

Survey Form and Instructions for Best Management Practice (BMP) Compliance



BMP surveys are conducted at facilities using more than household quantities of regulated substances in conjunction with local efforts to protect sources of drinking water. The surveys are conducted to ensure that each potential contamination source (PCS) is complying with New Hampshire's BMPs for Preventing Groundwater Contamination Rule, Env-Wq 401, so that the risk of groundwater and/or surface water contamination in the source protection area is minimized.

Section 1. Survey Preparation

Follow the steps in this section to ensure that your surveys are conducted in a thorough and professional manner and to minimize the inconvenience to the PCS.

- 1. Know the BMP Rules.** Knowledge of the Env-Wq 401 BMP rules will enable you to *know what to look for* during a survey. It is important to conduct your surveys as efficiently as possible so that you don't waste your time or that of the PCS. Knowing the BMP rules will speed up a survey, prevent oversights, and is essential to discuss compliance issues.
- 2. Be sure each PCS** has received a copy of the Env-Wq 401 BMP rules and a DES fact sheet summarizing the BMP Rules *in advance* of your appointment to do the survey. Ask them to read the rules and offer to answer any questions before the survey. Many PCSs become more comfortable about a survey after realizing the "common sense" approach of the BMP rules. Bring several BMP fact sheets to each survey to distribute to the PCS representative(s).
- 3. Know your Source Water Protection Area.** During a survey keep in mind where the PCS is situated relative to your source(s). This may help you make site-specific decisions about compliance issues. Bring a map showing your protection area(s) to the survey so the PCS can see that they are located inside the protection area.
- 4. Know your Source Water Protection Area Management Plan.** Keep in mind the compliance mechanism of your management plan. One of the most commonly asked questions by PCSs is "How are the BMP rules enforced?" so you should be able to explain how you will achieve compliance with BMP violations. Emphasize that you will seek the *least costly and most practical* way to achieve compliance. Voluntary compliance is always the goal.
- 5. Find out as much as you can about a PCS before you go** to the survey. It saves time to know site -specific background information, such as: what type of sewage disposal system does the PCS have; how long has the PCS been in business; and what was the historic usage of the PCS' property. Also, before the survey, think about site-specific concerns pertaining to the storage, handling and disposal of regulated materials. For example, before surveying a printing company, anticipate that you will need to know how they store, handle and dispose of ink products. Knowing key background data and anticipating site-specific compliance concerns will help prevent oversights and will make the survey more efficient.
- 6. Be sure that the PCS understands** that a BMP survey is mutually beneficial. Explain that the Env-Wq 401 rules apply to all PCSs in New Hampshire, not just the ones within a source protection area. Also, explain that compliance with BMP rules may benefit them by: improving their environmental practices; reducing their overall environmental liability; and perhaps minimizing potential cleanup costs by preventing a release of hazardous substances. Your water system benefits from improved protection of your drinking water sources and reduced sampling costs.
- 7. If at all possible, fill out Sections 2, 3, and 4 of this form before you go** to the PCS. Most PCS representatives are busy and will appreciate whatever you can do to minimize your time there. This is a good time to think about the site-specific concerns mentioned in (5) above.
- 8. Know the BMP survey form.** During a survey, it is not always possible to fill out the form in the same order as the questions are written. Knowing the form makes it much easier to "skip around" while you are touring a facility.

Section 2. Record of Survey

Fill out Sections 2 and 3 prior to each survey.

Survey Date	
Potential Contamination Source (PCS)	
Town where PCS is Located	
Agency Conducting Survey	
Name and Title of Person(s) Performing Survey	
Name and Title of Person(s) Giving Information about the PCS	

Section 3. Potential Contamination Source (PCS) Information

Update this section for each 3-year survey.

PCS Name		
PCS Address		
PCS Phone Number		
PCS Tax Map and Lot Number	Tax Map	Lot no.
PCS Owner		
PCS Owner Address (If different from above)		
General Description of Business		

Section 4.

