



MONITORING WAIVER APPLICATION INSTRUCTIONS

A. Introduction:

The Department promulgated a General Update to Chapter 109 (Safe Drinking Water) regulations on May 23, 2009. The purpose of the General Update was to incorporate necessary Federal requirements in order to obtain and/or maintain primacy for the Safe Drinking Water Program. Revisions to the Department's monitoring waiver protocol were also necessary in order to obtain primacy.

Public water systems (PWS) must conduct monitoring at the required initial or routine monitoring frequency or use the updated instructions and waiver application forms to request waivers. When requesting IOC waivers, PWSs should indicate on Module 1 of the waiver application the appropriate 9-year cycle from the table below. When requesting SOC, VOC, and/or PFAS waivers, PWSs should indicate on Module 1 of the waiver application the appropriate 3-year period from the table below.

Standard Monitoring Framework (9-Year Cycle) 2020 - 2028		
1 st Period 2020 – 2022	2 nd Period 2023 – 2025	3 rd Period 2026 - 2028
Standard Monitoring Framework (9-Year Cycle) 2029 - 2037		
1 st Period 2029 – 2031	2 nd Period 2032 – 2034	3 rd Period 2035 - 2037

PWSs are responsible for submitting waiver requests to the Department. Waiver requests must include all information needed for the Department to act on the request and approve or deny the request. At a minimum, waiver requests must include the following:

- Previous monitoring results.
- Inventory of land uses within Zone II (a ½ mile radius around the source unless a more rigorous delineation has been completed) for a groundwater source or within a 10-mile semi-circular radius for surface water sources.
- Inventory of substances or products used for each land use.
- Site map showing the location of PWS sources and the distance to each land use.

A separate application is required for each entry point (EP) waiver request. EPs at which treatment has been installed are not eligible for a monitoring waiver for the contaminant for which treatment has been installed.

Waiver requests and renewals must be made in writing for review and approval prior to the end of the applicable monitoring period. Until the waiver request or renewal is approved, the PWS is responsible for conducting all required monitoring.

All waivers are effective for one compliance period and may be renewed in each subsequent compliance period. The Department retains the right to revise or revoke any monitoring waiver if the conditions change under which the waiver was approved.

B. Submitting A Waiver Application:

The waiver application includes the following Modules:

Module Number	Title	Please Check
1	Completeness Report	☐
2	IOC Waiver Request	☐
5	Asbestos Waiver Request	☐
3	VOC Waiver Request	☐
4	SOC Waiver Request	☐
6	Waiver Renewal Request	☐
7	Site Map and Land Use Inventory	☐
8	PFAS Waiver Request	☐

IOC = Inorganic Chemicals; VOC = Volatile Synthetic Organic Chemicals; SOC = Synthetic Organic Chemicals

All submissions must include Module 1 (Completeness Report) and Module 7 (Site Map and Land Use Inventory). Modules 2 – 5 and 8 shall be included, as appropriate. Module 6 shall be used when requesting a waiver renewal.

Completed applications must be submitted to the appropriate local DEP office. Please see Section K for a list of local DEP offices.

DEP sanitarians and hydrogeologists will review the monitoring waiver application and determine if a waiver can be granted for that parameter(s).

If after this determination the PWS believes additional waivers can be demonstrated, a hydrogeologic investigation may be conducted by the PWS. It is recommended that the PWS contact and inform the regional hydrogeologist regarding the nature of the investigation prior to beginning work. Results of the investigation should be submitted to the regional hydrogeologist for review. The PWS will be notified of the Department's determination.

C. Fees:

As per 109.1403, completed applications must be accompanied by the following fee:

Waiver Type	Fee for 1 st Contribution Area	Fee for Each Additional Contribution Area
VOC use waiver	\$100	\$50
SOC use waiver	\$100	\$50
SOC susceptibility waiver	\$300	\$150
IOC/Asbestos waiver	\$100	\$50
PFAS use waiver	\$100	\$50
Renewals	\$50	\$25

Fees will be based on waiver type, taking into consideration the following conditions:

- For PWSs with multiple waivers all in the same contributing area, the fee will be as indicated in the table above, as applicable. For groundwater systems, the contributing area is the surface area overlying the portion of the aquifer through which water is diverted to a well or flows to a spring or infiltration gallery.
- For PWSs with sources in two or more contributing areas, the fee will be as indicated in the table above, as applicable, for the first source, plus ½ of the applicable fee for each additional contributing area in which the source is located (as shown in the 3rd column of the table above).
- For PWSs that are consecutive water systems applying for a distribution system asbestos waiver only, the fee will only be as indicated on the table above for one contribution area.

- PWSs renewing a waiver with no changes in land uses or potential sources of contamination will incur a \$50 renewal fee for the first contributing area and \$25 ($\$50 \times \frac{1}{2}$) for each additional contributing area. PWSs that indicate changes in land use and/or potential sources of contamination will incur a fee equal to the initial fee for the waiver type.

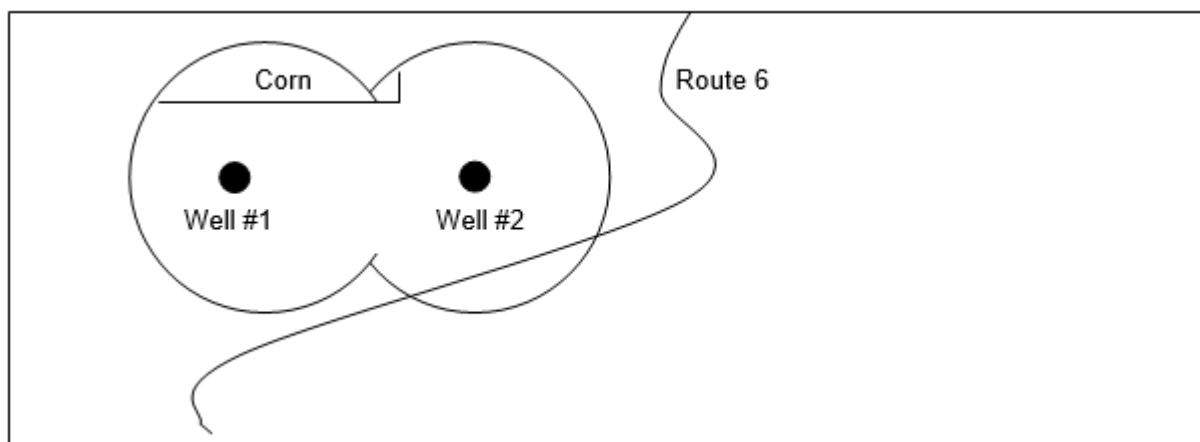
The source contributing area can be obtained from the PWS's Source Water Assessment report. This area may be a default $\frac{1}{2}$ mile radius around the source, a key-hole-shaped area around the source, or the area determined by a more rigorous delineation.

Here are several examples that describe how to calculate waiver application fees.

