DRINKING WATER WAIVER APPLICATION MANUAL

SOUTH DAKOTA
DEPARTMENT OF AGRICULTURE
AND NATURAL RESOURCES
DRINKING WATER PROGRAM

August 15, 2024

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INSTRUCTIONS TO APPLY FOR A PHASE II/V WAIVER

Introduction

The Phase II/V Regulations became effective in 1993. These regulations contain monitoring requirements and maximum contaminant levels for synthetic organic chemicals (SOCs) including pesticides, volatile organic chemicals (VOCs), inorganic chemicals (IOCs), asbestos, and nitrate/nitrite. Treatment techniques are provided for two chemicals-epichlorohydrin and acrylamide. All South Dakota PWS are affected by these regulations in some way. Waivers are available to water systems to reduce or eliminate the number of samples a system must take while not jeopardizing public health. The waivers are available for IOCs, VOCs, asbestos, and SOCs.

If a system does not apply for a waiver for a particular entry point, the entry point will have to be monitored at the frequency prescribed in the regulations for sources without waivers. Any source that is used for more than four months per year must meet all the monitoring requirements. All sources must meet the nitrate and nitrite monitoring requirements regardless of their amount of use. Systems that are served by other public water systems must meet the monitoring requirements for asbestos. The Department of Agriculture and Natural Resources (DANR) will not ask for nor complete your waiver forms. The decision to apply for a waiver is completely the responsibility of each water system.

DANR has issued statewide waivers for cyanide and dioxin. These waivers cover all water systems with a few exceptions. The systems that are exceptions will be notified of possible actions they may take.

Some waivers require that the water system submit copies of their previous chemical sampling. Regulations require systems to keep all chemical analyses for ten years.

The Phase II/V Regulations also provided for a standard monitoring framework consisting of nine-year compliance cycles made up of three-year compliance periods. The current compliance cycle started in 2020 and ends in 2028. The initial compliance period is defined as "the current compliance period when a system is classified as a public water system".

It is suggested that a system work on their asbestos and IOC waivers first. These waivers are easier to complete with a review of your system's records and past monitoring results. The VOC and SOC waivers will require more effort as possible sources of contamination may need to be located on maps. You can submit each waiver application separately.

Volatile Organic Chemicals (VOCs)

A VOC is an industrial chemical that is typically a solvent and/or a component of gasoline. A VOC "waiver by susceptibility" may be granted to a source provided a vulnerability assessment has been conducted. A susceptibility waiver assumes that the chemicals are present in the vicinity of the source and that the local geology and well conditions prevent contamination of the aquifer.

VOC waivers for groundwater entry points are effective for a designated six-year period. VOC waivers for surface water entry points are effective for the current compliance period.

The initial monitoring requirement is four consecutive quarterly samples at each entry point to the distribution system (hereafter referred to as an "entry point") during the initial compliance period. All community and non-transient non-community (NTNC) systems must be monitored. *A system must complete the initial quarterly monitoring requirements before it may apply for a waiver.*

Systems then have two options to comply with VOC monitoring after the initial samples-

1. If no waiver is obtained: Upon completion of the quarterly initial monitoring with all VOC levels below the detection level, water systems will then be monitored annually. After three years of "no detects", a groundwater entry point may sample once every three years while a surface water source will continue to monitor annually.

2. If a waiver is obtained: Sampling for a groundwater entry point with a six-year waiver is reduced to one sample during the waiver period. Surface water entry points with a three-year waiver must monitor once during the waiver period. Groundwater systems must update the vulnerability assessment at the mid-point of the waiver period.

Since VOCs are done by a single analytical method in the lab, the VOC waiver will be an "all or none" situation and will include all regulated VOCs.

Systems on annual monitoring must have obtained their waiver by December 31 of a year or have performed the required monitoring. Systems that monitor each compliance period must have obtained their waiver by December 31 of the year that they are assigned to monitor in or have performed the required monitoring.

All surface water/groundwater under direct influence of surface water sources will be granted a susceptibility waiver for VOCs without submitting a waiver form. Because of the volatile nature of these chemicals, they should not be found in surface water supplies.

In order to obtain a VOC susceptibility waiver for a groundwater entry point, all three of the following conditions must be met.

1. **VOCs must have been sampled previously and had "no detects" for the initial monitoring or the last three annual samples.**

Copies of your VOC monitoring must be attached to the waiver form.