Inventory Verification

An “inventory verification” is conducted before the actual survey to find out if the PCS uses greater than household quantities of regulated substances, thereby making it subject to the Env-Wq 401 BMP rules. If the PCS does not use greater than household quantities of regulated substances, answer “no” in Step C. and do not complete the rest of this form. This verification may be performed by phone.

Complete Steps A., B., and C. below

Step A. - What regulated substances does the PCS use, handle, or store?

The best way to complete this section is to ask the PCS contact to fill out the chart below. **If possible, arrange to have the PCS fill out this chart before you arrive to do the survey.** If not done earlier, this section is filled out as the first task of your survey. Quantities listed below only need to be **estimates** of maximum quantities on hand at any one time. Any chemicals stored in regulated tanks should be included on this chart.

Regulated Substance	Quantity (gallons)	Regulated Substance	Quantity (gallons)
Transmission and brake fluid		Cleaners and Disinfectants	
Radiator coolants		De-icing salt	
Hydraulic fluid		Refrigerants	
Motor oil		Fertilizer	
Waste oil		Pesticides and herbicides	
Gasoline or jet fuel		Photo processing chemicals	
Diesel Fuel and kerosene		Printing ink	
#2 Heating oil		Lye or caustic soda	
Grease and lubricants		Metal buffing compounds	
Degreasers		PCBs (bulk)	
Battery acid (bulk)		Products labeled poison	
Rustproofers		List other products you think are hazardous , below:	
Car wash products		1.	
Asphalt and roofing tar		2.	
Paint, stain, urethane		3.	
Thinner, wood stripper		4.	
Waterproofing chemicals		5.	
Dry-Cleaning Fluids		6.	

Section 4.

Inventory Verification

Step B. - What regulated substance wastes does the PCS produce?

The second part of the inventory verification is to find out if the PCS produces any regulated substance wastes and, if so, **how they are disposed**. As done for Section A, if possible arrange to have the chart below filled out by the PCS contact prior to your survey. If not done ahead of time, fill out the chart after you look over the results of Section A. For example, if the PCS is a machine shop that uses cutting oils and degreasing solvents, then the chart below must indicate how they dispose of their waste oils and used solvents. Do not list non-hazardous wastes, such as refuse and paper on this chart. Estimates of quantities generated per year are adequate.

Type of Waste	Quantity Generated per Year	Disposal Method
1.		
2.		
3.		
4.		
5.		

Step C. - Are greater than household quantities of regulated substances or wastes used, handled, or stored?

(check the appropriate box below)

If all containers at the PCS are **less than 5 gallons**, check "NO" below

✓ Check Below

	YES	Greater than household quantities of regulated substances or wastes <u>are used, handled, or stored</u> so conduct a survey to determine compliance with BMP rules.
	NO	Greater than household quantities of regulated substances or wastes <u>are not used, handled, or stored</u> so do not conduct a survey to determine compliance with BMP rules.

If you **checked "NO" above**, do not continue with the survey because the inventory verification indicated that regulated substances are not used by the PCS.

If you **checked "YES" above**, complete the rest of this form, which contains a series of questions that need to be answered to assess if the PCS is in compliance with the BMP rules. Be sure that you answer all of the questions – indicate "n/a" if that is the correct answer.

PCSs that have underground tanks, but no other containers larger than 5 gallons are special cases. If a PCS fits that description, you should not conduct a full survey. List the USTs in Section 7, verify that the USTs are registered with the DES, and then **stop the survey**. Convenience stores and self-service gas stations are common examples.

Section 5. Regulated Substance Storage Areas

If you observe a BMP violation during a survey, point it out to the PCS contact and discuss it right away - **surveys are meant to benefit both parties.**

Storage practices of regulated substances, whether raw materials or wastes, are a major focus of the BMP rules. Therefore, one of the most important tasks of a survey is to observe all areas where the regulated substances listed in Section 4 - Steps A and B are stored. **Ask the PCS contact where they store** their regulated substances and list them below. Then be sure to carefully observe each interior and exterior storage area to see if their storage practices comply with the BMP rules. Consider at all times during your observations that you are looking for practices that could lead to a potential release of hazardous substances to the environment. Use common sense.