Example #1: ABC Water System

- Requesting an SOC Susceptibility Waiver and IOC Use Waiver
- Number of Sources = 2 Wells (Well #1 & #2)
- Number of Entry Points = 1 EP (101)
- Number of Source Contributing Areas = 1

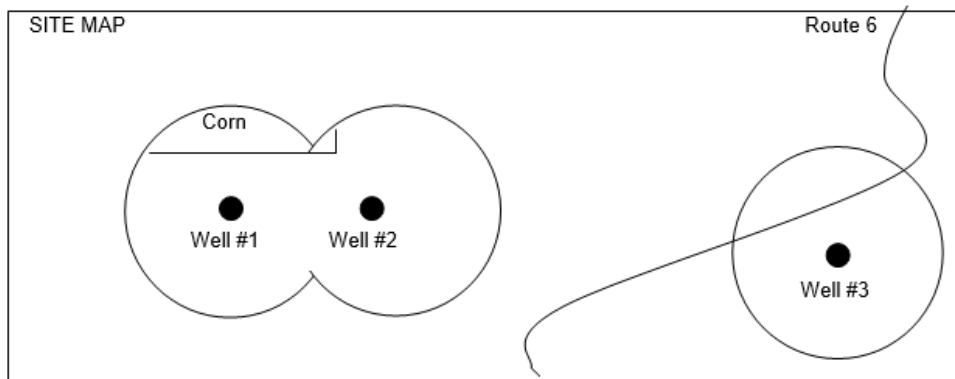
SITE MAP



Fee =	\$300	SOC Susceptibility Waiver Fee for 1 st Source Contributing Area
	\$100	IOC Use Waiver Fee for 1 st Source Contributing Area
	<u>+ \$.00</u>	Fee for Each Additional Source Contributing Area
	\$400	

Example #2: XYZ Water System

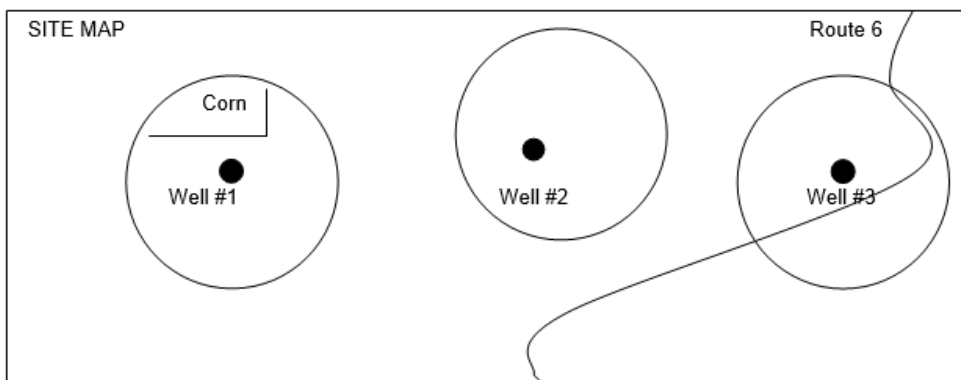
- Requesting SOC Susceptibility Waivers for Each Contribution Area
- Number of Sources = 3 Wells (Well #1, #2 & #3)
- Number of Entry Points = 2 EPs (101 & 102)
- Number of Source Contributing Areas = 2



Fee = \$300 SOC Susceptibility Waiver Fee for 1st Source Contributing Area
 + \$150 SOC Susceptibility Waiver Fee for Each Additional Source Contributing Area (\$300 x ½)
 \$450

Example #3: Pure Water System

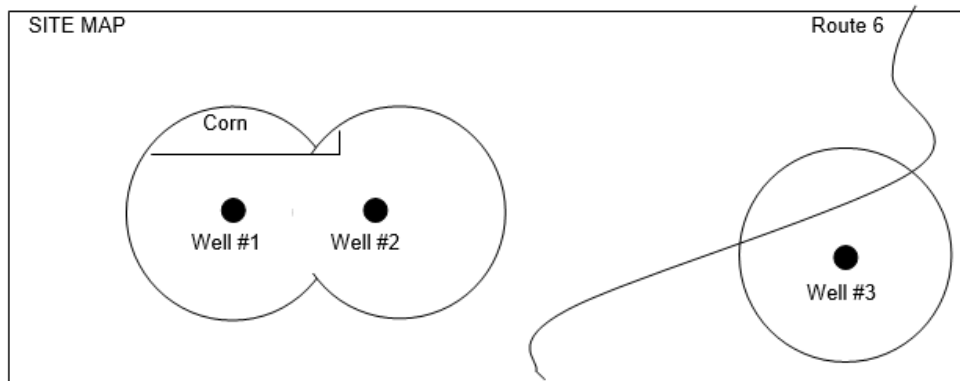
- Requesting VOC Use Waivers for all 3 Contribution Areas
- Requesting IOC Use Waiver for 1st Contribution Area
- Requesting SOC Susceptibility Waiver for 1st and 2nd Contribution Area
- Number of Sources = 3 Wells (Well #1, #2 & #3)
- Number of Entry Points = 2 EPs (101 & 102)
- Number of Source Contributing Areas = 3



Fee = \$100 VOC Use Waiver Fee for 1st Source Contributing Area
 \$50 VOC Use Waiver Fee for 2nd Source Contributing Area (\$100 x ½)
 \$50 VOC Use Waiver Fee for 3rd Source Contributing Area (\$100 x ½)
 \$100 IOC Use Waiver Fee for 1st Source Contributing Area
 \$300 SOC Susceptibility Waiver Fee for 1st Source Contributing Area
 \$150 SOC Susceptibility Waiver Fee for 2nd Source Contributing Area (\$300 x ½)
 \$750

Example #4: XYZ Water System

- Requesting Waiver Renewal for SOC Susceptibility Waivers for Each Contribution Area
- Number of Sources = 3 Wells (Well #1, #2 & #3)
- Number of Entry Points = 2 EPs (101 & 102)
- Number of Source Contributing Areas = 2



Fee = \$50 SOC Waiver Renewal Fee for 1st Source Contributing Area
 + \$25 SOC Waiver Renewal Fee for Each Additional Source Contributing Area (\$50 x ½)
 \$75

The appropriate fee must be submitted with the completed application. The fee should be determined for each public water system based on the waiver type and contributing area(s).

Checks shall be made payable to the “Commonwealth of Pennsylvania”.

D. Resources for Information about Potential Sources of Contamination:

PWSs are responsible for compiling information about the potential sources of contamination within the source protection area of their sources. PWSs should gather and update the information, as needed, using the following resources:

- Annual PWS Sanitary Surveys
- DEP Sanitary Surveys and Inspection Reports
- PWS site visits and interviews with nearby landowners
- Source Water Assessment Reports
- Wellhead and Source Water Protection Plans
- DEP databases such as eMapPA
- Other state and federal agencies*

More Information About eMapPA:

eMapPA is an advanced analytical mapping tool for the world wide web (Internet Explorer Version 5.5 or newer). The focus of eMapPA is to display environmentally relevant data to DEP contractors and the public. In addition to DEP-permitted facilities, there are over 50 map layers relating to administrative and political boundaries, culture and demographics, geology, mining, streams and water resources, and transportation networks. Tools for navigating, querying, identifying, extracting, buffering, and address matching are available for GIS analysis. All of the tools and their uses are fully explained in the Help option on the menu bar. A glossary of terms, data descriptions, and metadata are also there for assistance.

