**Glossary of Terms:** Burlington Environmental LLC Georgetown

**Agreed Order:** a legal document signed by Ecology and the PLPs, describing the process, expectations, and schedule for site cleanup.

**Chlorinated organic chemicals:** a large family of chemical compounds that contain chlorine and were often used for solvents. Examples include: trichloroethene (TCE), dichloroethenes, vinyl chloride, and tetrachloroethene (PCE, or perc).

**Cleanup Action Plan (CAP):** a document describing the final cleanup action (“remedy” or “remedial action”) for a site. A draft CAP is prepared following the Feasibility Study and provided to the public for comment.

**CVOC:** stands for “Chlorinated Volatile Organic Chemicals.” Chlorinated organic chemicals are described above. “Volatile” refers to chemicals in water that can easily change to a gas or vapor at relatively low temperatures. All of the chlorinated organic chemicals of concern at the site are volatile.

**Enhanced in situ bioremediation:** in this fact sheet enhanced in situ bioremediation refers to a groundwater cleanup technology that relies on microorganisms to breakdown – or “de-chlorinate” – chlorinated contaminants. “Enhancements,” like lactate, molasses, vegetable oil, and Hydrogen Release Compound®, are injected into the aquifer to help the microorganisms perform this task. The term “in situ” means *in place*. In the context here it means that the cleanup activity takes place where the contamination is located, below ground surface.

**Feasibility Study (FS):** an analysis performed following the site investigation, which evaluates potential cleanup actions (referred to as “alternatives”).

**In situ chemical oxidation (ISCO):**acleanup technology that places (e.g., injects) an oxidizing material into the soil and/or groundwater for the purpose of degrading contaminants. The most commonly used oxidants are permanganate and persulfate. Chlorinated organic compounds, like trichloroethene (see below), can potentially be cleaned-up with this technology. See EPA’s “[A Citizen's Guide to in Situ Chemical Oxidation](https://clu-in.org/download/Citizens/a_citizens_guide_to_in_situ_chemical_oxidation.pdf)**” at** <https://clu-in.org/techfocus/default.focus/sec/In_Situ_Oxidation/cat/Overview/>

**In situ chemical reduction (ISCR):**acleanup technology that places (e.g., injects) a reducing material into the soil and/or groundwater for the purpose of degrading contaminants. The most commonly used “reductant” is zero valent iron (ZVI). Chlorinated organic compounds can potentially be cleaned-up with this technology. See: <https://cluin.org/techfocus/default.focus/sec/In_Situ_Chemical_Reduction/cat/Overview/>

### **Interim Action:** an action that reduces or stabilizes site contamination, or otherwise protects human health and the environment, but only partially addresses the full cleanup of the site. Interim actions are commonly carried out during the RI/FS period, before a final cleanup action for the entire site has been selected.

**pH:** a measure of acidity that ranges from 0 to 14. A pH of 7 is considered “neutral.” Solutions (such as groundwater) with a pH less than 7 are *acidic*; pH values greater than 7 are considered [*basic*](https://en.wikipedia.org/wiki/Basic_%28chemistry%29).

**Pilot study**:an environmental study that is usually conducted during the remedy’s design phase. Pilot studies provide information that will improve the full-scale design and implementation of a cleanup action. Pilot studies can also serve in some respects as “treatability” studies. That is, they can be additionally used to test the site-specific effectiveness of certain types of cleanup technologies.

**Preferred alternative:** a potential cleanup action, favored by the PLPs, Ecology, or both. Cleanup actions are referred to as “preferred” to distinguish them from “final” or “selected” actions. Preferred cleanup actions can be considered proposals; they are developed prior to public comment periods. “Final” or “selected” cleanup actions are chosen after the public comment period, and after Ecology has had time to consider all comments received.

**Potentially Liable Person (PLP**): any person who Ecology finds, based on credible evidence, to be liable under RCW [70.105D.040](http://apps.leg.wa.gov/RCW/default.aspx?cite=70.105D.040) (the Model Toxics Control Act).

**Trichloroethene**: also called trichloroethylene, or TCE. TCE is a chlorinated, volatile hydrocarbon compound that was commonly used in the past as an industrial solvent. The US Environmental Protection Agency’s (EPA’s) Integrated Risk Information System (IRIS) database characterizes TCE as carcinogenic (cancer-causing) to humans. It is also a non-cancer health hazard. Please see <https://www.atsdr.cdc.gov/ToxProfiles/tp.asp?id=173&tid=30> for more information.

NOTE: Under certain conditions, TCE in groundwater can biologically degrade (change into) dichloroethenes and vinyl chloride. These are also toxic compounds. Vinyl chloride, in particular, has very low groundwater and surface water cleanup levels. Please see <https://www.atsdr.cdc.gov/toxprofiles/TP.asp?id=282&tid=51>.