Step A. - List and briefly describe **all on-site storage areas** below.

Exterior Storage Areas

1.
2.
3.
4.

Interior Storage Areas

1.
2.
3.
4.

Summary of **Env-Wq 401 BMP** rules pertaining to **storage** of regulated substances

- ☐ Secure storage areas against unauthorized entry.
- ☐ Store regulated substances on an impervious surface.
- ☐ Inspect storage areas weekly.
- ☐ Cover regulated containers in outdoor storage areas.
- ☐ Regulated containers in outdoor storage areas must be more than 50 feet from surface water, 50 feet from storm drains, 75 feet from private wells, and more than 400 feet from public wells.
- ☐ Secondary containment is required for outdoor storage of regulated containers. On-premise use heating oil tanks are exempted, however, containment is still recommended.
- ☐ Regulated containers should be clearly and visibly labeled.

A **regulated container** is a container with a capacity of 5 gallons or more that contains hazardous substances. Multiple 5-gallon containers of a regulated substance may qualify the facility as a PCS.

Secondary containment means an impervious structure adequate to hold 110% of the volume of a regulated container.

Section 5.

Regulated Substance Storage Areas

Proceed at a comfortable pace as you tour a facility.
You may miss key observations if you go too fast.

Step B. - Questions to ask when observing outdoor storage areas.

Wooden floors with earth beneath are not impervious surfaces.

Storage of Regulated Substances in outdoor storage areas (refer to Env-Wq 401.04)

- | | |
|---|---|
| * Yes No N/A
Env-Wq 401.04(b) | 1. Do the outdoor storage area(s) have an impervious surface under the regulated substances?
Describe: _____
_____ |
| * Yes No N/A
Env-Wq 401.04(c) | 2. Is the outdoor storage area(s) secured against unauthorized entry (fence, surveillance, etc.)?
Describe: _____
_____ |
| * Yes No N/A
Env-Wq 401.04(d) | 3. Is the outdoor storage area(s) inspected at least weekly for signs of spills? |
| * Yes No N/A
Env-Wq 401.04(d) | 4. Is there sufficient space between large containers to allow for inspections? |
| * Yes No N/A
Env-Wq 401.04(e) | 5. Is each regulated container clearly and visibly labeled with the name of material? |
| * Yes No N/A
Env-Wq 401.04(f) | 6. Is each container closed and sealed or equipped with a drip pan beneath a spigot, valve or pump? |
| * Yes No N/A
Env-Wq 401.04(g) | 7. Is spill control and containment equipment (i.e. absorbents) available in the outdoor storage area? |
| * Yes No N/A
Env-Wq 401.04(h)(2) | 8. Are regulated substances that are stored outside covered?
Describe: _____
_____ |
| * Yes No N/A
Env-Wq 401.04(h)(4) | 9. Are regulated substances which are stored outside > 50 feet from a surface water body or > 75 feet from a private well? |
| * Yes No N/A
Env-Wq 401.04(h)(4) | 10. Are regulated substances that are stored outside > 50 feet from a storm drain?
If no, is secondary containment present? _____ |
| * Yes No N/A
Env-Wq 401.04(h)(4) | 11. Are regulated substances in outdoor storage areas stored outside the protective radius of public water supply wells? (radius is usually 400' - contact 271-2947 with questions) |
| * Yes No N/A
Env-Wq 401.04(h)(1) | 12. Do regulated containers in outside storage areas have secondary containment? |

A cover must be permanent and large enough to keep a container fully protected from rain and snow.

Transfer (Handling) of Regulated Substances in outdoor storage areas (refer to Env-Wq 401.05)

During a survey, it is important to find out and understand **where and how** the PCS handles regulated substances. Observe all areas where fluids are used, or moved to and from.

- | | |
|--|--|
| * Yes No N/A
Env-Wq 401.05(a) | 13. Are regulated substances in outdoor storage areas transferred using funnels and drip pans or other spill-safe devices? |
| * Yes No N/A
Env-Wq 401.05(b) | 14. Are regulated substances in outdoor storage areas transferred over impervious surfaces?
Describe: _____
_____ |

Section 5.

