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PURPOSE FOR NEW POLICY/PROCEDURE: This policy is written to provide detail for administering the Maine Rules Relating to Drinking Water regarding the issuance of well to contamination source setback waivers. For setback requirements related to Underground Storage Tanks (USTs), see DWP0057.

ORIGINATOR/OWNER: Nathan Saunders P.E.

POLICY: Well-to-Contamination Source Setback Waiver Policy for Public Water Systems

DEFINITIONS:

Certified Geologist: A Maine Certified Geologist

Contamination Source: Leach field or other significant contamination source, not including an Underground Storage Tank (UST). For setback requirements related to Underground Storage Tanks (USTs), see DWP0057.

Existing Well: an existing well is a well already drilled when an establishment first approaches the Drinking Water Program to identify requirements related to becoming a PWS. If after contacting the DWP to identify applicable regulations and requirements, a system drills a well without DWP approval, this drilled well will not be eligible for waiver opportunities afforded to an “existing well”. Understanding this, it is essential that DWP personnel record the date of new system/well related conversations with a prospective public water system or a public water systems seeking to add a well. ***Note:*** A well driller drilling a well at an establishment meeting PWS criteria without prior approval from the DWP will be considered for referral to the Well Driller’s Board.

Licensed System: any system with a state license such as a day care, nursery school, convenience store, restaurant, campground, etc.

New Well: defined as a well that has not been drilled yet or an existing well that has not been regulated as a public water source in the last five (5) years... new to the Maine Drinking Water Program (*this includes After the Fact wells*).

Replacement Well: a well that provides a new source of water to a population served by an existing, currently regulated PWS well (which no longer serves the PWS). A replacement well is **not** a redundant or an additional well and may be an existing well. In the case of a well whose volume capacity has diminished over time, an additional well that replaces the lost capacity will be considered a “replacement” well (replacing lost capacity) and the existing, reduced-capacity-well may continue to be used; the reduction in volume capacity must be proven and documented.

Title: Well to Contamination Source Setback Waiver Policy
SOPID#: DWP0063- H
Revision: H

Prepared By: N. Saunders
Date: April. 16, 2010
Date of Revision: 10/22/2013

WT-IS Policy: Water Testing for Non-Community Public Water Supply Wells with Inadequate Setbacks from Septic System Disposal Leach Fields (DWP0072).

REGULATIONS:

From the Maine Rules Relating to Drinking Water [10-144 CMR 231 (3)(G)(2)]

1. “New wells shall be located at least 300 feet away from potential contamination sources” [primarily septic system leach fields]
2. “If circumstances exist where a proposed well location must be placed closer than 300 feet from a potential contamination source, [e.g. septic system leach field], then the Department may grant a setback waiver on a case-by-case basis.”

Public water system owners may be granted a waiver if the following circumstances prevent a 300-foot setback: These circumstances are incorporated directly from Chapter 4 of the Well Drillers Rule, CMR 232, New Water Well Construction.

- a) the size of the property is not sufficient to allow for the required setback; or
- b) sufficient setbacks from other potential sources of contamination cannot be met; or
- c) excessive slopes prohibit access; or
- d) the location of permanent structures would result in unreasonable impacts or damage to the structures; or
- e) the location of lakes, ponds, streams or wetlands prohibits meeting the required setback; or
- f) the presence of bedrock at or within three vertical feet of the surface would result in unreasonable trenching requirements; or
- g) other requirement as accepted by the Maine Drinking Water Program (DWP) staff.
- h) the new well is a “Replacement Well” as defined by this policy.

SPECIAL WAIVERS FOR STATE-LICENSED SYSTEMS:

Establishments meeting the DWP criteria of a public water system, currently licensed by another State agency (day cares, nursery schools, conveniences stores, restaurants, etc.), and operating continuously from before July 1st, 2009 until present, will be granted a well-to-leach field setback waiver if their separation distance measures between 100 and 300 feet. Such establishments with a well-to-leach field separation distance less than 100 feet will be evaluated for a setback waiver on a case-by-case basis. In contrast, all public water system establishments that began or substantially changed their licensed operation after July, 1st, 2009 will be subject to the standard requirements of this policy. All establishments with a setback less than 300 feet are required to sample according to the policy (DWP0072) for Water Testing for Non-Community PWS with Insufficient Setbacks from Septic System Disposal Leach Fields (WT-IS).

EXISTING WELLS

Existing wells, defined above, may be eligible for a setback waiver. See Standard Policy below.