For security reasons, information regarding Dams, Explosive Storage Locations, Public Water Supplies, and certain Water Pollution Control, Water Resource, and Radiation Facilities are not displayed on eMapPA. Permit information, inspections, and other data related to these facilities can be obtained by contacting the appropriate DEP Office.

eMapPA data layers include:

- Mining Operations
- Stream Designated Uses
- TMDLs
- Air Emission Plants
- Hazardous Waste Operations
- EPA's Toxic Release Inventory
- Land Recycling and Cleanup Locations
- Wastewater Facilities
- Oil and Gas Wells
- Storage Tanks

Link to eMapPA: <http://www.depgis.state.pa.us/emappa/>

*For more information about drinking water contaminants, refer to the following websites:

- U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry (ATSDR) – This site contains fact sheets (ToxFAQs) on most contaminants. www.atsdr.cdc.gov
- PA Department of Agriculture, Bureau of Plant Industry, Division of Health and Safety – The Division manages the registration of pesticide products as well as the certification of pesticide applicators. Outreach education is done in collaboration with Penn State University's Office of Pesticide Education. Responsibilities also include administering the EPA Pesticide Cooperative Grant Agreement, Pesticide Control Act, Farm Safety and Occupational Health Act and provisions of the Land Recycling Act.
- National Pesticide Information Retrieval System (NPIRS) – This site provides a link to a database that contains information about pesticides currently registered for distribution and sale in the Commonwealth of PA. Users can search for pesticides using active ingredients or trade names. http://npirspublic.ceris.purdue.edu/state/state_menu.aspx?state=PA
- Penn State University:
 - Cooperative Extension, <http://extension.psu.edu>
 - Pesticide Education Program, <https://extension.psu.edu/about-the-pesticide-education-program>
- The Pesticide Action Network (PAN) Pesticide Database – This site contains toxicity and regulatory information for pesticides. <http://www.pesticideinfo.org>

E. IOC Monitoring Waivers:

9-year waivers may be granted for inorganic chemicals (IOC) on a contaminant-by-contaminant basis. The following IOCs are eligible for a waiver:

- | | | |
|------------------------------------|-----------------------------------|-----------------------------------|
| ☐ Antimony | ☐ Chromium | ☐ Thallium |
| ☐ Arsenic | ☐ Cyanide | |
| ☐ Asbestos* | ☐ Fluoride | |
| ☐ Barium | ☐ Mercury | |
| ☐ Beryllium | ☐ Nickel | |
| ☐ Cadmium | ☐ Selenium | |

*Complete Module 5 for Asbestos waivers.

Waivers may be granted for EPs associated with both surface water and groundwater sources.

In order to be eligible for an IOC waiver, the following criteria must be met:

1. Three (3) consecutive rounds of monitoring have been conducted that indicate contaminant levels are reliably and consistently below (< 80%) the MCL.
2. For cyanide, PWS sources are not vulnerable to any industrial sources of cyanide.
3. For the IOCs listed above (except cyanide), PWS sources are not vulnerable to any land uses that disturb the bedrock or have the potential to affect IOC concentrations within Zone II (a ½ mile radius around the source unless a more rigorous delineation has been completed) for groundwater sources or within a 10-mile, semi-circular radius for surface water sources. Land uses that disturb the bedrock or have the potential to affect IOC concentrations include mining or drilling operations, oil and gas wells, NPDES discharges, landfills, environmental clean-up sites, etc.

Module 7 (Site Map and Land Use Inventory) must be completed for each source. Identify whether the source is vulnerable to any: (1) industrial sources of cyanide, or (2) land uses that have the potential to affect IOC concentrations.

If a 9-year waiver is approved, monitoring for that EP may be reduced to 1 sample per 9-year compliance cycle.

F. Asbestos Monitoring Waivers:

Asbestos:

A system needs to apply for both an Entry Point Waiver AND a Distribution Waiver.

9-year waivers for asbestos may be granted to PWSs with surface water and groundwater sources if the following criteria are met:

1. Distribution Waiver Criteria - The PWS's distribution system does not contain asbestos cement pipe, or if the PWS's distribution system does contain asbestos cement pipe, the PWS has implemented and maintains optimized corrosion control treatment (OCCT).
2. Entry Point Waiver Criteria - PWS sources are not vulnerable to asbestos contamination, including contamination from asbestos-bearing rock formations. List all Entry Points for which a waiver is being requested.

The following rock types have been identified as asbestos-bearing rock formations:

- | | |
|---|---|
| 1. Xmgh – Mafic gneiss, hornblende bearing | 8. gga – Gabbroic Gneiss and Gabbro |
| 2. Xmgp – Mafic gneiss, pyroxene bearing | 9. gg – Graphitic Gneiss |
| 3. Xmg – Metagabbro | 10. fgh – Felsic gneiss, hornblende bearing |
| 4. Xs – Serpentinite | 11. fgp – Felsic gneiss, pyroxene bearing |
| 5. Xwv –Metavolcanics – Wissahickon Formation | 12. hg – Hornblende Gneiss |
| 6. mb – Metabasalt | 13. mgh – Mafic gneiss, hornblende bearing |
| 7. md – Metadiabase | 14. mgp – Mafic gneiss, pyroxene bearing |

If an asbestos waiver is approved, no monitoring is required during the 9-year compliance cycle.

G. VOC Monitoring Waivers:

3-year waivers may be granted for volatile synthetic organic chemicals (VOC) as a group for EPs associated with groundwater sources only. The 3-year waiver is considered a “use” waiver and is available for EPs with a previous detect where three (3) subsequent consecutive years of monitoring have been conducted with no detection of VOCs.

Land use information must be provided in order to certify that substances containing VOCs have not been used, transported, stored or disposed of within Zone II for groundwater sources. Land uses that potentially generate VOCs include:

- | | |
|--|------------------------------------|
| • Airports | • Furniture refinishing facilities |
| • Above/below ground heating oil tanks | • Industrial parks |
| • Auto repair facilities | • Junk or salvage yards |
| • Bulk fuel/oil storage, or gas stations | • Landfills or dumps |
| • Dry cleaning facilities | • Roadways or parking lots* |
| • Facilities that use/generate/store chemicals | • Railroad tracks |

*Restricted access roadways may be exempt.

If a 3-year use waiver is approved, monitoring for that EP may be reduced to one sample per 3-year compliance period.

Note: VOC monitoring waivers are not intended (or needed) for groundwater EPs that have never had a detect. Groundwater EPs that have never had a detect can qualify for and remain on reduced triennial monitoring so long as subsequent results are non-detected.

H. SOC Monitoring Waivers:

3-year use and susceptibility waivers may be granted for synthetic organic contaminants (SOC) on a contaminant-by-contaminant basis: The following SOC's are eligible for a waiver:

- | | | |
|---|--|--|
| ☐ 2, 3, 7, 8 – TCDD (Dioxin) | ☐ Di(ethylhexyl)phthalate | ☐ Hexachlorobenzene |
| ☐ 2,4-D | ☐ Dibromochloropropane | ☐ Hexachlorocyclopentadiene |
| ☐ 2,4,5-TP | ☐ Dinoseb | ☐ Lindane |
| ☐ Alachlor | ☐ Diquat | ☐ Methoxychlor |
| ☐ Atrazine | ☐ Endothall | ☐ Oxamyl (Vydate) |
| ☐ Benzo(a)pyrene | ☐ Endrin | ☐ PCBs |
| ☐ Carbofuran | ☐ Ethylene Dibromide | ☐ Pentachlorophenol |
| ☐ Chlordane | ☐ Glyphosate | ☐ Picloram |
| ☐ Dalapon | ☐ Heptochlor | ☐ Simazine |
| ☐ Di(ethylhexyl)adipate | ☐ Heptachlor epoxide | ☐ Toxaphene |

Use Waivers:

A use waiver may be granted if substances containing the SOC have not been used, transported, stored or disposed of within Zone II for groundwater sources or within a 10-mile semi-circular radius for surface water sources.