Regulated Substance Storage Areas

Release Response Information

(refer to Env-Wq 401.09)

Release response information should be easy to find, clearly visible, and easy to read. If necessary, give a blank DES response form to the PCS contact. The form works best if copied onto brightly colored paper and placed in a clear plastic sleeve.

- * Yes No N/A 15. Is there adequate information posted at each outdoor storage area that indicates what should be done and who should be contacted in the event of a spill or other emergency?
Env-Wq 401.09(b)
- Yes No N/A 16. Did you recommend to the PCS that they post the DES release response form in outdoor storage areas?

Step C. - Questions to ask when observing indoor storage areas.

Storage of Regulated Substances in Indoor Storage Areas (refer to Env-Wq 401.04).

- * Yes No N/A 1. Does the indoor storage area(s) have an impervious surface under the regulated substances?
Env-Wq 401.04(b) Describe: _____
- * Yes No N/A 2. Is the indoor storage area(s) secured against unauthorized entry (locked building, etc.)?
Env-Wq 401.04(c) Describe: _____
- * Yes No N/A 3. Is the indoor storage area(s) inspected weekly for signs of spills?
Env-Wq 401.04(d)
- * Yes No N/A 4. Is there sufficient space between large containers to allow for inspections?
Env-Wq 401.04(d)
- * Yes No N/A 5. Is each regulated container clearly and visibly labeled with the name of material?
Env-Wq 401.04(e)
- * Yes No N/A 6. Is each container closed and sealed or equipped with a drip pan beneath a spigot or pump?
Env-Wq 401.04(f)
- * Yes No N/A 7. Is spill control and containment equipment (i.e. absorbents) available in the indoor storage area?
Env-Wq 401.04(g)

Transfer (Handling) of Regulated Substances in indoor storage areas (refer to Env-Wq 401.05)

- * Yes No N/A 8. Are regulated substances in indoor storage areas transferred using funnels and drip pans or other spill-safe devices?
Env-Wq 401.05(a)
- * Yes No N/A 9. Are regulated substances in indoor storage areas transferred over impervious surfaces?
Env-Wq 401.05(b) Describe: _____

Release Response Information in indoor storage areas (refer to Env-Wq 401.09)

- * Yes No N/A 10. Is there adequate information posted at each storage area that indicates what should be done and who should be contacted in the event of a spill or other emergency?
Env-Wq 401.09(b)
- Yes No N/A 11. Did you recommend to the PCS that they post the DES release response form in indoor storage areas?

Section 6.

Floor Drains and Work Sinks

Floor drains can be small and easily hidden from view, so be sure to **ask the PCS contact** if any floor drains are present at the facility. Do not assume that you will observe all drains.

Floor drains and work sinks are focuses of the BMP rules because they can be means by which hazardous substances are released to the environment. It is vital to know where floor drains and work sinks discharge. PCS background information is useful here because floor drains in an older building are more likely to discharge to a drywell or to an unknown point than those in a newer building. Env-Ws 1503.04 (c) prohibits discharges through floor drains to the environment. For this section, you need to know if the PCS is serviced by a sanitary sewer or by a septic system. Keep in mind that floor drains can range in size from circular drains a few inches in diameter to trench drains many feet in length.

Step A. - Floor Drains (refer to Env-Wq 401.06)

Answer questions 1- 6 below

Concentrate on floor drains located **near regulated substances**. Drains in non-hazardous areas like bathrooms, kitchens or cafeterias are not covered by the Env-Wq 401 BMP rules.

Yes No 1. Is the facility connected to a sanitary sewer?

Yes No 2. Are there any on-site septic systems?

Yes No 3. Are there any floor drains at the facility?

Observe each floor drain for **visible stains**. Note any stains in the chart below.

If you **answered "YES" to 3., above**, list their locations and briefly describe, below

list of **Floor Drains** at the PCS

1.	4.
2.	5.
3.	6.

Floor Drain Discharge Points (circle all that apply and describe in the box)

Unknown Holding Tank Sanitary Sewer Septic System Drywell Stream or Wetland

Yes No N/A 4. If you circled unknown above, did you require that the PCS **determine the discharge point** of their floor drains?