REPLACEMENT WELLS

A “replacement” well, as defined above, may be issued a setback waiver without requiring a hydrogeologic assessment (Apdx B).

For a well drilled to replace a contaminated well (due to oil or other contaminant), additional testing and/or a hydrogeologic assessment (Apdx B) may be required.

A well that makes up (replaces) the lost volume capacity of a well with diminished output can only be considered a “replacement” well if the diminished output of the well is proven and documented. A well that cannot meet an increased demand does not qualify as a well with diminished output. Therefore, if the growth of a PWS increases the demand on an existing well and the well cannot meet the increased demand, then an “additional” well is required and it cannot be considered a “replacement” well.

Note: when drilling a replacement well close to an existing well, the well-driller/owner should take caution if abandoning the existing well so that the abandonment process does not negatively impact the new well. For example, do not fill up the entire existing well with Bentonite slurry. Instead, fill the well with crushed rock to within 10 to 20 feet of the casing shoe, then fill the remaining well and casing with Bentonite slurry.

Due to the hydrogeologic complications associated with drilling a replacement well close to an existing well, setback waivers for replacement wells need to be reviewed and signed by the DWP Geologist.

STANDARD POLICY

The Well to Contamination Source Setback Waiver Form (DWP0150) must be used to record a setback waiver request that is granted or denied.

Setback = 300 feet or more:

If a setback measures 300 feet or more, then a waiver is not required. Tables (1) and (2) within the Policy for Water Quality Monitoring for Non-Community PWS Wells with Inadequate Setbacks from Septic Disposal System Leach Fields (WQM-IS) offer monitoring and well construction guidance for Non-Community public water systems. Monitoring and well construction requirements for Community systems are determined on a case-by-case basis.

Setback = 150 to 299 feet:

1. A public water system seeking to drill a new well must meet one of the above 8 circumstances that prevent a 300-foot setback from occurring. If none of the above circumstances apply, then the public water system must create a 300-foot-or-greater setback by drilling a well, moving a septic system leach field, or some other method.
2. A public water system seeking to drill a new well with a setback of 150 to 299 feet, that fails to meet one of the reduced-setback circumstances, may hire a certified geologist to render an opinion concerning the risk of the well being contaminated by the leach field, based on the surficial geology between the well and the leach field. A setback of 150 to 299 feet may be waived by a DWP geologist upon review of the information, data, and opinion provided by a certified geologist. Potential remedies to this reduced setback include septic pretreatment and/or well modification (e.g. installation of a Jazwell seal of an appropriate length), as approved by a DWP geologist. See Appendix B: General Steps of a Hydrogeologic Assessment

3. For an existing well that fails to meet one of the above 8 circumstances allowing for a reduced setback, the DWP may issue a setback waiver.

4. A waived non community public water system with a setback between 150 to 299 feet must follow the water quality monitoring and well construction requirements from Table 1 and Table 2 of the WT-IS Policy. Monitoring and well construction requirements for Community systems are determined on a case-by-case basis.

Setback = 100 to 149 feet:

1. A public water system seeking to drill a new well must meet one of the above 8 circumstances that prevent a 300-foot setback from occurring. If none of the above circumstances apply, then the public water system must create a 300-foot-or-greater setback by drilling a well, moving a septic system leach field, or some other method. See definition of an existing well.

2. A public water system with a setback of 100 feet to 149 feet that requires a hydrogeologic assessment may only receive a waiver if a DWP geologist reviews and approves such a waiver request.

3. For both an existing well or a well that has not been drilled yet, a public water system that started operating or was substantially changed after 10/24/2001, per the Maine Rules Relating to Drinking Water:

Must complete a hydrogeologic assessment appropriate to the system classification and situation as specified by a DWP geologist. The DWP geologist will approve or disapprove the evaluation. DWP Field Inspectors will instruct the public water system to contact a DWP geologist to discuss the requirements of a hydrogeologic assessment. If the DWP Geologist determines that a professional hydrogeologic assessment is necessary, the assessment must be completed by a Maine Certified Geologist. **A hydrogeologic assessment may be waived if a certified geologist submits an engineered septic and/or well construction proposal that is then approved by the DWP.** See Appendix B: General Steps of a Hydrogeologic Assessment

4. A public water system that started operating or was substantially changed before 10/24/2001, with a well(s) drilled before 10/24/2001, is not required to complete a hydrogeologic assessment for that well. Note water quality monitoring requirements below.

