



SOURCE WATER PROTECTION PROGRAM

THREATS TO DRINKING WATER SOURCES

DNAPLs (DENSE NON-AQUEOUS PHASE LIQUIDS)

What are DNAPLs?

Dense, non-aqueous phase liquids—or DNAPLs (pronounced dee-napples) are toxic chemicals found in liquid products that you may store or use in your home or business. DNAPLs can contaminate our drinking water sources if spilled or mishandled.

DNAPLs are chemicals that:

- Are denser than water (which means they sink); and
- Do not dissolve readily in water (which means they do not break down in water).

Where are DNAPLs found?

DNAPLs are most commonly used in commercial and industrial operations. They are used as coolants, solvents for degreasing and dry cleaning, paint strippers and spot removers. The DNAPLs on the provincial list of drinking water threats are:

- 1,4 Dioxane, PAHs
- Perchloroethylene (PCE)
- Tetrachloroethylene (PERC)
- Trichloroethylene (TCE)
- Any chemical that degrades to vinyl chloride

Why are DNAPLs a threat to our source water?

A spill or leak from improper handling or storage of a DNAPL could contaminate drinking water sources. DNAPLs are the drinking water threat of most concern because:

- Small amounts of DNAPLs are toxic to humans and our environment
- Many DNAPLs are carcinogenic (can cause cancer)
- Spills are very difficult to clean up because DNAPLs sink
- Toxic plumes from DNAPLs can last for decades or even centuries

Ours to Protect

For more information
519-822-1260 x 3320
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What can I do to protect our source water from DNAPLs?

The Clean Water Act, 2006 requires that DNAPLs are handled and stored in way that ensures they do not impact our source water. To help protect our drinking water sources:

- Consider using alternative, eco-friendly products in place of DNAPLs
- Have a spills response plan in place
- Ensure staff handling and storing DNAPLs are properly trained and use proper personal protective equipment
- Dispose of household hazardous waste safely and free of charge at the City of Guelph's Household Hazardous Waste Depot: visit guelph.ca/waste for more information about hours of operation and acceptable materials
- Report any spill, no matter how small, to the **24-hour Spills Action Centre** immediately at **1-800-268-6060**