* Yes No N/A 5. Are the floor drains **authorized to discharge** by any of the following (check all that apply)?
Env-Wq 401.06

_____ Underground Injection Control (UIC) Registration	_____ National Pollution Discharge Elimination System Permit
_____ Holding Tank Registration	other
_____ Discharge Authorization from local treatment plant	other

Yes No N/A 6. Did you ask to see the permits to verify their existence?

Floor drains and work sinks **cannot discharge** into or onto the ground or water without a permit.

Section 6.

Floor Drains and Work Sinks

Step B. - Work Sinks (refer to Env-Wq 401.07)

Env-Wq 401.03(k) defines work sink as a basin necessary to perform a task or process that requires a regulated substance, such as parts washing. Sinks used exclusively for hand washing are excluded from the survey unless they are stained or located near where regulated substances are used. Observe sinks for visible staining. Many facilities have devices for parts cleaning that utilize a self-contained, recirculating system for degreasing solvent. Consider these devices a work sink, but note the self-containment feature in the chart below. Self-contained degreasing sinks comply with BMP rules.

Answer questions 1 - 4 below

Yes No 1. Are there any work sinks used for non-hand washing purposes at the facility?

If you answered "YES" to question 1, list their locations and briefly describe, below

List of **Work Sinks** at the PCS

1.	4.
2.	5.
3.	6.

Work Sink Discharge Points (circle all that apply and describe in the box)

Unknown Holding Tank Self-Contained Sanitary Sewer Septic System Drywell Stream or Wetland

Yes No N/A 2. If you circled unknown, above, did you require that the PCS **determine the discharge point** of their work sinks? Report all unknown discharge locations to the DES/UIC Program at 271-2858.

* Yes No N/A 3. Are all the work sinks **authorized to discharge** by any of the following (check all that apply)?
Env-Wq 401.07

_____ Underground Injection Control (UIC) Registration	_____ National Pollution Discharge Elimination System Permit
_____ Holding Tank Registration	other
_____ Discharge authorization from local treatment plant	other

Yes No N/A 4. Did you ask to see the permits to verify their existence?

Section 7. Storage Tanks

Underground tanks cannot be directly observed, so simply list them and check their registration status. **Observe all fueling areas.** Keep in mind that the Env-Wq 401 BMP rules require that fueling be conducted on an impervious surface.

Storage tanks are either underground or aboveground. A tank is considered underground if more than 10% of its capacity is below grade. Env-Wq 401 BMP rules do not encompass all regulations pertaining to tanks; both underground and aboveground tanks are regulated apart from the BMP rules. However, because tanks have the potential to adversely impact the environment you must observe all PCS tanks and associated fueling and filling areas during a survey. List all tanks at the PCS and find out if they are registered with the DES. BMP issues applicable to tanks may include impervious surfaces, secondary containment, covers, and setbacks from surface water and wells. Be sure to keep these issues in mind while observing tanks.

Step A. - Underground Storage Tanks (USTs)

USTs are regulated by NH UST rules Env-Wm 1401.
(to be readopted as Env-Or 400 in 2007)

Partial Summary of UST Regulations

- ♦Non-residential USTs that contain other regulated materials (such as gasoline or chemicals) and are larger than 110 gallons must be registered with the DES.
- ♦Non-residential heating oil USTs that are larger than 110 gallons must be registered with the DES if other USTs are on the site that must be registered.

Answer questions 1 - 6 below.

Yes No 1. Are any USTs located at the PCS? If "YES", list them below.

List of **USTs** at the PCS

Contents	Capacity (gal.)	Age	Contents	Capacity (gal.)	Age
1.			5.		
2.			6.		
3.			7.		
4.			8.		

* Yes No N/A Unknown
Env-Wm 1401

2. Are the USTs at the PCS registered with the DES?

Yes No N/A.

3. If you answered "unknown" or "no" to question 2, did you require the PCS to determine or correct its UST registration status, if applicable?

