



November 21, 2005

Alameda County
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Alameda County
NOV 28 2005

Attention: Ms. Susan Hugo

RE: Work Plan to Profile Soil Conditions
Aqua Chlor
15885 Altamont Pass Road, Tracy, California
(CCI Project No. 12176-1)

Dear Ms. Hugo:

On behalf of Aqua Chlor, Compliance & Closure, Inc. (CCI) has prepared this Work Plan to profile soil conditions below the surface where ethylene glycol was detected in a soil sample collected at the Aqua Chlor facility, located at 15885 Altamont Pass Road, Tracy, Alameda County, California (Figure 1).

As the Alameda County, Environmental Health Services (ACEHS) is aware, ethylene glycol was detected at 1,700 milligrams per kilogram (mg/kg) in one of six soil samples collected at depths ranging from 15 to 22 inches below the ground surface. The ethylene glycol was detected in soil sample S-2 (Limited Closure Plan Report, September 18, 2005), collected near the former location of the freezer which was filled with antifreeze. The antifreeze was used to cool 20-pound field service cylinders prior to filling them with chlorine gas for use in Aqua Chlor's business (Figure's 2 & 3). CCI is of the opinion the ethylene glycol detected at S-2 is limited to the clay soil in the immediate area near the sample location. This is based on the fact that the sample was collected from very dense clay, which is prevalent throughout the site. The density of the clay will minimize or prevent the migration of compounds in the soil. Furthermore, soil samples S-1 and S-1A, located in front of and five feet away from the former freezer area, were reported to be free of detectable ethylene glycol.

In order to confirm that the ethylene glycol is limited to the near surface and does not pose a threat to the environment, CCI proposes to drill one soil boring at the location where sample S-2 was collected and profile the soil to a maximum depth of 25 feet. If groundwater is encountered within the proposed depth interval, a grab water sample will also be collected. Soil samples will be collected at 5, 10, 15, 20 and 25 feet and analyzed for ethylene glycol. Since the soil in the

area is very dense clay, the proposed samples should provide the necessary data to determine the extent and impact of the ethylene glycol.

Soil Boring

The proposed soil boring will be drilled as follows:

CCI will retain Vironex of San Leandro, California to drill the boring. The boring will be drilled with a truck-mounted, BT-6600 drill rig, using 7-inch outside diameter hollow stem augers, which will be cleaned prior to use. The boring will be advanced to a depth of 25 feet. A CCI geologist will log the borehole by collecting samples at 5-foot intervals to the bottom of the boring. The soils encountered will be characterized using the Unified Soil Classification System. Soil samples will be collected using a pre-cleaned, modified, California split-spoon sampler with internal 2-inch diameter by 6-inch long brass liners. The sampler will be driven 1-1/2 feet ahead of the auger with a 140-pound, rig-operated hammer. The sampler will then be removed and disassembled into its component parts. The soil samples collected for analysis will be capped, labeled and logged on a chain of custody form and placed in a cooler containing water ice for preservation in the field and during transport to a state-certified laboratory. All drill cuttings will be placed on and covered with plastic and left at the site pending laboratory analysis of the soil.

Laboratory Analysis

The soil samples will be transported to Severn Trent Laboratories, Inc. (STL), located in Pleasanton, California. All soil samples will be analyzed for ethylene glycol using EPA Test Method 8015B.

If groundwater is encountered within the depth explored, a grab water sample will be collected by installing temporary 1-inch Schedule 40 Poly-vinyl chloride (PVC) casing through the hollow stem auger to the full depth of the boring. The temporary well will be allowed to fill with formation water. A groundwater sample will be collected by hydraulically pumping a 3/8-inch diameter PVC tubing that is fitted with a small ball valve. Upon hydraulically pumping the tubing, which forces water through the tubing to the surface, a water sample will be collected in appropriate laboratory-supplied bottles, labeled, logged on a chain-of-custody form and stored in a chilled ice chest containing water ice for preservation in the field and during transport to a state-certified laboratory. The water sample will also be analyzed for ethylene glycol using EPA Test Method 8015B. Upon completion of sampling, the temporary 1-inch PVC casing will be removed and the borehole will be sealed with Portland cement to the surface.

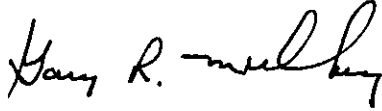
Report

At the conclusion of field activities, a letter report will be prepared documenting all field activities, and methods and procedures used to drill the soil boring, as well as laboratory results.

