



2650 East 40<sup>th</sup> Avenue  
 Denver, CO 80205  
 800-833-7958 www.geotechenv.com

## TREATMENT FOR VAPOR PHASE REMEDIATION FORM

CUSTOMER INFORMATION																																																						
Name _____		Title _____																																																				
Company _____																																																						
Address _____																																																						
_____																																																						
Email _____		Phone _____																																																				
Customer # _____																																																						
SITE CHARACTERISTICS																																																						
<b>Vapor Contaminant(s) being Treated</b> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr style="background-color: #cccccc;"> <th colspan="5" style="text-align: center; padding: 5px;">Physical Properties</th> </tr> <tr style="background-color: #cccccc;"> <th style="width: 20%; padding: 5px;">Vapor Compound</th> <th style="width: 15%; padding: 5px;">Influent (ppm)</th> <th style="width: 15%; padding: 5px;">Vapor Point (C°)</th> <th style="width: 15%; padding: 5px;">Specific Gravity</th> <th style="width: 15%; padding: 5px;">Vapor Density at 25°C</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr style="background-color: #cccccc;"> <th colspan="2" style="padding: 5px;">Soil Type(s)</th> <th colspan="3" style="padding: 5px;">Permeability (k)</th> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				Physical Properties					Vapor Compound	Influent (ppm)	Vapor Point (C°)	Specific Gravity	Vapor Density at 25°C																										Soil Type(s)		Permeability (k)													<b>Site Engineering Drawing Available?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No  <b>Site Elevation</b> _____ ft ASL <b>Vadose Zone</b> Measured Distance from Ground Surface to Saturated Zone: _____ ft <b>Vapor Recovery</b> Number of Vapor Recovery Well Points _____ total Vapor Recovery Pipe Diameter (ID) _____ (ID) Total Length of Pipe _____ feet CFM at Blower Inlet _____ SCFM Vacuum at Blower Inlet _____ H2OG <b>Sparge</b> Number of Sparge Well Points _____ total CFM at Blower Discharge _____ SCFM Pressure at Blower Discharge _____ PSIG/in
Physical Properties																																																						
Vapor Compound	Influent (ppm)	Vapor Point (C°)	Specific Gravity	Vapor Density at 25°C																																																		
Soil Type(s)		Permeability (k)																																																				
TOOLBOX																																																						
<b>System Preferences</b> <input type="checkbox"/> Portable Trailer Mounted System(s) <input type="checkbox"/> Dedicated Semi-Permanent Skid System <input type="checkbox"/> Dedicated Permanent Enclosed System <b>Available Power</b> <input type="checkbox"/> No Power <input type="checkbox"/> AC 115V or 230V, 1PH, Grid or Generator <input type="checkbox"/> AC 230V 3PH, Grid or Generator <input type="checkbox"/> Other _____ <b>Hazardous Classified Location</b> <input type="checkbox"/> No Hazardous Location Classification <input type="checkbox"/> NEPA NEC Hazardous Location Class, Division, Group Class _____ (I-III) Division _____ (1-2) Group _____ (A-G)			<b>Other Monitoring, Treatment &amp; Transfer Technology</b> <input type="checkbox"/> Sub slab Vapor Points _____ qty <input type="checkbox"/> Photo Ionization Detector <input type="checkbox"/> High Vacuum Sampler <input type="checkbox"/> Tedlar Bags <input type="checkbox"/> Bio or Chemical Injection <input type="checkbox"/> Activated Carbon <input type="checkbox"/> Transfer Pump(s) <input type="checkbox"/> Condensate Tank Fluid Level Sensor(s) <input type="checkbox"/> Remote Telemetry <input type="checkbox"/> High Vacuum Shut Down <input type="checkbox"/> Other _____																																																			

## Additional Notes:

### **Contaminant Type**

Hydrocarbon-based contaminants are chemical substances, primarily composed of hydrogen and carbon atoms, that can pollute the environment, particularly soil and water, when released from industrial processes or accidental spills.

### **Influent Concentrations & Units**

Influent concentration is a measure of the amount of a particular substance present in a fluid entering a system or process, typically expressed in units such as milligrams per liter (mg/L) or parts per million (ppm).

**The vapor point**, also known as boiling point, is the temperature at which a liquid's vapor pressure equals the external pressure, causing the liquid to rapidly evaporate or boil.

**The specific gravity of vapor**, also known as vapor density, is a measure of the density of a vapor in relation to the density of air.

**The density of vapor** is a measure of the mass per unit volume of a vapor at a specific temperature and pressure.

**Soil permeability** refers to the ability of soil to transmit water and air, essentially a measure of the ease with which fluids can move through the soil's pore spaces.

Understanding these properties can help in predicting a contaminant's behavior, determining the potential risk, and designing effective remediation strategies, such as soil vapor extraction systems.

### **NEPA NEC Hazardous Location**

The National Environmental Policy Act (NEPA) is a key piece of environmental legislation in the United States that requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions. As part of this, the NEC (National Electrical Code) Hazardous Location Class, Division, Group system is used to classify locations with potentially dangerous conditions due to flammable gases or vapors, combustible dusts, or ignitable fibers or flyings. The 'Class' refers to the general nature of hazardous material in the surrounding atmosphere (Class I for flammable gases or vapors, Class II for combustible dust, and Class III for ignitable fibers or flyings). 'Division' indicates the likelihood of hazardous material being present in an ignitable concentration (Division 1 for conditions where hazards are normally present, and Division 2 where hazards are not normally present but may accidentally exist). Finally, 'Group' categorizes the specific type of hazardous material in the location, designated by letters A through G.