

# San Joaquin Valley Air Pollution Control District Supplemental Application Form

## Soil and Groundwater Remediation

*This form must be accompanied by a completed Application for Authority to Construct and Permit to Operate form*

PERMIT TO BE ISSUED TO:
LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:

### PROCESS DESCRIPTION

<b>Project Details</b>	Affected media: <input type="checkbox"/> Groundwater and/or <input type="checkbox"/> Soil
	Molecular weight of contaminant: _____ lb/lb-mole (Note: Default is gasoline @ 100 lb/lb-mole.)
	Source of contamination (include substances, sources, and full soil analysis):

### REMEDIATION EQUIPMENT DESCRIPTION

<b>Remediation Equipment Details</b>	Blower Manufacturer:	Model:	Rating: _____ hp
	Pump Manufacturer <sup>1</sup> :	Model:	Rating: _____ hp
	Maximum air flow: _____ cfm	Maximum water flow <sup>1</sup> : _____ gpm	
	Maximum concentration of contaminant (hydrocarbon, PERC, etc.) in the air stream entering the control equipment from the stripper/soil wells: _____ ppmv		
	Overall control efficiency of the remediation operation: _____ % (attach manufacturer's guarantee)		
	Soil to undergo aeration? <input type="checkbox"/> No <input type="checkbox"/> Yes (Note: If yes the "Uncontrolled Limited Soil Aeration" form is required.)		
	<sup>1</sup> Note: Applies to groundwater remediation projects only.		

### CONTROL EQUIPMENT DESCRIPTION

<b>Type</b>	<input type="checkbox"/> Carbon Canisters <input type="checkbox"/> Catalytic Oxidizer <input type="checkbox"/> Thermal Oxidizer <input type="checkbox"/> Internal combustion (IC) engine <input type="checkbox"/> Other: _____ (Note: Provide details.)		
<b>Carbon Canister Details</b>	Manufacturer:	Model:	
	Weight of primary canister(s): _____ lb	Weight of final canister: _____ lb	
	Number of canisters: _____	Note: Prior to the last canister, the system must be able to withstand 7 days of operation without VOC breakthrough.	
<b>Thermal/Catalytic Oxidizer Details</b>	Manufacturer:	Model:	
	Supplemental Heat: <input type="checkbox"/> Natural Gas _____ MMBtu/hr, <input type="checkbox"/> LPG _____ MMBtu/hr, <input type="checkbox"/> Electric _____ kVA		
	Oxidizer temperature: _____ °F (Note: Thermal oxidizer temperature must be at least 1,400 °F, catalytic oxidizer temperature must be at least of 600 °F)		
	Is a continuous exhaust temperature-recording device present? <input type="checkbox"/> Yes <input type="checkbox"/> No (Note: A continuous temperature-recording device or an automatic shutdown system is required.)		
	Oxidizer retention time: _____ sec (Note: The retention time must be at least 0.5 seconds.)		

### CONTROL EQUIPMENT DESCRIPTION (Continued)

<b>IC Engine Details</b>	Manufacturer: _____		Model: _____	
	Type of supplemental fuel used: <input type="checkbox"/> Natural Gas <input type="checkbox"/> LPG/Propane		Maximum Rated Power: _____ hp	
	Fuel consumption at maximum rated Output: _____ scf/hr or _____ gal/hr			
	Does the engine power a blower or a pump? <input type="checkbox"/> Yes <input type="checkbox"/> No			
	Will the engine operate for longer than 12 months or 1,000 hrs at this location? <input type="checkbox"/> Yes <input type="checkbox"/> No			
	Is the engine rated at greater than 50 bhp? <input type="checkbox"/> Yes <input type="checkbox"/> No			
	If you answer "yes" to all the above then the engine is subject to Rule 4701 (Emission limits Section 5.1.3 Table 3.3.c, Alternate Monitoring, source testing, etc.) <a href="http://www.valleyair.org/policies_per/Policies/SSP%201810.pdf">http://www.valleyair.org/policies_per/Policies/SSP%201810.pdf</a> <input type="checkbox"/> Monitoring of NO <sub>x</sub> , CO, and O <sub>2</sub> concentrations <input type="checkbox"/> Other Alternate Monitoring Plan, attach details			
<b>Control Equipment</b>	Catalytic Converter - Manufacturer: _____		Model: _____	
	Control Efficiencies: NO <sub>x</sub> _____%, CO _____%, VOC _____%			
<b>Emission Factors</b>	Note: See District BACT and District Rule 4701 requirements for applicability to proposed engine at <a href="http://www.valleyair.org/busind/pto/bact/chapter2.pdf">http://www.valleyair.org/busind/pto/bact/chapter2.pdf</a> and <a href="http://www.valleyair.org/rules/curnrules/r4701.pdf">http://www.valleyair.org/rules/curnrules/r4701.pdf</a>			
	Nitrogen Oxides (as NO <sub>2</sub> )	_____	ppmvd	g/hp-hr
	Carbon Monoxide	_____	ppmvd	g/hp-hr
	% O <sub>2</sub> , dry basis, if corrected to other than 15%			
<b>Source of Data</b> (include copies)	Are emissions provided above: <input type="checkbox"/> Controlled <input type="checkbox"/> Uncontrolled			

### HEALTH RISK ASSESSMENT DATA

<b>Operating Hours</b>	Maximum Operating Schedule: _____ hours per day, and _____ years			
<b>Receptor Data</b>	Distance to nearest Residence	_____ feet	Distance is measured from the proposed stack location to the nearest boundary of the nearest apartment, house, dormitory, etc.	
	Direction to nearest Residence	_____	Direction from the stack to the receptor, i.e. Northeast or South.	
	Distance to nearest Business	_____ feet	Distance is measured from the proposed stack location to the nearest boundary of the nearest office building, factory, store, etc.	
	Direction to nearest Business	_____	Direction from the stack to the receptor, i.e. North or Southwest.	
<b>Stack Parameters</b>	Release Height	_____ feet above the ground		
	Stack Diameter	_____ inches, at point of release		
	Rain Cap	<input type="checkbox"/> Flapper-type <input type="checkbox"/> Fixed-type <input type="checkbox"/> None		
	Direction of Flow	<input type="checkbox"/> Vertically Upward <input type="checkbox"/> Horizontal		
<b>Exhaust Data</b>	Flowrate: _____ acfm		Temperature: _____ °F	
<b>Facility Location</b>	<input type="checkbox"/> Urban (area of dense population) <input type="checkbox"/> Rural (area of sparse population)			

### FOR DISTRICT USE ONLY

<b>Date:</b> _____	<b>FID:</b> _____	<b>Project:</b> _____	<b>Public Notice:</b> Y N
<b>Comments:</b> _____			