Note: A waiver of the hydrogeologic assessment based on the age of the system is only applicable for wells drilled before 10/24/2001. Conversely, any well drilled after 10/24/2001 must be evaluated using a hydrogeological assessment.

5. A waived non community public water system with a setback between 100 to 149 feet must follow the water quality monitoring and well construction requirements from Table 1 and Table 2 of the WT-IS Policy. Monitoring and well construction requirements for Community systems are determined on a case-by-case basis.

Setbacks less than 100 feet:

1. A public water system seeking to drill a new well must meet one of the above 8 circumstances that prevent a 300-foot setback from occurring. If none of the above circumstances apply, then

the public water system must create a 300-foot-or-greater setback by drilling a well, moving a septic system leach field, or some other method.

2. A public water system with a setback of less than 100 feet that requires a hydrogeologic assessment may only receive a waiver if a DWP geologist reviews and approves such a waiver request.

3. For an existing well, a hydrogeologic assessment is required, regardless of the establishment start date or substantial change date.

4. For both an existing well or a well that has not been drilled yet, per Maine Rules Relating to Drinking Water, any system that started operating or was substantially changed after 10/24/2001 must complete a hydrogeologic assessment as specified above for setbacks of 100 to 149 feet.

A hydrogeologic assessment may be waived if a certified geologist submits an engineered septic and/or well construction proposal that is then approved by the DWP. See Appendix B: General Steps of a Hydrogeologic Assessment

5. A waived non community public water system with a setback less than 100 feet must follow the water quality monitoring and well construction requirements from Table 1 and Table 2 of the WT-IS Policy. Monitoring and well construction requirements for Community systems are determined on a case-by-case basis.

Approval of Setback Waivers

The DWP Field Inspection Team Manager can approve and sign setback waivers that do not require a hydrogeologic assessment. All waivers that require a hydrogeologic assessment must be approved and signed by a DWP Geologist.

Associated Documents

Well to Contamination Source Setback Waiver Form (DWP0150)

New System or Well Approval Procedure (DWP0068)

Well-to-Underground-Storage-Tank (UST) Setback Policy for Public Water Systems (DWP0057)

Water Quality Monitoring for Non-Community PWS with Insufficient Setbacks from Septic System Disposal Fields: [WT-IS Policy] (DWP0072)