To request a use waiver, PWSs must complete Modules 1, 4, and 7 for each EP and its associated sources. Modules 4 and 7 include a land use analysis, which is designed to identify activities which use SOC's, and a pesticide/SOC use inventory, which identifies the specific substances or products being used.

Susceptibility Waivers:

PWSs with groundwater sources only that do not qualify for a use waiver for SOC's may apply for a susceptibility waiver. A susceptibility waiver requires evaluation of site-specific information, such as well construction, contaminant characteristics, geology, soil type, groundwater flow, distances to known contamination sites, and nitrate levels.

PWSs requesting a susceptibility waiver must submit previous monitoring results with no detection in order to obtain a susceptibility waiver.

Please refer to the following table for more information about SOC's.

SOCs/Pesticides/Herbicides Trade Names:

CHEMICAL NAME	TRADE NAME	USAGE
2, 3, 7, 8 – TCDD (Dioxin)	No Trade Name	Dioxin is not produced or used commercially in the US. Dioxin is a contaminant that is formed in the production of 2,4,5-trichlorophenol and several chlorinated herbicides such as silvex. Dioxin may also be formed during combustion of a variety of chlorinated organic compounds. Sources of dioxin contamination include facilities utilizing chlorine in the manufacturing process, paper mills, Superfund or environmental cleanup sites, or military installations where dioxin may be suspected of being present.
2,4-D	2,4-Dichlorophenoxy acetic acid, Acme Amin 4, Acme 3 Butyl Ester 4, Acme LV, Acme LV 6, Agrotect, Amoxone, AquaKleen, Chloroxone, Cropider, D50, Dinoxol, DMA-4, Dormone, Emulsamine BK, Emulsamine E-3, Estone, Fernesta, Fernimine, Fernoxone, Ferxone, Lawn-Keeper, Macondray, Pennamine D, Planotox, Plantgard, Tributon, Weed-B-Gon, Weedatol, Chipco Turf Herbicide D, DMA-4, Esterone pp, Formula 40, Spritz-Hormit/2, 4-D, Weed-Ag-Bar, Weedez Wonder Bar, Basagran, Acme Super Brush Killer, Acme Brush Killer 875, U 46 DP, Duplosan DP-D, Duplasan KV-Combi, Chipco Turf Kleen, 2 Plus 2, Actril DS, Mad, Gordon's Vegemec Vegetation Killer, Lentemul, SEE, Landmaster	Post-emergent herbicide used widely for selective control of broadleaf plants in a variety of crop, forest, aquatic and residential sites. It is commonly found in lawn care products; wheat, corn and other grass family herbicides; forestry products; treatments for roadside weeds; and aquatic weed control products.
2,4,5-TP	2,4,5-Trichlorophenoxy propionic acid, Silvex, Aqua Vex, Fruitone T, Kurosai, Weed-B-Gon, Amchem 2,4,5-TP, Ded-Weed, Double Strength, Kuron, Silvix-Rhap, T-Nox, Fruitone, Esteron, Brush-B-Gone, Fence Rider, Line Rider	Post-emergent herbicide used on fence rows, right-of-ways, golf courses, and lawns. Aquatic uses include control of weeds in ditches and riverbanks, reservoirs and streams. Cancelled in 1985.
Alachlor	Lasso, Pillarzo, Alatox-480, Alazine, Lozo, Lariat, Nudor Extra, Bronco, Alanex, Bullet, Stake, ALA-SCEPT, Partner, Mon-9850, Cannon, Freedom, Micro-Tech, Marksman, Shroud	Herbicide used for pre-emergent control of annual grasses and broadleaf weeds in crops, primarily on corn and soybeans.
Atrazine	Aatrex, Aktikon, Atrazinax, Atritol, Fenamin, Gesaprim, Zeaphos, Nudor Extra, Atramet Combi, Crisazina-Crisatrina Kombi, Drexel, Rhino, Farmco Amizine-AA Flowable, Marksman, Primextra, Prozine, Bicep, Conquest, Candex, Extrazine, Vestal, Rapuzin, Pramitol, Centric, A-11976E, Surpass 100, Pursuit, Buctril, Liberty ATZ, Bladex, Extrazine, Basis Gold, Ramrod, Lasso, Bullet, Harness Xtra, Mon, Cynex DF, Cy-Pro, Axiom, Laddok, Sutazine, Ida, Micro Flo, Guardsman, Altranex, Lariat	Widely used herbicide for control of broadleaf and grassy weeds in corn, rangeland, turf grass sod, forestry, grasslands and grass crops. It was also used until 1993 for control of vegetation in fallow and in non-crop land.
Benzo(a)pyrene	No trade name, a poly aromatic hydrocarbon (PAH)	Usually found in coal tar.
Carbofuran	Bay 70143, Crisfuran, Curaterr, Yaltox, Furadan, Carbodan, Carbosip, Chinufur, Kenofuran, Niagra	Broad spectrum insecticide sprayed directly onto soil and plants just after emergence to control beetles, nematodes and rootworm. It is used most often on alfalfa and rice. It was also used for termite control.
Chlordane	Forchlor, Kill-Ko, Sydane, Belt, Chlor Kil, Chlorotox, Corodane, Gold Crest C-100, Kilex Lindane, Krpchlor, Octachlor, Synklor, Termided, Topiclor 20, Velsicol 1068, Aspon-Chlordane, Ortho-Klor, Niran, Termide, Chlorohepton, Dragon, Dexol, Guardsman,	Pesticide used on agricultural crops (corn, deciduous fruits and nuts, vegetables), lawns and gardens, and ditches and roadsides. It was also used to control termites in homes. In 1988, all commercial use of chlordane in the US was cancelled. The only commercial use still permitted is for fire ant control in power transformers.
Dalapon	Dalapon-Na, Ded-Weed, Devipon, Gramevin, Revenge, Unipon, Dowpon M, Radapon, Basfapon, Basinex P and N, Alatex, Dalacide, DPA, Kenapon, Liropon	Selective herbicide used to control grasses in a wide variety of crops, including fruit trees, beans, corn and peas. It is also registered for use in a number of non-crop applications, such as lawns, drainage ditches, along railroad tracks and in industrial areas. Not registered for use since the 1989.
Di(ethylhexyl)adipate	DOA, a plasticizer	Used as a plasticizer and vinyl resins compound.