2. **Source must be considered "non-vulnerable" by the South Dakota Geological Survey (SDGS) study, the Black Hills Hydrology Study, or other Department study. These studies have considered depth to the top of the aquifer, depth to water, confined vs. unconfined aquifer, the geology of the overlying material, and general knowledge on water movement in South Dakota to determine vulnerability.**

DANR can supply this information for each water system.

3. **Source must be properly constructed and maintained.**

An as-built well plan or well log showing, at a minimum, casing type, sanitary seal, and grouting that are suitable for the area geology must be submitted.

You must complete and sign the "Waiver for VOC Sampling" form contained in Appendix B. Any additional information must be attached to the form. It should be sent to the Drinking Water Program for approval.

Synthetic Organic Chemicals (SOCs)

SOCs are man-made compounds used for a variety of industrial and agricultural purposes. A "waiver by use" or a "waiver by susceptibility" may be granted to a source provided that a vulnerability assessment has been conducted.

"Use waivers" can be granted when no SOC is present near a source while a "susceptibility waiver" can be issued when SOCs are present but cannot contaminate a source of water. If the present and past use/existence of SOCs cannot be documented or is unknown, a "use" waiver cannot be granted.

A system that has vulnerable water sources such as shallow wells, is ineligible for a “susceptibility waiver” and should apply for a "use waiver" for any SOCs not found to be present within the Source Water Assessment Area. Systems that have non-vulnerable water sources such as deep wells, should apply for a "susceptibility waiver". Surface water sources are not eligible for SOC susceptibility waivers.

Waivers are effective for the duration of the compliance period during which it is granted. The waiver must then be renewed. Sources receiving a waiver are not required to sample. *A SOC waiver can be obtained without having performed any previous SOC monitoring.*

Systems have two options to comply with the SOC monitoring requirements-

1. If no waiver is obtained: The initial monitoring is four quarterly samples at each entry point during the initial compliance period. All community and NTNC systems must monitor. Upon completion of the initial monitoring, systems that do not detect an SOC and serve more than 3,300 people will analyze two consecutive quarterly samples during a compliance period. Systems that do not detect an SOC and serve less than 3,301 people will analyze one sample during a compliance period. The particular year within a compliance period that these subsequent samples are to be taken will be determined by DANR.

2. If a waiver is obtained: For those SOC lab methods that are granted a waiver, no monitoring is required. Sampling for all SOC lab methods that are not granted a waiver is outlined under Item #1.

New systems must have their first quarterly samples analyzed within three months of being designated as a public water system or have an SOC waiver submitted to DANR. New systems are also subject to sampling under the capacity development requirements.

SOC waivers will be granted on an analytical method basis since seven lab methods are used to analyze all the SOCs. Any waiver granted will cover all SOCs measured by that particular lab method.

The analytical methods and the chemicals detected by each are as follows:

Method 525				
	Alachlor	Atrazine	Benzo(a)pyrene	Chlordane
	Di(ethylhexyl)adipate	Di(ethylhexyl)phthalate	Endrin	Heptachlor
	Heptachlor Epoxide	Hexachlorobenzene	Hexachlorocyclopenadiene	Lindane
	Methoxychlor	PCBs	Simazine	Toxaphene
Method 531.1				
	Aldicarb	Aldicarb Sulfone	Aldicarb Sulfoxide	Carbofuran
	Oxamyl			

Method 515.1				
	Dalapon	Dinoseb	Pentachlorophenol	Pichloram
	2,4-D	2,4,5-TP		
Method 524/504		DBCP	EDB	
Method 547		Glyphosate		
Method 548		Endothall		
Method 549		Diquat		

The following are trade names for some of the chemicals listed above:

Chemical	Trade Name
Glyphosate	Round-Up
	Rodeo
	Weed-B-Gone
Alachlor	Lasso

SOC Use Waivers

In order to obtain an SOC "use" waiver, two conditions must be met.

1. **All areas where an SOC has been used, manufactured, stored, or disposed of during the last ten years within the Source Water Assessment Area developed by DANR. You can obtain a larger copy of this delineation from DANR.**

All sources of possible SOC contamination within the boundary of the Assessment Area for each water source will need to be noted on the map. You will need to interview local personnel as to the past and present chemical use in your area. (Systems that have both a Zone “A” and Zone “B” noted must inventory only Zone “A”. This pertains mostly to systems in the Black Hills.)

The point sources of possible SOC use include, but are not limited to, spills or leaks of chemicals at or near a water treatment facility, or at manufacturing, distribution, or storage facilities, or from hazardous and municipal waste landfills, and other waste handling or treatment facilities.

