sludge Treatment
I345	Filtration, Rapid Sand		I742	pH Adjustment, Pre

Manganese Removal

Code	Treatment Process		Code	Treatment Process
M300	Distillation		M543	Ozonation, Pre
M343	Filtration, Green Sand		M560	Permanganate
M403	Gaseous Chlorination, Pre		M640	Reverse Osmosis
M423	HypoChlorination, Pre		M680	Sequestration

No Treatment At Source

Code	Treatment Process		Code	Treatment Process
N000	No Treatment/Not Applicable		N996	Treatment Applied by Seller
N349	Unfiltered, Avoiding Filtration		N997	Treatment Applied at Plant
N350	Unfiltered, Must Install Filtration		N998	Treatment Applied at Entry Point
N351	SWTR: Not Subject to SWTR			

Organics Removal

Code	Treatment Process		Code	Treatment Process
O121	Activated Carbon, Granular		O403	Gaseous Chlorination, Pre
O125	Activated Carbon, Powder		O423	HypoChlorination, Pre
O141	Aeration, Cascade		O543	Ozonation, Pre
O143	Aeration, Diffused		O560	Permanganate
O145	Aeration, Packed Tower		O580	Peroxide
O147	Aeration, Slat Tray		O620	Reducing Agents
O149	Aeration, Spray		O640	Reverse Osmosis
O160	Algae Control		O660	Sedimentation
O240	Coagulation		O742	pH Adjustment, Pre
O300	Distillation			
O345	Filtration, Rapid Sand			
O360	Flocculation			

Particulate Removal

Code	Treatment Process	Code	Treatment Process
P240	Coagulation	P348	Filtered
P300	Distillation	P360	Flocculation
P341	Filtration, Cartridge	P520	Micro Screening
P342	Filtration, Diatomaceous Earth	P600	Rapid Mix
P344	Filtration, Pressure Sand	P660	Sedimentation
P345	Filtration, Rapid Sand	P700	Sludge Treatment
P346	Filtration, Slow Sand	P741	pH Adjustment, Post
P347	Filtration, Ultrafiltration	P742	pH Adjustment, Pre

Radionuclide Removal

Code	Treatment Process	Code	Treatment Process
R100	Activated Alumina	R344	Filtration, Pressure Sand
R121	Activated Carbon, Granular	R345	Filtration, Rapid Sand
R141	Aeration, Cascade	R360	Flocculation
R143	Aeration, Diffused	R460	Ion Exchange
R145	Aeration, Packed Tower	R500	Lime-Soda Ash
R147	Aeration, Slat Tray	R600	Rapid Mix
R149	Aeration, Spray	R640	Reverse Osmosis
R180	Bone Char	R660	Sedimentation
R240	Coagulation	R680	Sequestration
R300	Distillation	R700	Sludge Treatment
R320	Electrodialysis	R742	pH Adjustment, Pre

Softening   (Hardness Removal)

Code	Treatment Process	Code	Treatment Process
S240	Coagulation	S600	Rapid Mix
S300	Distillation	S640	Reverse Osmosis
S344	Filtration, Pressure Sand	S660	Sedimentation
S345	Filtration, Rapid Sand	S680	Sequestration
S360	Flocculation	S700	Sludge Treatment
S460	Ion Exchange	S742	pH Adjustment, Pre
S500	Lime-Soda Ash		

Taste / Ordor Control

Code	Treatment Process	Code	Treatment Process
T121	Activated Carbon, Granular	T160	Algae Control
T125	Activated Carbon, Powder	T403	Gaseous Chlorination, Pre
T141	Aeration, Cascade	T423	HypoChlorination, Pre
T143	Aeration, Diffused	T543	Ozonation, Pre
T145	Aeration, Packed tower	T560	Permanganate
T147	Aeration, Slat Tray	T580	Peroxide
T149	Aeration, Spray		

Treatment Other/Unknown

Code	Treatment Process
X001	Treatment Not Reported (Unknown)
Z380	Fluoridation

For More Information
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