CHEMICAL NAME	TRADE NAME	USAGE
Di(ethylhexyl)phthalate	DOP, DEHP, BEHP, Bisoflex, Eviplast, Octoil, Platimol, Sicol, a plasticizer	Used as a plasticizer for resins, PVC and rubber. It is also used in insect repellent formulations, cosmetics, rubbing alcohol, liquid soaps/detergents, and other uses.
Dibromochloropropane (DBCP)	Nemafume, Namanax, Nemaset, BBC 12, Fumazone, Nemagon, Nematocide, Oxy DBCP	Used as a soil fumigant for nematode control. All registrations were cancelled by 1985.
Dinoseb	DNBP, Basanite, Elgetol 318, HelFire, Kiloseb, Nitropone C, Sinox General, Caldon, Chemox, Chemsect, Dinitro, Dn-289, Dynamyte, Gebutox, Premerge, Subitex, Unicrop DNBP, Dinitro Weed Killer, Vertac, Dyanap, Spurge, Contact	Selective pre- or post-emergent herbicide used on numerous crops (cereals, peas, beans, potatoes, corn). It is also used as an insecticide and miticide. Registrations were cancelled in 1986.
Diquat	Midstream, Actor, Aquacide, Dextrone, Wedtrine-D, Preeglone, Priglone, Weedol, Pathclear, DNBP, Krop, Reglox, Klean, QuikPro, Reglone	Herbicide used on aquatic weeds and crops.
Endothall	Aquathol, Endothal Weed Killer, Hydout, Hydrothol, Niagrathal, Des-i-cate, Penco, Weedtrine, Byramin, Weedaway, Herbicide 273	Used as a defoliant for a wide range of crops and as a herbicide for both terrestrial and aquatic weeds.
Endrin	Hexadrin, Endrex, Endrisol, Nendren, Rid a Bird, De-Pester, Valco, Best 4 Servis	Insecticide used mainly on field crops such as corn, cereals, ornamentals and other crops. It has also been used for grasshoppers in non-cropland and to control voles and mice in orchards. The pesticide is cancelled; however, it persists for extremely long periods of time.
Ethylene Dibromide (EDB)	Bromofume, E-D-Bee, KopFume, Nephis, Dowfume, Soilbrom, Infuco Dibrome, Tri-X	Used as a solvent for resins, gums and waxes; in waterproofing preparations; as a chemical intermediate in the synthesis of dyes and pharmaceuticals; and as a fumigant, insecticide, nematocide for grains and fruit.
Glyphosate	Roundup, Rodeo, Herbolex, Glycel, Honcho, Ranger, Sting, Hockey, Knockout, Shackle, Kleen-up, Myster, Accord, Azural, Arcade, Landmaster, Aquamaster, QuikPro, Duramax, Durango, Glyphomax, Touchdown	Widely used post-emergent, systemic, and non-selective herbicide used on annual and perennial plants of all types and in commercial, residential and agricultural settings. The most common uses include control of broadleaf weeds and grasses in hay/pasture, soybeans, field corn, ornamentals, lawns/turf, forest plantings, greenhouses and right-of-ways.
Heptachlor	Drinox H-34, Heptamul, Heptox, H-60, Termide, Chlorohepton	Insecticide used heavily in the 1960s and 1970s in household and agricultural settings. It was used extensively to control termites and pests on corn crops. Most uses of the product were cancelled in 1978. The only permitted commercial use is for fire ant control in buried, pad-mounted electric power transformers, and in underground cable TV and telephone cable boxes. It is very persistent in the environment.
Heptachlor epoxide	Degradation product of Heptachlor	Degradation product of Heptachlor.
Hexachlorobenzene	Perchlorabenzene, Anticarie, Ceku C.B., No Bunt	Produced as a byproduct or waste material when making other chlorine-containing compounds (TCE, PCE, vinyl chloride, atrazine, etc.). It is used to make rubber, dyes and wood preservatives. Other uses include an additive in explosives, in electrode manufacture, and as a fungicide on grains, especially wheat. It is very persistent in the environment.
Hexachlorocyclopentadiene	Intermediate in the synthesis of cyclodiene insecticides: composed of combined chlorine	Used as an intermediate in chemical manufacture, including the synthesis of chlorinated pesticides, flame retardants, resins, dyes, pharmaceuticals, plastics, etc.
Lindane	Agronexit, Forlin, Gamaphex, Gammex, Isotox, Lacco Hi Lin, Lacco Lin-O-Mulsion, Lindagam, Lin-O-Sol, Novigam, Silvanol, Agrox 3-Way, Gamatin, Germate, Vitavax, Granol, Landafor, Lintox, Nexit, Novigam, Lindafor, OR-CAL METAM, Kill-Ko	Insecticide used for soil treatment, foliage application on fruit and nut trees. Most uses were restricted in 1983. It is currently used primarily for treating wood-inhabiting beetles and seeds.
Methoxychlor	Double-M, Chemform, Flo Pro Mc Seed Protectant, Moxie, Alfa-Tox, Dual, Pennant, Dueler, Medal, Ontract	Insecticide used on fruit and shade trees, home and garden applications, and around buildings.

CHEMICAL NAME	TRADE NAME	USAGE
Oxamyl	DPX-1410, Vydate, Thioxamyl	Insecticide, nematocide used for certain insects, mites or nematodes. Used on many field crops, fruits and vegetables. It is most widely used on apples, potatoes and tomatoes.
PCBs	No Trade Name	PCBs were manufactured from 1929 until they were banned in 1979. Prior to 1979, PCBs entered the environment during manufacture and use. PCBs were used as hydraulic fluids, plasticizers, adhesives, fire retardants, way extenders, dedusting agents, pesticide extenders, inks, lubricants, cutting oils, in heat transfer systems, and in carbonless reproducing paper. Today, PCBs can still be released into the environment from hazardous waste sites; illegal or improper dumping of PCB wastes; leaks or releases from electrical transformers, capacitors, water pumps and other electrical equipment; and from disposal of PCB-containing products into municipal or other landfills not designed to handle hazardous waste. PCBs may also be released into the environment by the burning of some wastes in municipal and industrial incinerators.
Pentachlorophenol (PCP)	Penta, Penwar, Pentacon, Penta Ready, Penta WR, Penta Plus 40, Penta EC 30, Penta Preservative Ready-to-Use, Glazd Penta and Block Penta, Penchlorol, Sinituho, Antimicrobial, Dow Pentachlorophenol DP-2, Dowicide EC7, Priltox, Santobrite, Santophen, Weedone, Permatox, Quancide, Dowicide, Mitrol, Chem-Tox, Lumberite, Moss Stop, Dura Treat II	Applied commercially in the treatment of utility poles, fences, shingles, walkways, building components, piers, docks and porches, and flooring and laminated beams. It is also used in agricultural purposes such as wood protection treatment to buildings or products, and fence rows or hedgerows.
Picloram	Amdon, Borolin, K-Pin, Access, Tordon, Grazon, Sure Death, Toram	Systemic herbicide used on a variety of deep-rooted herbaceous weeds. Used for right-of-way weed control, especially by utility companies.
Simazine	Cekusan, Framed, Caliber 90, Simadex, Aquazine 80 W, Amizine, Simazol, Remtal Sc, Pathclear, Sim-Trol, Alco Printrex	Pre-emergent, selective herbicide used for control of most annual grasses and broad leaf weeds on corn, berry crops, beans, and fruit orchards. It is also used on non-crop areas such as lawns, farm ponds, and fish hatcheries.
Toxaphene	Camphoclor, Motox, Phenacide, Phenatox, Strobane T-90, Toxakil, Toxon 63, Attac, Motox, Phenatox, Polychloro camphene, Kill-Ko, Prokil, Farmchem Agri-Tox, Diptic	Used as an insecticide for cotton, fruit, vegetables, livestock and poultry, soybeans and wheat. All formulations are now Restricted Use Pesticides. It is very persistent in the environment.