Non-point sources include, but are not limited to, the use of pesticides to control insects and weeds on agricultural areas, forest lands, homes, gardens, railroad right-of-ways, roadsides, golf courses, parks, and other land application areas. A site where an organic chemical is used on-site must be identified; however, if a chemical remains in its original retail package, the site does not have to be noted. An area where a pesticide was sprayed on-site would have to be noted, but a hardware store that sells pesticides would not have to be noted. Retail businesses that sell drum-size quantities of a chemical, such as a farm coop, must be shown.

You should number each of the SOC sites on your map. On a separate paper define the type of site that exists at each point and what chemical is or has been used there. An example has been provided on page 7.

The South Dakota Department of Transportation indicated that roadside ditches are sprayed with glyphosate (Roundup), pichloram (tordon), and 2,4-D. Near wetlands, another form of glyphosate is used (Rodeo). It will be assumed that these chemicals are used on any state, county, or federal highways in your area unless you can demonstrate otherwise.

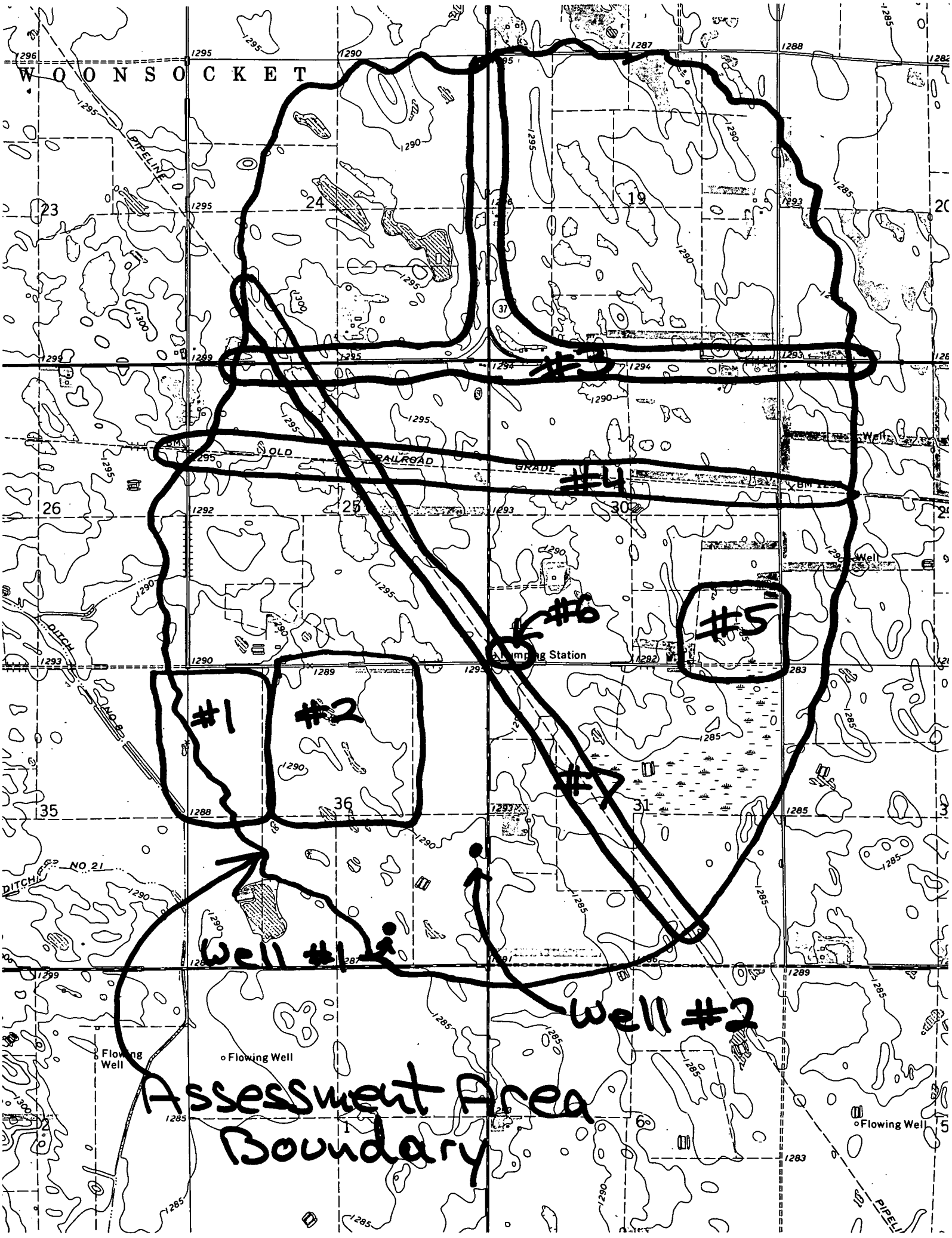
Typical home/garden use of pesticides may include glyphosate (Roundup, Weed-B-Gone, and others) and lindane (Lindafor) that are commonly available at yard and garden shops. It will be assumed that these chemicals are used in your area.

