

# **Tamworth Groundwater Protection Ordinance Summary & FAQs**

**September 25, 2010, updated December 28, 2010**

*See the Draft Version of the Ordinance dated December 15, 2010. An earlier version was initially presented to and accepted by the Planning Board on September 22, 2010, then revised and released as a version dated October 28, 2010, which was the subject of the first public hearing on the draft ordinance on November 17, 2010. The current December 15, 2010 version is the subject of the second public hearing, December 29, 2010.*

## **1. Why should Tamworth adopt this ordinance?**

Most Tamworth residents have private wells. Most do not get their water tested regularly. Ensuring that businesses handling larger quantities of regulated substances follow Best Management Practices is a direct health concern for the town. Groundwater is the one water resource in Tamworth that is not well protected (pun intended).

There are many examples around New Hampshire of groundwater pollution that have cost landowners and towns a lot of money.

Prevention is the best and cheapest way to go. So far, Tamworth's groundwater is of high quality. But the Ossipee stratified drift aquifer that underlies much of the southern and eastern parts of Town recharges rapidly and is very permeable. This means that groundwater can become contaminated quickly if a spill occurs, and that pollution will travel quickly (within hours or days) to area wells, making clean-up difficult.

### **Why groundwater matters....**

- Of NH's 2,400+ public water supplies, 98% rely on groundwater; all of Tamworth's do.
- Groundwater provides about 40% of flow to NH rivers and lakes.
- Since 1990, groundwater contamination clean-ups in Tamworth have cost the NH DES \$303,272. State funds are now scarce, and the Town could be left with this kind of bill.

## **2. Where did this ordinance come from?**

Lakes Region Planning Commission (LRPC), with assistance from Green Mountain Conservation Group and a grant from the NH Department of Environmental Services (DES), are encouraging all towns in the Ossipee watershed to do what they can to protect the quality of the water in the stratified drift Ossipee aquifer – the largest such aquifer in the state. The model ordinance was developed over many years by DES and has been tested and refined by use in Belmont and other towns. The proposed Tamworth ordinance closely follows the latest model ordinance, although the order of some of the sections have been changed, and several sections have been deleted, to simplify the ordinance.

After collecting background information, the Tamworth Planning Board asked the Tamworth Conservation Commission for assistance in creating a draft ordinance. Ned Beecher, Chair of the TCC, and Commissioner Kathy Bunker developed the initial version of the draft ordinance and provided it to the Planning Board late in the spring of 2010. It was then further refined by this subcommittee, with assistance from Planning Board Secretary David Little, as well as David Jeffers and Eric Senecal of LRPC.

## **3. What does the ordinance do?**

This ordinance stresses Best Management Practices (applying Performance Standards) for the handling of regulated substances – substances that are known to be potentially toxic and detrimental to groundwater.

#### **4. Where does the ordinance apply?**

The ordinance establishes a Groundwater Protection District that includes wellhead protection areas (for public or group drinking water systems) that are designated by DES and the land areas over the stratified drift aquifer (which is defined by U. S. Geological Society mapping). The ordinance only applies to this District in Tamworth, which is mostly in the southeast part of town.

The ordinance applies to businesses of any sort that use and/or store regulated substances such as gasoline (see list, below) in containers of 5 gallons or more. Private residences are exempt, although commercial activities at them are not.

Specific Performance Standards (Best Management Practices) must be followed by any business in the Groundwater Protection District.

#### **5. The state has regulations. Aren't they adequate?**

The Department of Environmental Services (DES) administers Env-Wq 401, which requires Best Management Practices for the handling of regulated substances. DES can enforce these regulations. The problem is, DES is in Concord and does not have enough staff. The proposed Tamworth ordinance requires essentially the same things as the state rules, but lends Town officials support to conduct inspections, if the Selectmen choose to create an inspection program, and take enforcement actions. This creates more local control and sensitivity to local conditions.

#### **6. How does this ordinance compare with requirements in other towns?**

Tamworth is generally following the model ordinance recommended by the Office of Energy and Planning, DES, and the Lakes Region Planning Commission. Madison has had a groundwater protection ordinance for more than 10 years. Other towns around Tamworth in the Ossipee watershed are discussing adopting the same requirements as being proposed for Tamworth. All of these others will adopt them under their zoning ordinances. Tamworth has no comprehensive zoning, so the groundwater protection ordinance will be a stand-alone version, same as the existing Tamworth Wetlands Conservation District Ordinance.

#### **7. Does the ordinance prohibit anything?**

Yes. DES has learned from experience that there are particular land uses that have led to groundwater pollution and recommends that these uses (for example, hazardous waste facilities, and new gasoline stations) not be allowed over the highest quality aquifers (e.g. the stratified drift aquifer) and in wellhead protection areas around key drinking water wells. Some activities, including some that involve more than 100 gallons of a regulated substance, would be possible with a Conditional Use Permit from the Planning Board.

#### **8. What about inspections? Won't businesses object to them?**

1. There is already at least one local inspection program in Tamworth: the Fire Chief inspects buildings for compliance with state fire codes. This is for the protection of public health and safety. Protecting the groundwater on which almost all Tamworth residents depend is a significant public health and safety matter.
2. Inspections are educational events. They help business owners be aware of Best Management Practices and how they can be followed. Inspections help meet the

Used oil from 1 oil change can contaminate 1 million gallons of groundwater. -U.S. EPA

requirements of business insurance, and sometime insurance companies will charge a lower rate if they know that independent inspections occur regularly. Inspections could also help with the value of the property, if it were to be sold, by ensuring no groundwater pollution. For example, it would help to be able to provide a prospective seller with a signed, official document that says "Property was inspected 3 times in the last five years; no violations of the local groundwater protection ordinance were found in any inspection." In other towns, businesses have welcomed the inspection program, for it helps them prove to the public and their customers that they are acting responsibly.