I. PFAS Monitoring Waivers:

3-year use waivers may be granted for per- and polyfluoroalkyl substances (PFAS) on a contaminant-by-contaminant basis. Susceptibility waivers will not be granted for PFAS. The following PFAS are eligible for a use waiver:

☐ Perfluorooctanoic acid (PFOA)

☐ Perfluorooctanesulfonic acid (PFOS)

Use Waivers:

PFAS use waivers are applicable to PWSs conducting annual or more frequent monitoring as a result of a previous detection. Only entry points (EPs) using groundwater or groundwater under the direct influence of surface water (GUDI) sources are eligible for a PFAS use waiver. A use waiver may be granted if three consecutive years of quarterly or annual samples show no detections, and if substances containing the PFAS have not been used, transported, stored or disposed of within Zone II for groundwater sources. EPs with PFAS removal treatment are not eligible for a PFAS use waiver. Use waivers for PFOA and PFOS will be determined independently.

To request a use waiver, PWSs must complete Modules 1, 8, and 7 for each EP and its associated sources. Modules 8 and 7 include a land use analysis, which is designed to identify activities which use PFAS.

If granted, a PFAS use waiver reduces monitoring frequency from annual to triennial. Triennial monitoring for PFAS should occur during the same year as reduced monitoring for SOC and VOCs.

J. Waiver Renewal Requests:

PWSs may request renewals for the waivers issued during the prior compliance period. The renewal application serves the following purposes:

- Confirms that previous monitoring data continues to meet specific criteria (i.e., IOC levels are reliably and consistently < MCL, VOC and SOC levels are ND).
- Identifies any changes to the conditions under which the waiver was initially approved (i.e., any changes to the land uses and/or substances/products used within Zone II; any changes to groundwater pumping rates, the system's configuration or operating procedures, or stream flows or characteristics).

All waiver renewal applications must include Module 1 (Completeness Report) and Module 6 (Waiver Renewal Request). When there have been changes to land uses and/or substances/products used then you must also include:

- Module 7 (Site Map and Land Use Inventory).
- A fee calculated in accordance with Section C. of these instructions.

K. Example Completed Waiver Application Form:

ABC Water System:

- Population = 500
- Number of Sources = 2 wells (Well #1 & #2)
- Number of Entry Points = 1 EP (101)
- Number of Source Contribution Areas = 1

Waivers being requested: Select IOCs & SOCs, and Asbestos.

Forms included in the waiver application: Module 1, 2, 4, 5 & 7

Historical Sample Results:

Parameter	Sample Date	Result (mg/L)	MCL (mg/L)
Arsenic	5/5/2006	0.006	0.010
	6/1/2009	0.003	
	5/10/2010	0.007	
Mercury	3/26/2003	0.0005	0.002
	5/5/2006	ND	
	6/1/2009	ND	
Benzo(a)pyrene	3/7/1995	ND	0.0002
	5/4/1995	ND	
	8/1/1995	ND	
	11/7/1995	ND	
Di(ethylhexyl)adipate	3/7/1995	ND	0.4
	5/4/1995	ND	
	8/1/1995	ND	
	11/7/1995	ND	
Di(ethylhexyl)phthalate	3/7/1995	ND	0.006
	5/4/1995	ND	
	8/1/1995	ND	
	11/7/1995	ND	
Dibromochloropropane	3/7/1995	ND	0.0002
	5/4/1995	ND	
	8/1/1995	ND	
	11/7/1995	ND	
Ethylene Dibromide	3/7/1995	ND	0.00005
	5/4/1995	ND	
	8/1/1995	ND	
	11/7/1995	ND	

MONITORING WAIVER APPLICATION

MODULE 1 – COMPLETENESS REPORT

A. Compliance Period:

Enter the Compliance Cycle and Period for which Waivers have been Requested: (Refer to the table in Section A of the instructions. Document ID# **3930-FM-BSDW0020a**).

9-year Compliance Cycle (IOC Waivers): 2020 - 2028

3-year Compliance Period (VOC/SOC Waivers): 2020 - 2022

B. Public Water System (PWS) Information:

PWS ID#: 1234567
PWS Name: ABC Water System
Mailing Address: 123 Water Street Anytown, PA 12345
Contact Person Name and Phone Number: John Doe 555-1212
System Type: ☒ Community ☐ Nontransient Noncommunity ☐ Bottled Water (SOCs only)

C. Entry Points (EP), Associated Sources and Treatment Plant (TP) Information:*

[illegible]

*Include all permanent, interim, reserve, seasonal and emergency EPs and sources.

PWSID # 1234567

D. Please indicate which of the following modules are included in this submission:

Module Number	Title	Please Check
1	Completeness Report	☒
2	IOC Waiver Request	☒
5	Asbestos Waiver Request	☒
3	VOC Waiver Request	☐
4	SOC Waiver Request	☒
6	Waiver Renewal Request	☐
7	Site Map and Land Use Inventory	☒

IOC = Inorganic Chemicals; VOC = Volatile Synthetic Organic Chemicals; SOC = Synthetic Organic Chemicals

E. Waiver Application Fee:

Fees are based on Waiver type and the number of source contribution areas.

Waiver Type	Fee for 1 st Contribution Area	Fee for Each Additional Contribution Area
VOC use waiver	\$100	\$50
SOC use waiver	\$100	\$50
SOC susceptibility waiver	\$300	\$150
IOC waiver	\$100	\$50

Use information about your system and the table above to complete the following (This example is based on a PWS requesting a VOC use waiver and SOC use waiver for two contributing areas each):

The VOC use waiver fee for the 1st contributing area: \$100 (a)

The VOC use waiver fee for additional contribution area \$50 (b)

Total of lines (a) + (b) = \$150 (c)

The SOC use waiver fee for the 1st contributing area: \$100 (a)

The SOC use waiver fee for additional contribution area \$50 (b)

Total of lines (a) + (b) = \$150 (c)

The SOC susceptibility waiver fee for the 1st contributing area: \$300 (a)

The SOC susceptibility waiver fee for additional contribution area \$150 (b)

Total of lines (a) + (b) = \$450 (c)

The IOC & Asbestos use waiver fee for the 1st contributing area: \$100 (a)

The IOC use waiver fee for additional contribution area \$50 (b)

Total of lines (a) + (b) = \$150 (c)

Add amounts from all lines (c) and enter amount here to calculate total fee: \$900

F. Certification:

The information contained herein is true and correct to the best of my knowledge, information and belief. The information given is subject to the penalty provisions of the Crimes Code regarding unsworn falsification to authorities (49 P.S. § 4904).