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Aqua Chlor
Page 3

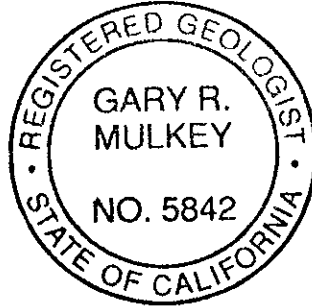
CCI is prepared to implement this Work Plan upon receiving approval from the ACEHS. If you have any questions or require additional information, please call our office at (925) 648-2008.

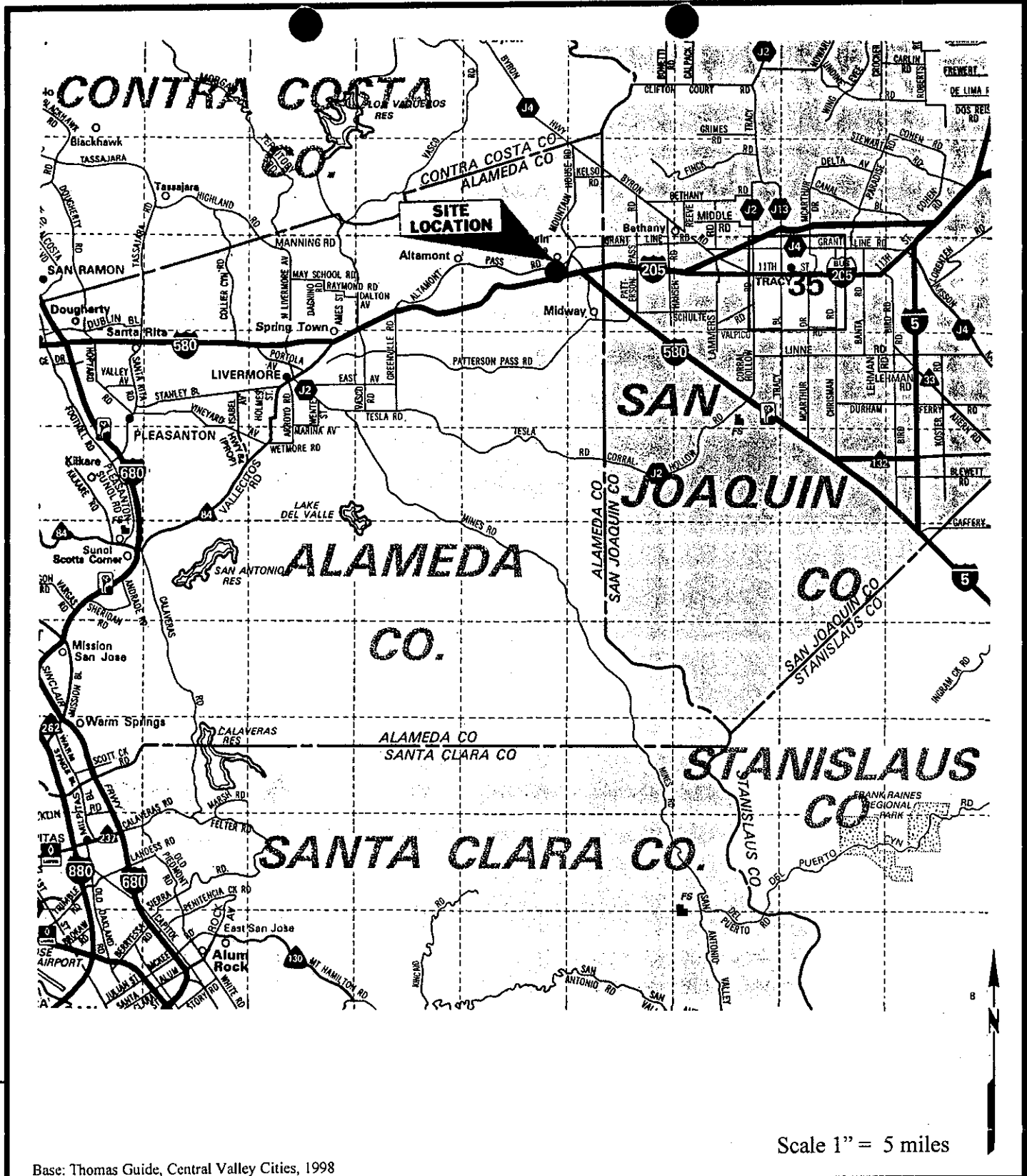
Sincerely,
Compliance & Closure, Inc.



