

ATTACHMENT A

ITEMS TO BE INCLUDED IN AN ENGINEERING FEASIBILITY STUDY CEASE AND DESIST ORDER NO. GUENOC WINERY, INC. GUENOC WINERY LAKE COUNTY

The outline below is a minimum requirement for items to be included and discussed in the text of all feasibility studies/remedial option evaluation reports submitted to the Board. Reports must be signed by a registered geologist, certified engineering geologist, or civil engineer registered or certified by the state of California.

- I. Purpose of Feasibility Study

- II. Background
 - A. Description of Facility
 - B. Site History
 - 1. Years of Operation
 - 2. Chemical Use
 - 3. Chemical Releases (Potential and Documented)
 - C. Geology
 - 1. Regional
 - 2. Local, soil type, lithology, lateral extent of lithologic units
 - D. Hydrogeology
 - 1. Aquifers, Aquitards, Perched Aquifers
 - 2. Groundwater flow rates, directions, recharge, discharge
 - 3. Groundwater Use
 - 4. Extraction and injection wells affect on groundwater flow
 - E. Surface Water
 - 1. Losing or gaining streams, ponds etc.
 - 2. Hydraulic connection with aquifers
 - F. Local Land Use
 - G. Previous Investigation and Remedial Actions

- II. Nature and Extent of Contamination
 - A. Contaminants in Soils
 - 1. Types and Concentrations
 - 2. Lateral and Vertical Extent

- B. Pollutants in Groundwater
 - 1. Types and Concentrations
 - 2. Lateral and Vertical Extent (including Perched Zones)
- III. Contaminant Fate and Transport
 - A. Contaminant Properties
 - 1. Mobility
 - 2. Toxicity
 - 3. Half-life
 - 4. Chemical and biological degradation
 - B. Contaminant Transport based on Soil and Aquifer Properties
- IV. Remedial Action Objectives
- V. Description of Remedial Action Alternatives – at a minimum, 3 alternatives must be considered
 - A. Alternative that meets background levels
 - B. Alternative that meets water quality objectives
 - C. Alternative that meets levels between background and water quality objectives
- VI. Evaluation of Remedial Action Alternatives
 - A. Overall Protectiveness of Human Health and the Environment
 - B. Compliance with Laws and Regulations
 - C. Long Term Effectiveness and Permanence
 - D. Reduction of Toxicity, Mobility, and Volume
 - E. Short Term Effectiveness
 - F. Implementability
 - G. Cost
 - F. State and Community Acceptance
- VII. Potential Impacts of Remedial Actions
- VIII. Estimated Project Schedule for Each Alternative
- IX. Preferred Alternative