John Doe

Signature

12/31/2019

Date

Example



MONITORING WAIVER APPLICATION

MODULE 2 – IOC WAIVER REQUEST

A. General:

Entry Point (EP) ID #: 101
(Please complete a separate form for each EP)

IOC waivers are issued on a contaminant-by-contaminant basis for groundwater and surface water sources. A waiver is being requested for the following IOCs: (Please check all that apply)

☐ Antimony	☐ Barium	☐ Chromium	☒ Mercury
☒ Arsenic	☐ Beryllium	☐ Cyanide	☐ Nickel
☐ Asbestos*	☐ Cadmium	☐ Fluoride	☐ Selenium
☐ Thallium			

* Complete Module 5 for Asbestos Waivers.

B. Historical Monitoring Results:

Have three (3) consecutive rounds of monitoring been conducted that indicate contaminant levels are reliably and consistently below (< 80%) the MCL?

☒ YES ☐ NO

Please attach laboratory results.

C. Please indicate which of the following modules are included in this submission:

1. Are the sources vulnerable to any industrial sources of cyanide?

☐ YES ☒ NO ☐

N/A

2. Are the sources vulnerable to any land uses that disturb the bedrock or have the potential to affect IOC concentrations, such as mining or drilling operations, oil and gas wells, NPDES discharges, landfills, environmental clean-up sites, etc.

☐ YES ☒ NO

Please complete Module 7 (Site Map and Land Use Inventory) for each source and identify all land uses, including industrial sources of cyanide and land uses that disturb the bedrock or have the potential to affect IOC concentrations.

3. Please describe the steps taken to determine land uses that potentially affect IOC concentrations:

We reviewed all DEP inspection reports and sanitary surveys, our annual sanitary surveys, and the Source Water Assessment Report. We used eMapPA to locate any additional sources of contamination. We surveyed our source protection area for land uses that disturb the bedrock.

D. Certification:

The information contained herein is true and correct to the best of my knowledge, information and belief. The information given is subject to the penalty provisions of the Crimes Code regarding unsworn falsification to authorities (49 P.S. § 4904).

John Doe

Signature

12/31/2019

Date

Example



MONITORING WAIVER APPLICATION

MODULE 4 – SOC WAIVER REQUEST

A. General:

Entry Point (EP) ID #: 101
(Please complete a separate page for each EP)

SOC use and susceptibility waivers are issued on a contaminant-by-contaminant basis. Please indicate which type of waiver is being requested for the following SOCs:
(Please check all that apply)

U	S		U	S	
☐	☐	2, 3, 7, 8 – TCDD (Dioxin)	☐	☐	Endrin
☐	☐	2,4-D	☐	☒	Ethylene Dibromide
☐	☐	2,4,5-TP	☐	☐	Glyphosate
☐	☐	Alachlor	☐	☐	Heptochlor
☐	☐	Atrazine	☐	☐	Heptachlor epoxide
☐	☒	Benzo(a)pyrene	☐	☐	Hexachlorobenzene
☐	☐	Carbofuran	☐	☐	Hexachlorocyclopentadiene
☐	☐	Chlordane	☐	☐	Lindane
☐	☐	Dalapon	☐	☐	Methoxychlor
☐	☒	Di(ethylhexyl)adipate	☐	☐	Oxamyl (Vydate)
☐	☒	Di(ethylhexyl)phthalate	☐	☐	PCBs
☐	☒	Dibromochloropropane	☐	☐	Pentachlorophenol
☐	☐	Dinoseb	☐	☐	Picloram
☐	☐	Diquat	☐	☐	Simazine
☐	☐	Endothall	☐	☐	Toxaphene

U = Use Waiver

S = Susceptibility Waiver (groundwater sources only)

B. Historical Monitoring Results:

1. Has previous monitoring (including new source sampling) been conducted for the SOCs for which a waiver is being requested? **Note:** Previous monitoring results must be submitted if requesting a susceptibility waiver.

☒ YES ☐ NO

2. Has previous monitoring indicated any detects for SOCs?

☐ YES ☒ NO ☐ N/A

3. If previous monitoring indicated detections for one or more of the SOCs, have three (3) subsequent consecutive years of monitoring been conducted with no detection?

☐ YES ☐ NO ☒ N/A

Please attach laboratory results.

C. Source Water Protection Information:

1. For each source associated with the EP, have substances containing SOC's been used, transported, stored or disposed of within the Zone II area (a ½ mile radius around the source unless a more rigorous delineation has been completed) for groundwater sources or within a 10 mile semi-circular radius for surface water sources?

☒ YES ☐ NO

Please check all land uses located within each source contribution area.

Land Uses that Potentially Generate SOC's

	Source 001	Source 002	Source	Source	Source
Agricultural/crop farm	☒	☒	☐	☐	☐
Aquatic pesticide application area	☐	☐	☐	☐	☐
Chemical production/storage facility	☐	☐	☐	☐	☐
Commercial facility	☐	☐	☐	☐	☐
Dairy or livestock farm	☐	☐	☐	☐	☐
Golf course or nursery	☐	☐	☐	☐	☐
Landfill or dump	☐	☐	☐	☐	☐
Lawn care or garden	☐	☐	☐	☐	☐
NPDES discharge point	☐	☐	☐	☐	☐
Plastics manufacturing facility	☐	☐	☐	☐	☐
Roadway or railroad tracks	☒	☒	☐	☐	☐
Utility right-of-way	☒	☒	☐	☐	☐
Waste incineration facility	☐	☐	☐	☐	☐
Wood preserving facility	☐	☐	☐	☐	☐
Other:	☐	☐	☐	☐	☐
Other:	☐	☐	☐	☐	☐

Please complete Module 7 (Site Map and Land Use Inventory) for each PWS source and identify all land uses.

2. Please describe the steps taken to determine land uses that potentially affect SOC concentrations:

We reviewed all previous DEP inspection reports and sanitary surveys, our annual sanitary surveys, and the Source Water Assessment Report. We used eMapPA to locate any additional sources of contamination. We surveyed our source protection area and spoke with each landowner to confirm the land uses and products used.

3. Other factors for consideration:

- a. Depth (feet) to static water table for each groundwater source.

Source 001	Source 002	Source	Source	Source
50	35			

- b. Permitted pumping rate (GPM) for each groundwater source.

Source 001	Source 002	Source	Source	Source
25	50			

- c. Nitrate levels for the last three years range from 2 mg/L to 4 mg/L.

- d. Is an approved source water protection or wellhead protection program in place?

☐ YES ☒ NO

D. Certification:

The information contained herein is true and correct to the best of my knowledge, information and belief. The information given is subject to the penalty provisions of the Crimes Code regarding unsworn falsification to authorities (49 P.S. § 4904).

John Doe

Signature

12/31/2019

Date



MONITORING WAIVER APPLICATION

MODULE 5 – ASBESTOS (EP and DISTRIBUTION) WAIVER REQUEST

A. General:

A waiver is being requested for the following EP(s):

☐ Entry Point (EP) ID #: 101

A distribution waiver is being requested:

☒ Distribution Waiver

B. Waiver Criteria:

(Please complete all applicable sections)

Asbestos:

- a. Does the distribution system contain asbestos-cement pipe?
☐ YES ☒ NO
- b. Has optimized corrosion control treatment been implemented and maintained?
☒ YES ☐ NO ☐ N/A
- c. Are the PWS sources vulnerable to asbestos contamination, including contamination from asbestos-bearing rock formations?
☐ YES ☒ NO ☐ N/A

C. Source Water Protection Information:

Please complete Module 7 (Site Map and Land Use Inventory) for each source and identify all land uses, including potential sources of Asbestos.