Typical pesticide use for parks/golf courses may include 2,4-D for broadleaf control and glyphosate (Roundup) for total weed control. You will need to contact your local parks and golf courses when conducting the inventory of your local SOC use.

2. **If any sources use a submersible pump motor, it must not contain non-food grade oil, or a PCB filled capacitor. Documentation must be attached, or system must indicate that no submersible pump motors exist in system or that the capacitor does not use PCBs and uses only food grade oil. See the detailed section on PCBs that follows.**

You must complete and sign the "Use Waiver for SOC Sampling" form contained in Appendix B. Your map and any additional information must be attached to the form. It should be sent to the Drinking Water Program for approval.

Map for SOC Use waiver.


WOONSOCKET
#1
#2
#3
#4
#5
#6
#7
Well #1
Well #2
Assessment Area Boundary
OLD RAILROAD GRADE
PIPELINE
DITCH NO 21
Flowing Well
Flowing Well
Flowing Well
Pumping Station

Example SOC "Use" Waiver Sites

1. Atrazine and dicamba on corn
2. Alachlor used on beans
3. Roadside use of 2,4-D
4. Railroad right-of-way use of 2,4-D
5. Atrazine on corn
6. Glyphosate use around pumphouse
7. Glyphosate use on pipeline right-of-way

General use of glyphosate (Roundup), malathion, and carbaryl on lawns and gardens.

Several homes fumigated for termites with chlordane.

SOC Susceptibility Waivers

Systems that use deep wells may be eligible to obtain an SOC "susceptibility" waiver. Surface water sources are not eligible for SOC susceptibility waivers. In order to obtain an SOC susceptibility waiver, all of the following five conditions must be met.

1. If any SOCs have been sampled within the last five years, the result must be "no detect".

Copies of any SOC monitoring for the last five years must be attached to the waiver form.

2. Source must be considered "non-vulnerable" by the South Dakota Geological Survey (SDGS) study, Black Hills Hydrology Study, or other Department study. The studies considered depth to top of aquifer, depth to water, confined vs unconfined aquifer, geology of the overlying material, and general knowledge on water movement in South Dakota to determine vulnerability.

DANR has supplied this information for your water system.

3. Source must be properly constructed and maintained.

An as-built well plan or well log showing, as a minimum, casing type, sanitary seal, and grouting that are suitable for the area geology must be submitted.

4. Cannot have a nitrate level above 5.0 mg/l.

Copies of all nitrate samples within the last five years must be attached. Nitrate compliance samples are submitted annually for all entry points. Nitrate samples are also taken during DANR sanitary surveys.

5. If any sources use a submersible pump motor, it must not contain non-food grade oil, or a PCB filled capacitor. Documentation must be attached, or system must indicate that no submersible pump motors exist in system or that the capacitor does not use PCBs and uses only food grade oil. See the detailed section on PCBs that follows.

You must complete and sign the "Susceptibility Waiver for SOC Sampling" form contained in Appendix B. Any additional information must be attached to the form. It should be sent to the Drinking Water Program for approval.

Polychlorinated Biphenyls (PCBs)

It has been determined that certain submersible pumps used to draw water from wells may leak contaminants into drinking water and may pose a health risk. Contaminants leaked from these pumps come from either mineral oil contained in pump motors or from a dielectric fluid used in the pump motor's capacitor. "Non-food grade" mineral oils used in some submersible pump motors contained polyaromatic hydrocarbons and other fuel-like compounds. The dielectric fluid in capacitors used in certain pump motors manufactured before 1979 was made of PCBs.

The US Food and Drug Administration (FDA) has approved propylene glycol and certain types of mineral oil for occasional contact with or for addition to food products. These oils are commonly referred to as "food-grade mineral oils". Certain submersible pump motors were filled with oil that did not meet these FDA requirements. These "non-food grade" oils are commonly referred to as transformer oil, heat transfer fluid, refrigerator compressor oil, electrical insulating oils, hydraulic oil, cable oil, spindle oil, agricultural spray oil, turbine oil, and machine or cutting oil.