3. The Ordinance offers residents protection from the rare occasion where a business is acting irresponsibly and may be threatening water quality. The only businesses that would be afraid of an inspection are those that are out of compliance with the standards of the Ordinance – which means they are likely out of compliance with current state regulations. The goal of the Ordinance is to help change the actions of these businesses. In order to reduce risks to groundwater, the Ordinance may only be effective with an inspection program.
4. The Ordinance says that an inspection program "may" occur, so there will be public discussion of such a program before it is implemented. Regulated business owners should be involved in setting up any inspection program and have input as to who will conduct the inspections.
5. Inspections are already authorized by state law; RSA 485-C states: **Investigation and Inspection.** – The department, any authorized representative, any authorized representative of any agency operating under a memorandum of agreement with the department, or any town or city health officer may enter any land or establishment for the purpose of administering the provisions of this chapter, and shall at reasonable times have access to any facility subject to this chapter. **Source.** 1991, 344:1. 1996, 228:106, eff. July 1, 1996. With this Ordinance, there can be local discussion and input regarding a fair and effective inspection program.

### ***9. What are the "regulated substances" that would be regulated by this Ordinance?***

The Ordinance defines "regulated substances" as "petroleum, petroleum products, and substances listed under 40 CFR 302, as may be updated from time to time, excluding the following substances: (1) ammonia, (2) sodium hypochlorite, (3) sodium hydroxide, (4) acetic acid, (5) sulfuric acid, (6) potassium hydroxide, (7) potassium permanganate, and (8) propane and other liquefied fuels which exist as gases at normal atmospheric temperature and pressure."

40 CFR 302 is the federal regulation of hazardous substances, and it includes a table of hundreds of chemicals and elements. The full list of these regulated substances, which would be covered by this ordinance, can be viewed at <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=bd2402e0ebd1e894b77c340b0d611c46&rgn=div5&view=text&node=40:27.0.1.1.2&idno=40>

### **10. Why does the ordinance apply to regulated substances in containers of 5 gallons or greater? Why not 6 gallons or 4 gallons?**

1. A line has to be drawn somewhere. Obviously, it makes no sense to try to regulate every little bit of regulated substance used at commercial operations in town. And small amounts of substances present a lower risk of groundwater contamination compared to larger amounts. This ordinance is intended to reduce the greatest risks. It cannot eliminate all risks.

2. The state regulations, Env-Wq 401, applies to regulated containers “with a capacity of greater than or equal to 5 gallons” and the regulated substances in them. The proposed Ordinance is written to be consistent with this existing state standard.

**11. What about skid tanks and other large, mobile fuel tanks used in agricultural or forestry operations that can hold 100 gallons of fuel or more? How will they be affected by this proposed Ordinance?**

Agricultural and timber harvesting activities are specifically exempted from most or all of the performance standards in the Ordinance.

Skid tanks are designed to be mobile and their use in the field is not usually over impervious surfaces. Ideally, such operations should use some of the portable secondary containment or catchment devices available to contain spills that may occur during transfer of fuel from these tanks. However, to date, enforcement of this kind of requirement (under the state’s Env-Wq 401) has been minimal. This is because timber harvest and related forestry activities are regulated mostly by the NH Dept. of Resources and Economic Development (DRED) and agriculture is regulated by the NH Dept. of Agriculture, Markets, and Food (DAMF), both of which provide Best Management Practices. Therefore, these activities are exempted from having to comply with particular performance standards and from the requirement of getting a conditional use permit. But this exemption applies only as long as these activities are conducted in accordance with the official best management practices (BMPs), which include, for forestry operations, having spill clean-up materials readily available (e.g. absorbents).

**12. Does anyone pay attention to the comments provided at the public hearings?**

Yes. For example, at the first public hearing, someone noted that some regulated substances should not be in completely sealed containers; this led to a change noting that a container should be vented, as appropriate. Other comments were concerned about regulation of forestry and agriculture skid tanks; these comments led to further consultation with DES and the exemption of timber harvesting and agricultural activities for most or all of the performance standards. Other comments about stormwater permits, blasting activities, and snow dumps led to removal of those items from the current version of the Ordinance.

**Ordinance or not, here’s what YOU can do to protect groundwater:**

- Minimize use of hazardous chemicals; use less toxic alternatives.
- Bring leftover chemicals, oil paints, fuels, etc. to Household Hazardous Waste Day (late July/early August each year).
- Transfer fuels and other regulated substances over a drip pan or other impervious surface (there are portable spill containment systems for use when refueling skidders and farm machinery).
- Avoid spills. Keep absorbent materials (rags, speedee-dri, etc.) close by, and promptly clean up any spill that occurs.
- Store gas, oil, pesticides, and other regulated substances in labeled, closed, leak-proof containers on an impervious surface, under cover.
- Apply fertilizers at no more than the recommended rate, if at all.
- Encourage these Best Management Practices at home and at work.
- Take care of your septic system: don’t pour hazardous chemicals down the drain, and have the septic tank pumped out every 3-5 years.