Gary R. Mulkey, R.G. 5842




cc: Mr. John Wallace, Aqua Chlor





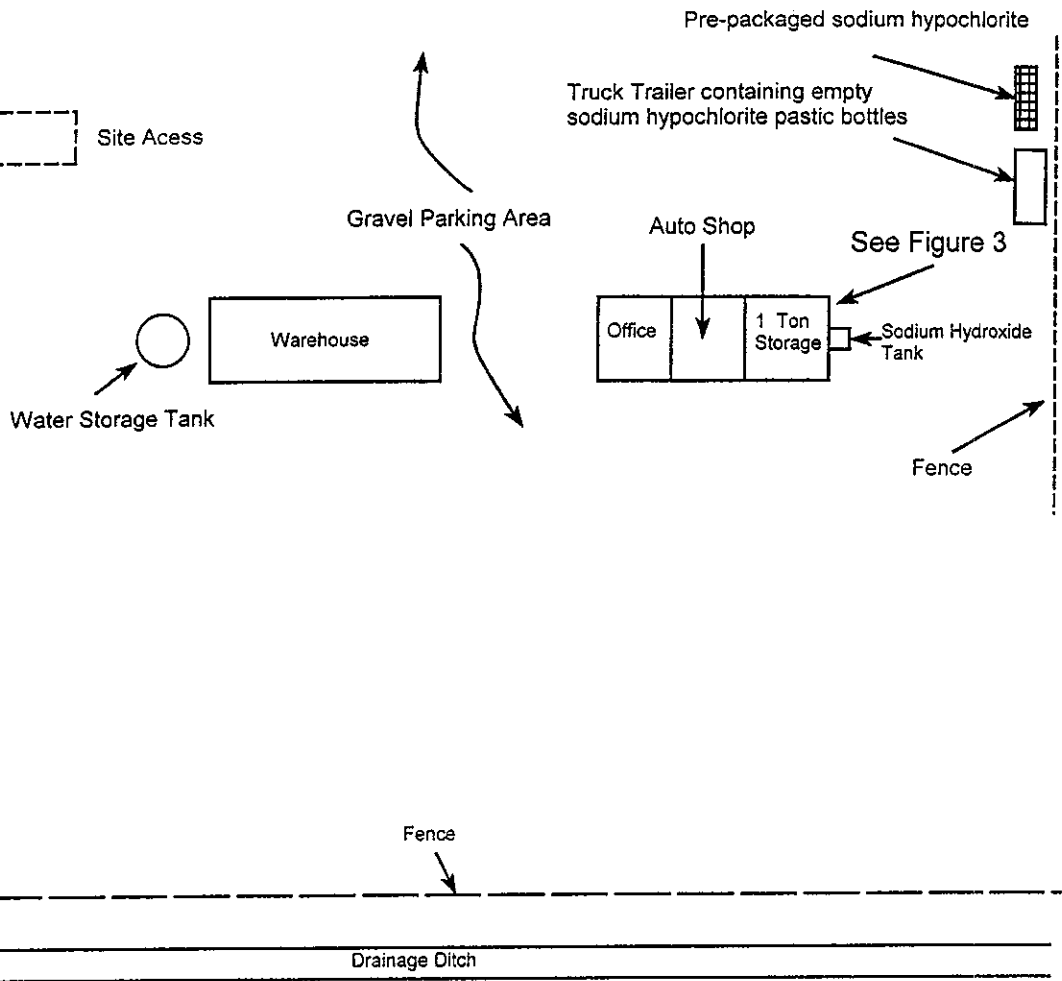
Scale 1" = 5 miles

Base: Thomas Guide, Central Valley Cities, 1998

Reviewed By: 	SITE LOCATION MAP AQUA CHLOR 15885 Altamont Pass Road Tracy, California	 Compliance & Closure, Inc.	
Approved By: 			Job No.: 12176-1
Date: 5/23/2005		Fig. No.: 1	

Altamont Pass Road

Drainage Ditch



See Figure 3

North

Not to Scale

Reviewed By:

Approved By:

GENERAL SITE MAP

AQUA CHLOR
15885 Altamont Pass Road
Tracy, California



**Compliance
&
Closure, Inc.**

Job No.:

12176-1

Drawn By:

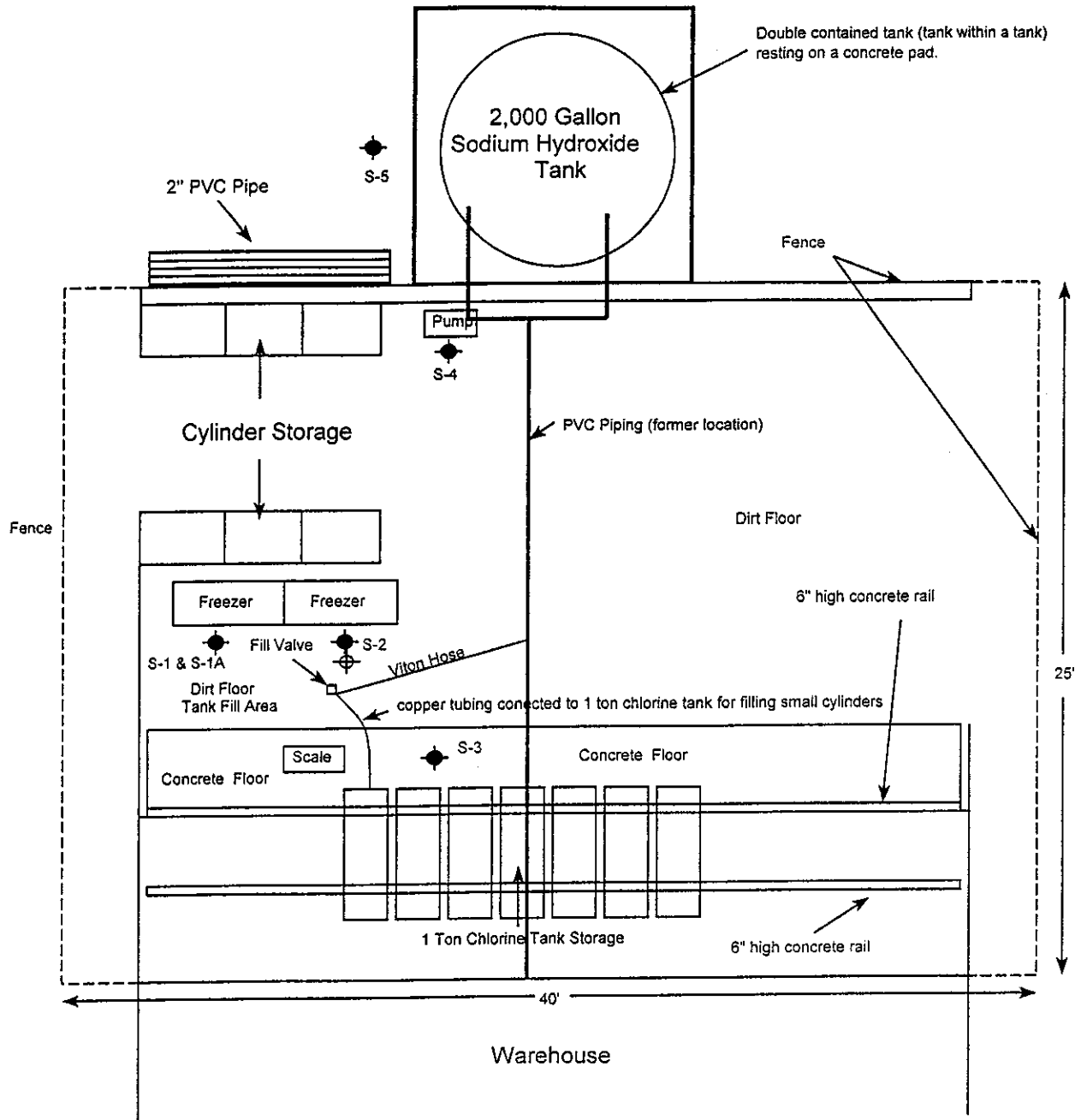
GM

Date:

6/8/2005

Fig. No.:


2




Legend

- ◆ Soil Sample Location
- ⊕ Proposed Soil Boring

N
↓
Not to Scale

Reviewed By: 

Approved By: 

PROPOSED BORING LOCATION MAP

Aqua Chlor
15885 Altamont Pass Road
Tracy, California



Job No.: 12176-1	Drawn By: GM
Date: 11/21/2005	Fig. No.: 3