PCBs from submersible pump motor capacitors may mix with the oil contained in the motor housing. Exposure to PCBs occurs when oil-containing PCBs leak into the water supply system.

To obtain either a use or susceptibility SOC waiver for PCBs, you must determine whether the pump motor is likely to contain non-food grade mineral oils, a PCB-filled capacitor, or both.

In an attempt to identify which submersible motors are likely to contain FDA-approved food-grade oil, responses from pump manufacturers were relied upon. There are likely other submersible pump brands that use oil-filled motors. Consequently, unless it can be shown that a submersible pump definitely contains a food-grade oil, it will be assumed that it does NOT. Your pump installer or well driller may be able to assist you in this determination. A list of submersible motors that are known to contain oil is included as follows:

A. O. Smith-Representatives of this company state that their records indicate that oils recognized as food grade by the FDA were used in submersible pump motors. However, they did not provide any supporting documentation or copies of their records.

Barnes (Peabody Barnes)-This company was acquired by Burks Pumps, Inc. Representatives of Burks Pumps state that the oils used in Barnes submersible motors were a paraffinic type of oil. No documentation was provided to indicate whether the oil used in these pump motors was food grade. Limited analytical data suggests that oils used in Peabody Barnes motors were unlikely to be food grade. Montgomery Ward and Johnson Water Systems used motors supplied by Barnes at various times.

Byron Jackson-Currently known as BW/IP International, Inc., documentation was provided indicating that submersible pump motors currently produced contain food-grade oil. Documentation indicating whether oils were food grade was not provided for motors produced before 1991.

Century-Century Electric Motors was previously a division of Transamerica/Delevall, now known as IOM. Century motors were used on many different submersible pump brands including but not limited to Aeromotor, Berkley, Tait, Pumptron, Red Jacket, Rapidayton, Webtrol, Flint & Walling, and Teel/Grainger. Century Motors ceased operation in 1986 though many of the brands that used Century motors are still available. Manufacturers who purchased brand names associated with Century Motors have provided documentation indicating that food grade oil was used from 1978 to 1986 and state that oil used between 1962 and 1978 was food grade though sufficient documentation was not provided. Limited analytical data suggests that oil used in at least some pre-1978 motors was probably non-food grade.

Exodyne-Exodyne purchased the assets of Magney Electric Motors, Inc. Documentation was provided indicating that submersible pump motors currently produced by Exodyne contain food-grade oil. Documentation for motors produced by Magney before 1991 was not available.

F. E. Myers-Documentation provided by FE Myers and analytical data confirms that non-food grade oil was used in oil-filled submersible pump motors manufactured by Myers. Between 1981 and 1983, Myers discontinued oil-filled motor production and converted it to water-filled motor technology. All Myers submersible motors since 1983 use a water-filled design.

Fairbanks Morse-Except for pumps utilizing Franklin water-filled motors, all motors contain oil. Fairbanks Morse has provided documentation indicating that food-grade oil was used in motors manufactured from 1978 to 1990. Company representatives state that "Information available to Fairbanks Morse is that from 1969 to 1978 an oil which was used was FDA approved and non-toxic." The documentation provided by Fairbanks Morse does not indicate that the oil used from 1969 to 1978 was FDA-approved, food-grade material. Company representatives also state that "Before 1969, information available to Fairbanks indicates that the oil used was a white mineral oil which was pharmaceutical grade and safe for human contact." However, Fairbanks Morse provided no supporting documentation or copies of available records.

General Electric-GE indicated that they were not going to review their records to determine what types of oil were used in the various submersible pump motors they manufactured. PCBs have been found in GE submersible pump motor oil, the presence of which requires a non-food grade classification. GE motors were used on different brands of submersible pumps. e.g. Hoosier.

Red Jacket-Currently, Red Jacket is a division of the Marley Pump Company. Submersible pump motors manufactured by Red Jacket are water-cooled and do not contain oil. However, Century Electric submersible

pump motors were used on 3000 of the Red Jacket pumps nationwide between 1978 and 1981. Documentation has been provided indicating that food-grade oil was used in these motors. See Century Motor section.