* Yes No N/A
Env-Wq 401.04(b)

4. Does the PCS conduct fueling operations from its USTs over an impervious surface?

* Yes No N/A
Env-Wq 401.04(g)

5. Is spill control and containment equipment (i.e. absorbents) available near the USTs (especially where fueling takes place)?

* Yes No N/A
Env-Wq 401.09

6. Is release response information posted near the USTs?

Section 7. Storage Tanks

Tanks in basements are aboveground tanks if they are above the floor.

Step B. - Aboveground Storage Tanks (ASTs)

ASTs are regulated by NH AST rules Env-Wm 1402.
(to be readopted as Env-Or 300 in 2007)

Partial Summary of AST Regulations

- A single AST with a capacity larger than 660 gallons must be registered with the DES.
- Two or more ASTs with a total storage capacity larger than 1,320 gallons must be registered with DES.
- ASTs with a capacity of 10,000 gallons or less storing **fuel oil used only to heat an on-site structure** do not have to be registered.
- ASTs with a capacity less than 660 gallons are subject to BMP rules.

Answer questions 1 - 8 below.

Yes No 1. Are any ASTs at the PCS? If "YES", list below

List of **ASTs at the PCS**

Contents	Capacity (gal.)	Age	Contents	Capacity (gal.)	Age
1.			5.		
2.			6.		
3.			7.		
4.			8.		

* Yes No N/A Unknown
Env-Wm 1402

2. Are the ASTs at the PCS registered with the DES?

Yes No N/A.

3. If you answered "unknown" or "no" above, did you require the PCS to determine or correct its AST registration status, if applicable?

* Yes No N/A
Env-Wq 401.04(b)

4. Does the PCS conduct fueling operations from its ASTs over an impervious surface?

* Yes No N/A
Env-Wq 401.09

5. Is release response information posted near the ASTs?

* Yes No N/A
Env-Wq 401.04(g)

6. Is spill control and containment equipment (i.e. absorbents) available near the ASTs?

* Yes No N/A
Env-Wq 401.04(h)(1)

7. Do the ASTs at the PCS (including those that do not require registration) have a cover (i.e. roof) if outside, secondary containment and/or a spill prevention control and countermeasure plan (SPCC)? Describe below.

* Yes No N/A
Env-Wq 401.04(h)(4)

8. Do all portable, outdoor ASTs meet the BMP setbacks from surface water (>50 feet) and private wells (>75 feet)? If no, describe below.

Section 8. Final Questions

Fill out this section **before you leave the site**. Don't rely on your memory to complete this form. Site specific information is easy to forget or to confuse with other facilities so fill out this form completely and have all your questions answered before leaving.

- Yes No 1. Do any on-site septic system(s) or drywell(s) accept any non-sanitary discharges not previously mentioned? If **yes**, describe below.

- Yes No 2. Are there any other non-sanitary discharges not previously mentioned? If **yes**, describe below.

- Yes No 3. Did the survey indicate any other practices or findings that you want to discuss with the DES? If **yes**, describe below and call 271-2947 or 271-0688 for further assistance.

Section 9. Follow-up Procedures

Before you leave the site, inform the PCS representative that within 30 days you will get back to them in writing with the results of the survey.

- If you **circled "No"** to any question with an asterisk (*) beside it, or **circled "Yes"** to any question in Section 8, then the PCS is not in compliance with the referenced BMP or tank rule.

- ♦ If a BMP is **not in compliance** with a BMP or tank rule, you should notify them in writing within 30 days of the survey. Written notification should include suggestions about how to correct non-compliance issues as well as reasonable deadlines. Refer to the booklet "Managing Groundwater Protection Areas - Guidance and Sample Letters" for assistance. Call the DES at 271-2947 or 271-0688 for a copy of this booklet.
- ♦ A PCS should be notified in writing within 30 days even if no BMP rule violations were observed.
- ♦ It is not necessary to submit copies of completed survey forms to the DES. However, be certain to keep them in your files for reference. A copy of a completed survey form can be provided to a PCS if requested.

Please call the DES Source Water Protection Program at 271-2947 or 271-0688 if you need training, assistance or have any questions.