Superseded Documents

None

Retention

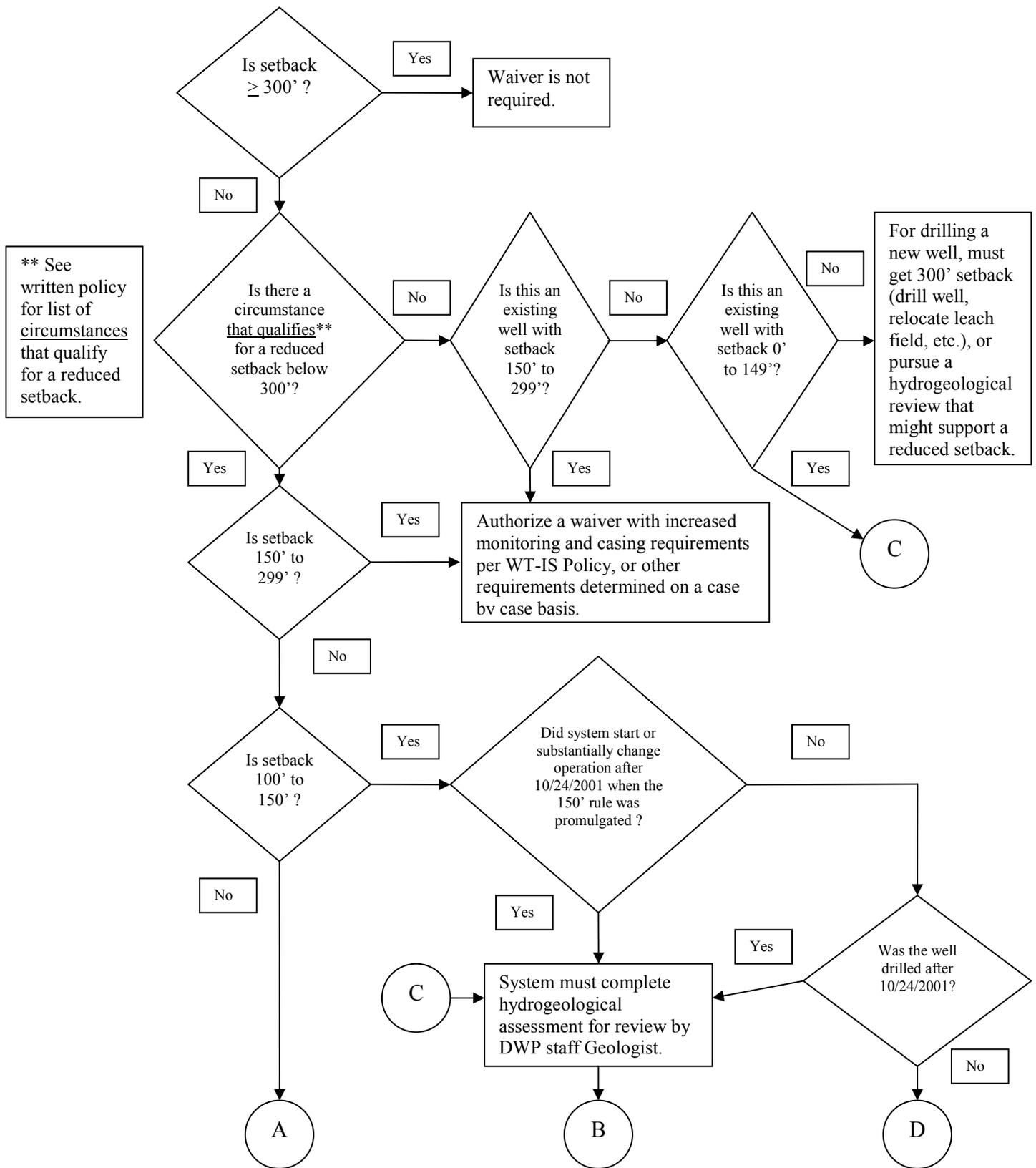
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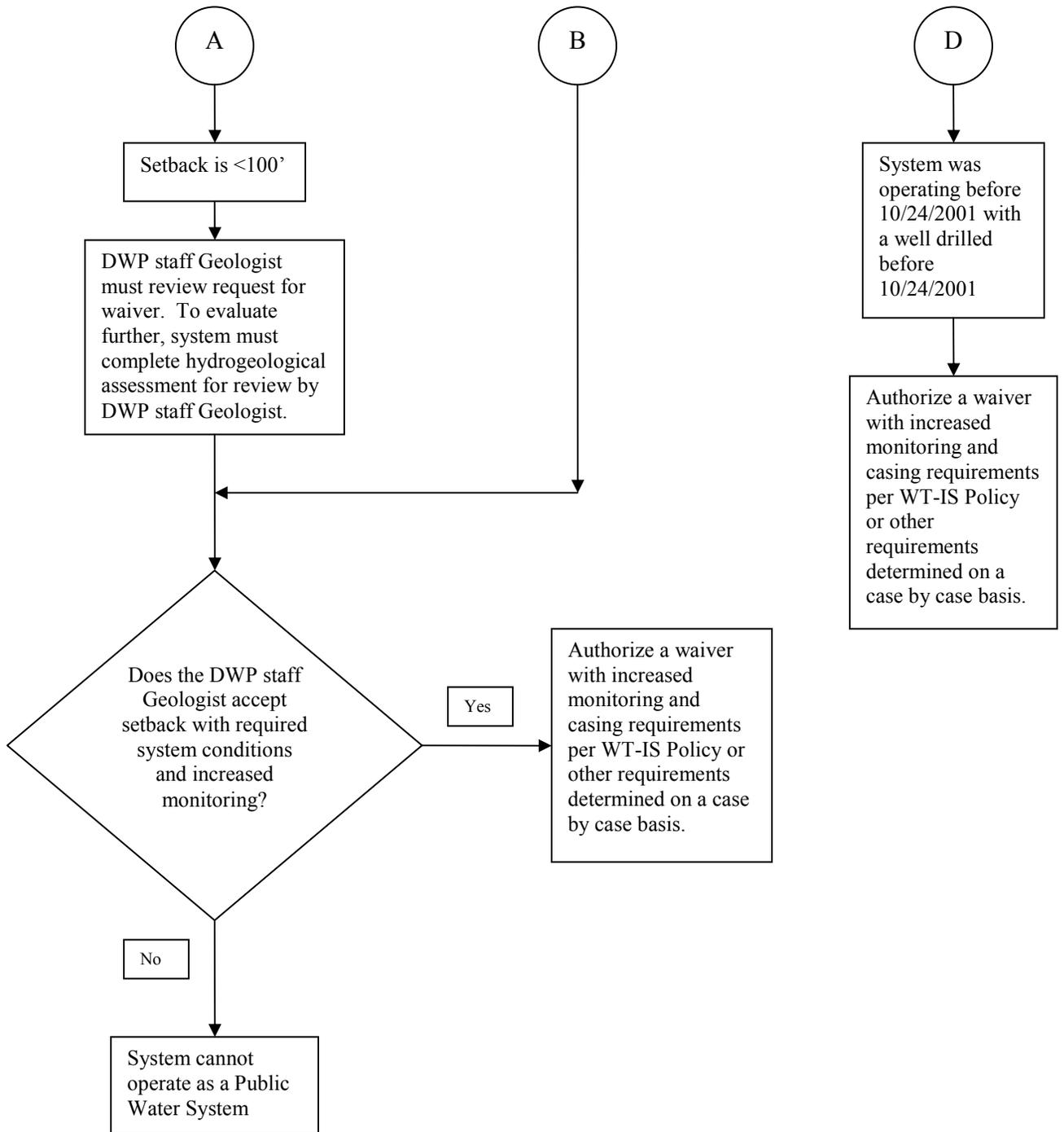
Revision Log