REDA, A Camco Company-REDA was previously a division of TRW. Representatives of REDA state that REDA has not manufactured a submersible pump for use in potable water supply wells since 1979. Documentation has been provided indicating that food grade oil was used in motors designed for used in potable water supplies from 1965 through 1979. REDA has also manufactured motors for purposes other than potable water wells that do not contain food-grade oil. They state that they do not know whether some of these motors may have been installed in wells. Before 1965, REDA motors contained non-food grade oil. REDA motors were supplied to various manufacturers during the 1950s including Clayton-Mark, Dempster, Duro, Red Jacket, Rapidayton, Flint & Walling, Rom, and Woodmansey.

Sta-Rite-Documentation was provided indicating that food-grade oils were used in submersible pump motors manufactured between 1961 and 1966 and from 1975 through 1991. Representatives state that food-grade oils were always used in submersible motors but did not provide sufficient confirmational documentation for motors manufactured prior to 1961 and between 1966 and 1975. However, limited analytical data suggests that food-grade oil was used. Sta-Rite also supplied motors to Sears, Roebuck, and Company.

Asbestos

A monitoring waiver may be granted for asbestos. Asbestos monitoring is required only for community and non-transient non-community systems. Systems have two options to comply with the asbestos monitoring requirements-

1. If no waiver is obtained-Monitor during the first compliance period of each compliance cycle.

2. If a waiver is obtained-No monitoring is necessary.

An existing system must renew its waiver by the end of the first year of each compliance cycle or have performed the necessary monitoring. New systems must either monitor for asbestos or have submitted an asbestos waiver to DANR within three months of being designated as a public water system.

No previous monitoring is necessary for an asbestos waiver. To obtain an asbestos waiver, a water system must either-

1. Verify that no asbestos-cement (AC) pipe exists in the distribution system or as a source construction material or

2. If AC material does exist in your system, the water must be non-corrosive. This is determined by a Langlier's Index (LI) is equal to or greater than 0.00.

Complete the form with your water system name and check the proper blank corresponding to whether AC pipe exists in your water system. Enter the latest LI result if necessary. Please sign, date, and return the form to the Drinking Water Program. You must attach a copy of your latest LI result ONLY if AC pipe exists in your system. This analysis is done each time that the DANR performs a sanitary survey.

If the existence of AC material is unknown, a waiver can not be granted if your LI is negative.

Systems being served by other systems do not normally have their own LI analyzed during a survey. They may either have a LI analyzed by a lab or use the LI of the "mother system" in determining whether their water is corrosive.

Inorganic Chemicals

A water system may be granted a waiver from sampling for each of the IOCs. The waiver is effective for the duration of the compliance cycle during which it is granted. The chemicals that can be waived include antimony, arsenic, barium, beryllium, chromium, cadmium, fluoride, mercury, nickel, selenium, and thallium. There are currently no waivers for nitrate or nitrite.

Systems have two options to comply with the IOC monitoring requirements-

1. If no waiver is obtained-Monitoring is every three years for groundwater systems and annually for surface water systems. Monitoring will continue at these frequencies unless a waiver is obtained.

2. If a waiver is obtained-Sampling for a system is reduced to once each nine-year compliance cycle.

A water system must have monitored three times for the IOCs in order to qualify for a waiver. The level of each individual chemical result must be less than 90% of the maximum contaminant level (MCL) for all chemicals except arsenic. For arsenic, all levels must be less than 7 ug/l. The MCL is noted on each result sheet. The system must apply for the waiver by December 31 of the year in which the monitoring is to occur or have performed the actual monitoring.

Complete the form with your water system name and check the names of the chemicals for which you desire to obtain a waiver. Please sign, date, and return the form to the Drinking Water Program. You must attach copies of your last three IOC analyses.

General Comments

The Drinking Water Program will review waiver applications in accordance with the criteria and approve/disapprove all waiver applications. The DANR Groundwater Program will be given an opportunity for any comments it may have prior to DWP approval for VOC/SOC waivers. Systems that are denied waivers will receive written comments outlining the reason (s) for denial. The system may then resubmit its application after correcting the deficiencies.

When a waiver is granted, the system will receive a copy of the signed waiver approval. The original will be placed in its Drinking Water Program file.

Waivers are granted for a specific period of time. The date that a waiver expires will be indicated on the approval letter the system will receive. When the waiver expires, the system must submit a new waiver application for review.

Some waivers require an inventory of potential contamination sources. Water systems that are located in close proximity to other water systems can cooperate on these inventories, thereby saving time and effort. This would be particularly true for housing developments and mobile home courts located near municipalities; however, separate waiver applications must be submitted by each water system. Some inventory information could be received from the local emergency response people.