Please describe the steps taken to determine the potential sources of contamination:

We reviewed all previous DEP inspection reports and sanitary surveys, our annual sanitary surveys, and the Source Water Assessment Report. We used eMapPA to locate any additional sources of contamination. We surveyed our source protection area and spoke with each landowner to confirm the land uses. Our sources are not located within a geologic formation that contains naturally occurring Asbestos.

D. Certification:

The information contained herein is true and correct to the best of my knowledge, information and belief. The information given is subject to the penalty provisions of the Crimes Code regarding unsworn falsification to authorities (49 P.S. § 4904).

John Doe

Signature

12/31/2019

Date

Example

MONITORING WAIVER APPLICATION

MODULE 7 – SITE MAP AND LAND USE INVENTORY

A. General:

Entry Point (EP) ID #: 101

Source ID #: Well 001

(Please complete a separate form for each source)

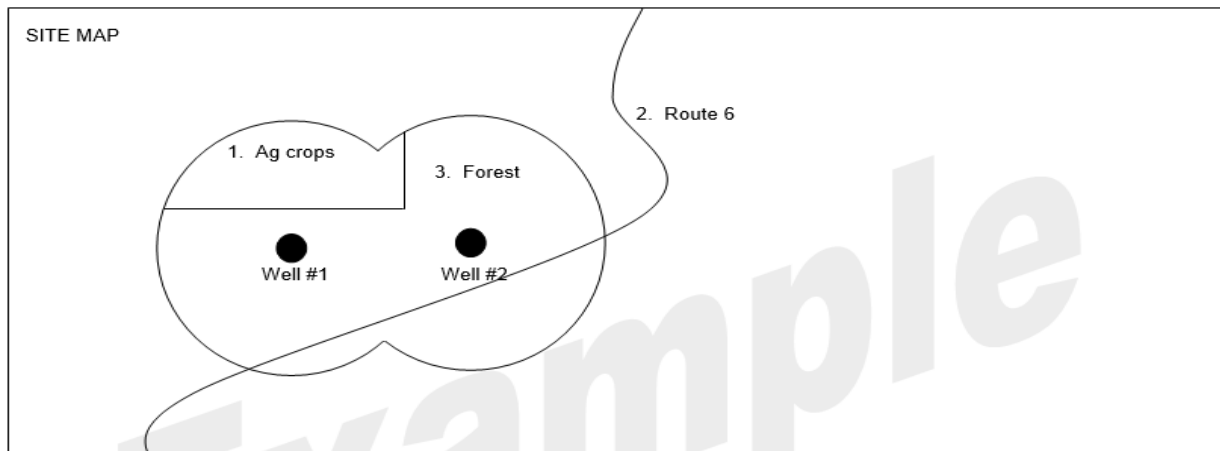
B. Source Water Protection Information:

Please complete the following table. Include any land uses located within Zone II for groundwater sources or within a 10-mile semi-circular radius for surface water sources. Identify the substances/products used for each land use. Indicate the distance from each land use to the PWS source of supply.

[illegible]

C. Site Map:

Please complete the site map below or attach the site map if some other format was used (i.e., 7.5-minute topo quad map, electronic mapping tool, etc.). Identify the PWS source and label all land uses (using the numbers in the left-hand column of the Land Use table).



Scale: _____

Please describe the steps taken to determine the substances/products used for each land use:

We surveyed each land owner and asked whether any chemicals were being used or stored on the property. We obtained a list of all pesticides/herbicides being used on the farm for the last 15 years. We contacted the township to determine whether any herbicides were being used along township roads. No chemicals are being used on the forested land.

Example

D. Certification:

The information contained herein is true and correct to the best of my knowledge, information and belief. The information given is subject to the penalty provisions of the Crimes Code regarding unsworn falsification to authorities (49 P.S. § 4904).

John Doe

Signature

12/31/2019

Date

A. General:

Source ID #: Well 002

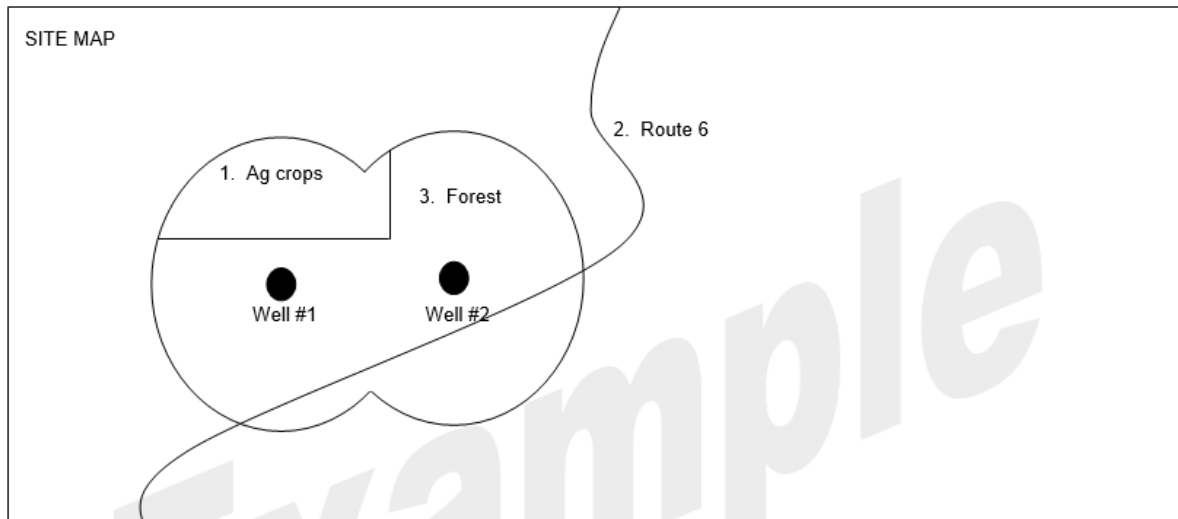
(Please complete a separate form for each source)

B. Source Water Protection Information:

[illegible]

C. Site Map:

Please complete the site map below or attach the site map if some other format was used (i.e., 7.5-minute topo quad map, electronic mapping tool, etc.). Identify the PWS source and label all land uses (using the numbers in the left-hand column of the Land Use table).



Scale: _____

Please describe the steps taken to determine the substances/products used for each land use:

We surveyed each land owner and asked whether any chemicals were being used or stored on the property. We obtained a list of all pesticides/herbicides being used on the farm for the last 15 years. We contacted the township to determine whether any herbicides were being used along township roads. No chemicals are being used on the forested land.

Example

D. Certification:

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John Doe
Signature

12/31/2019
Date

K. DEP Office and County Health Department Contact Information

To determine the contact information and mailing address of your local DEP office, follow this link:

<http://www.depgreenport.state.pa.us/elibrary/GetDocument?docId=1422467&DocName=DEP%20OFFICE%20AND%20COUNTY%20HEALTH%20DEPARTMENT%20CONTACT%20INFORMATION%20BY%20COUNTY.PDF%20%20%3Cspan%20style%3D%22color%3Ablue%3B%22%3E%3C%2Fspan%3E>