Section	Page	Rev.	Date	Description Of Change	Approved by:
		Original	9/25/06		Nancy Beardsley
		B	1/9/07		Nancy Beardsley
Policy		C	5/11/09	Changed wording of Maine rules to reflect updated rules. Added criteria for state licensed establishments. Reformatted to meet DWP documentation requirements. Used "Certified Geologist" throughout doc.	Roger Crouse
Special Waivers	2	D	8/3/09	Added clarifying language	Roger Crouse
Definitions, Policy	Several	E	4/16/10	Added definition and policy on "Replacement Wells"	Roger Crouse
Definitions Policy	Several	F	8/19/11	Added definition and policy on "Existing Wells". Clarified waiving a hydrogeologic assessment for systems in place before 10/24/2001.	Roger Crouse
Purpose, Policy, Apdx	Several	G	8/23/12	Referred to UST policy in Purpose. Removed Apdx B - waiver form, to its own document (DWP0150). Changed Apdx C to B.	 Nathan Saunders
Definitions, Appndx A	1,7	H	10/22/2013	Changed New Well Definition from 3 to 5 years. Clarified flow chart on drilling a new well with no reason for a setback reduction, to match written policy in "Standard Policy, Setback = 150 to 299 feet, bullet 2, on page 3.	 Nathan Saunders

Appendix A

Flowchart for the Well to Contamination Source Setback Waiver Policy for Public Water Systems





Appendix B General Steps of a Hydrogeologic Assessment

When a hydrogeologic assessment is either required or requested as part of a setback waiver request:

1. The DWP Field Inspector contacts DWP Geologist to provide known site related information.
2. The DWP Geologist determines if enough information is known to justify a setback waiver, and also potentially to waive a formal hydrogeologic assessment.
 - If enough information is known that justifies a setback waiver, the field inspector fills out the Well to Contamination Source Setback Waiver Form (DWP0150) and sends it to the DWP Geologist to record any necessary waiver conditions and to sign the waiver. The waiver is granted. (see note below).
 - If not enough information is known to justify a setback waiver, the field inspector informs the PWS that they must hire a Maine Certified Geologist to complete a hydrogeologic assessment. The PWS can call the DWP Geologist to discuss the hydrogeologic assessment process. The hired geologist should first call the DWP Geologist to discuss the specific geological conditions at the site. It is possible that due to unfavorable geological conditions, further geological study is not warranted (see note below), and subsequent effort should be focused on acceptable risk mitigation such as drilling a new well or installing septic pretreatment. This may occur without requiring the cost of a detailed hydrogeologic assessment and report. It is also possible that further hydrogeologic assessment will record that geologic conditions warrant a waiver, with or without well construction requirements. In this case a report from a Certified Maine Hydrogeologist must be submitted to the DWP Geologist for review and approval, or disapproval. If the hired geologist is in contact with the DWP geologist about findings and options developed during the study, the assessment should end up identifying a best plan for acceptable risk mitigation, which reduces the chance of a plan simply being denied.

Note: The Maine Rules Relating to Drinking Water give the opportunity for the DWP to waive the request for a hydrogeologic assessment from a Maine Certified Hydrogeologist