Waiver applications should be mailed to and more information on the Phase II/V waiver criteria is available from-

Drinking Water Program
523 E Capitol
Pierre, SD 57501-3181
Phone: 605-773-3754
Fax: 605-773-5286

Appendix A
Phase II/V Waiver Forms

SOUTH DAKOTA DRINKING WATER PROGRAM

WAIVER FOR

INORGANIC CHEMICAL SAMPLING

A water system may be granted a waiver for each of the individual Inorganic Chemicals (IOCs). These chemicals include antimony, arsenic, barium, beryllium, chromium, cadmium, fluoride, mercury, nickel, selenium, and thallium. The waiver is in effect until the end of the current nine-year compliance cycle. In order to qualify for the regulated IOC waiver, a system's last three compliance samples must have results less than 90% of the maximum contaminant levels (MCL). No new sources may have been added to your water system during the time period covered by these analyses. As a condition of the waiver, a system must sample once during the term of the waiver.

_____ water system requests a waiver for the following chemicals (Please check as appropriate):

☐ Antimony	☐ Arsenic	☐ Barium
☐ Beryllium	☐ Cadmium	☐ Chromium
☐ Fluoride	☐ Mercury	☐ Nickel
☐ Selenium	☐ Thallium	

We request the waiver to cover the following source(s) of water:

Entry Point Name	Year Built

You must supply actual copies of the last three inorganic analyses for the regulated IOCs along with this waiver request. All information supplied is true and correct.

Signature _____ Date _____

Title _____ Phone Number _____

Address _____ System EPA ID # _____

City, State, Zip _____

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SOUTH DAKOTA DRINKING WATER PROGRAM

WAIVER FOR ASBESTOS SAMPLING

A water system may be granted a waiver from sampling for asbestos. The waiver will be based on:

1. potential asbestos contamination of the water source,

2. the use of asbestos-cement (AC) pipe for water distribution systems, and

3. the corrosive nature of the water.

The waiver is in effect until the end of the current nine-year compliance period. A new waiver is required in the first three-year compliance period of each nine-year compliance cycle. No sampling is required when granted a waiver. If a waiver is not granted or not renewed, a system must sample according to baseline requirements.

_____ water system requests a waiver for asbestos monitoring based on-

____ No AC pipe is present in the distribution system or as a source construction material (No Langlier's Index necessary) OR

____ AC pipe does exist in the distribution system and the water is non-corrosive as evidenced by the last Langlier's Index of ____. (The latest copy must be enclosed.)

If any AC material is installed or discovered in this water system or if the water becomes corrosive, the Department of Agriculture and Natural Resources will be notified immediately. All information supplied is true and correct.

_____ _____

Signature Date

_____ _____

Title Phone Number

_____ _____

Address System EPA ID #

_____

City, State, Zip

SOUTH DAKOTA DRINKING WATER PROGRAM

WAIVER FOR

VOLATILE ORGANIC CHEMICAL (VOC) SAMPLING

A water system may be granted a waiver from sampling for VOCs. The waiver is in effect for the current and subsequent compliance periods. The waiver must be renewed after expiration. Systems must monitor once during the waiver period. If a waiver is not granted or not renewed, systems must sample according to baseline requirements.

Systems may apply for a "susceptibility" waiver if-

1. VOCs have been sampled previously and had "no detects" during the initial monitoring or the last three annual samples except for chloroform, bromoform, bromodichloromethane, and dibromochloromethane. Copies of all analyses must be attached.

2. Source must be considered "non-vulnerable" by the South Dakota Geological Survey (SDGS) study, Black Hills Hydrology Study, or other Department study.

3. Source must be properly constructed and maintained. Written verification such as a well log must be provided.

We request the waiver to cover the following source(s) of water:

Entry Point Name	Year Built

_____ water system requests a waiver for the volatile organic chemicals. All documentation described in items #1-#3 above must accompany this application. All information supplied is true and correct.

_____ _____
Signature Date

_____ _____
Title Phone Number

_____ _____
Address System EPA ID #

_____
City, State, Zip

August 15, 2024

SOUTH DAKOTA DRINKING WATER PROGRAM

"SUSCEPTIBILITY" WAIVER

FOR SYNTHETIC ORGANIC CHEMICAL (SOC) SAMPLING

A water system may be granted a "susceptibility waiver" for the SOCs. The waiver is in effect until the end of the current three-year compliance period. The waiver must be renewed for each subsequent compliance period. Systems that obtain a waiver are excused from any SOC sampling for each analytical method that has been granted a waiver. If a waiver is not granted or not renewed, systems must sample according to baseline requirements.

Systems may apply for a "susceptibility" waiver if-

1. Any parameter that has been sampled previously, must have been "no detect". Any previous analyses must be attached.

2. Source must have been considered "non-vulnerable" by SDGS or other Department study. Vulnerability data ("Water Source Characteristics") must be attached.

3. Source must be properly constructed and maintained. Verification such as a well log or an "as-built" well plan must be provided.

4. Cannot have a nitrate level above 5.0 mg/l. All nitrate samples for the previous five years must be attached.

5. If any sources use a submersible pump motor, it must not contain non-food grade oil or a PCB-filled capacitor. This documentation from the pump manufacturer must be attached or the system must indicate that no submersible pump motor exists in system.

The environmental persistence and transport of the SOCs will also be considered as well.

_____ water system requests a waiver for the following SOC lab methods as indicated (Please check)-

☐ Method 525				
	Alachlor	Atrazine	Benzo(a)pyrene	Chlordane
	Di(ethylhexyl)adipate	Di(ethylhexyl)phthalate	Endrin	Heptachlor
	Heptachlor Epoxide	Hexachlorobenzene	Hexachlorocyclopenadiene	Lindane
	Methoxychlor	PCBs	Simazine	Toxaphene
☐ Method 531.1				
	Aldicarb	Aldicarb Sulfone	Aldicarb Sulfoxide	Carbofuran
	Oxamyl			
☐ Method 515.1				
	Dalapon	Dinoseb	Pentachlorophenol	Pichloram
	2,4-D	2,4,5-TP		
☐ Method 524/504		DBCP	EDB	
☐ Method 547		Glyphosate		
☐ Method 548		Endothall		
☐ Method 549		Diquat		

We request the waiver to cover the following source(s) of water:

Entry Point Name	Year Built

All information supplied is true and correct.

Signature

Date

Title

Phone Number

Address

System EPA ID #

City, State, Zip

SOUTH DAKOTA DRINKING WATER PROGRAM

"USE" WAIVER

FOR SYNTHETIC ORGANIC CHEMICAL (SOC) SAMPLING

A water system may be granted a "use waiver" from sampling for the SOCs. The waiver is in effect until the end of the current three-year compliance period. The waiver must be renewed for each subsequent compliance period. Systems that obtain a waiver are excused from any SOC sampling for each analytical method that has been granted a waiver. If a waiver is not granted or not renewed, systems must sample according to baseline requirements.

Systems may apply for a "use waiver" if-

1. No SOC, during the last ten years, has been or is being used, manufactured, stored, or disposed of within the Source Water Assessment Area as developed by the DANR. The system will be required to submit a topographical map/aerial photo indicating all SOC "use" for each water source. If the "use" pattern changes after a waiver has been granted, the system must notify the State. Please note that water sources located within the influence of a stream/river or in the Black Hills have two areas designated-Zones "A" and "B". These systems must locate all possible SOC contaminations sources in Zone "A" only.

2. If any sources use a submersible pump motor, it must not contain non-food grade oil or a PCB-filled capacitor. This documentation must be attached or the system must indicate that no submersible pump motors exist in system.

_____ water system requests a waiver for the following SOC lab methods as indicated (Please check)-

☐ Method 525				
	Alachlor	Atrazine	Benzo(a)pyrene	Chlordane
	Di(ethylhexyl)adipate	Di(ethylhexyl)phthalate	Endrin	Heptachlor
	Heptachlor Epoxide	Hexachlorobenzene	Hexachlorocyclopenadiene	Lindane
	Methoxychlor	PCBs	Simazine	Toxaphene
☐ Method 531.1				
	Aldicarb	Aldicarb Sulfone	Aldicarb Sulfoxide	Carbofuran
	Oxamyl			
☐ Method 515.1				
	Dalapon	Dinoseb	Pentachlorophenol	Pichloram
	2,4-D	2,4,5-TP		
☐ Method 524/504		DBCP	EDB	
☐ Method 547		Glyphosate		
☐ Method 548		Endothall		
☐ Method 549		Diquat		

We request the waiver to cover the following source(s) of water:

Entry Point Name	Year Built

All information supplied is true and correct.

Signature

Date

Title

Phone Number

Address

System EPA ID #

City, State, Zip