CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board
Division of Drinking Water

ENGINEERING REPORT

In the Matter of the Permit Application

From

County Service Area 11
Water System No. 4100582

Report Prepared By

Van Tsang, P.E.
Associate Sanitary Engineer

Approved By
Eric Lacy, P.E.
District Engineer
Santa Clara District

Domestic Water Supply Permit
August 5, 2015

Division of Drinking Water
Drinking Water Field Operations Branch

STATE OF *CALIFORNIA*

DOMESTIC WATER SUPPLY PERMIT

Issued To

County Service Area 11

4100582

By The

State Water Resource Control Board

Division of Drinking Water

PERMIT NUMBER: 02-17-15P-4100582 **DATE: August 5, 2015**

WHEREAS:

1. On July 1, 2011, the regulatory authority for the water system known as County Service Area 11 was transferred from the San Mateo County Environmental Health to the State Water Resource Control Board – Division of Drinking Water. In accordance with the requirements of the California Health and Safety Code (CHSC), the Division has made the decision to initiate an investigation and consider issuing a water supply permit.

2. The County Service Area 11 water system is located in Pescadero, San Mateo County.

3. County Service Area 11's actions are governed by the County of San Mateo, Board of Supervisors and managed by the County of San Mateo, Department of Public Works. The County of San Mateo, Department of Public Works therefore is responsible for compliance with all statutory and regulatory drinking water requirements and the conditions set forth in this permit.

4. The public water system for which the permit application has been submitted is as described briefly below:

   The water system consists of one active groundwater supply well, Well 01 (Primary Station Code (PSCode) 4100582-001), a standby well, Well 02 (PSCode 4100582-002), a 140,000 gallon welded steel storage tank, a pump/chlorination house (for emergency disinfection), seventeen fire hydrants and approximately 11,660 feet of 4 inch to 8 inch polyvinyl (PVC) and ductile iron (DI) pipes.

A more detailed description of the permitted system is presented in the attached Engineering Report.

And WHEREAS:

1. The Division of Drinking Water has evaluated all of the information submitted for County Service Area 11 and has conducted a physical investigation of the County Service Area 11 water system.

2. The Division of Drinking Water has the authority to issue domestic water supply permits pursuant to Health and Safety Code Section 116540.

THEREFORE: The Division of Drinking Water has determined the following:

1. The County Service Area 11 water system meets the criteria for and is hereby classified as a community water system.

2. The County Service Area 11 water system has sufficient source capacity to serve the anticipated water demand.

3. Provided the following conditions are complied with, the County Service Area 11 should be capable of providing water to consumers that is pure, wholesome, and potable and in compliance with statutory and regulatory drinking water requirements at all times.

THE COUNTY SERVICE AREA 11 IS HEREBY ISSUED THIS DOMESTIC WATER SUPPLY PERMIT TO OPERATE THE COUNTY SERVICE AREA 11 WATER SYSTEM.

The County Service Area 11 water system shall comply with the following permit conditions:

1. County Service Area 11 shall comply with all the requirements set forth in the California Safe Drinking Water Act, California Health and Safety Code and any regulations, standards or orders adopted thereunder.

2. County Service Area 11 shall serve water to its customers only from approved sources. No other sources shall be used without prior approval from the Division. The only approved sources for CSA 11 are Well 01, Primary Station Code 4100582-001, and Well 02, Primary Station Code 4100582-002.

3. County Service Area 11 shall operate the CSA 11 water supply and distribution system in accordance with the approved operations plan, dated December 1, 2011. Planed modifications to incorporate new operating procedures shall be submitted to the Division for review and approval prior to implementation.

4. County Service Area 11 shall develop and adopt operating rules and ordinances to implement the cross-connection control program by **December 31, 2015**. By **July 1, 2016**, CSA 11 shall survey and identify all water user premises where cross-connections are likely to occur. By **December 31, 2016**, CSA 11 shall install and test all required backflow prevention assemblies to ensure their operation. By **December 31, 2016**, CSA 11 shall be in full compliance with Section 7584, CCR.

5. County Service Area 11 shall comply with the water quality monitoring and reporting requirements for the following water quality constituents:

    a. Bacteriological quality, in accordance with Article 3, Chapter 15, Title 22, CCR.

    b. Inorganic chemicals, except for Nitrate, Nitrite, Asbestos and Perchlorate, in accordance with Section 64432, Chapter 15, Title 22, CCR.

    c. Nitrate and Nitrite, in accordance with Section 64432.1, Chapter 15, Title 22, CCR.

    d. Asbestos, in accordance with Section 64432.2, Chapter 15, Title 22, CCR.

    e. Perchlorate, in accordance with Section 64432.3, Chapter 15, Title 22, CCR.

    f. Radiological Chemicals, in accordance with Section 64442, Chapter 15, Tile 22, CCR.

    g. Volatile and Synthetic Organic Chemicals, in accordance with Section 64444, Chapter 15, Title 22, CCR.

    h. Lead and Copper, in accordance with Section 64675, Chapter 17.5, Title 22, CCR.

    All source water quality monitoring results analyzed by a certified laboratory shall be submitted to the Division via Electronic Data Transfer (EDT) using the assigned Primary Station Code (PS Code) of the monitoring site.

6. All persons responsible for the operation and maintenance of the water system shall be certified in accordance with Sections 63750.1 through 64413.7, inclusive, Title 22, CCR. A chief operator licensed at, as a minimum, Grade D1, shall be responsible for the operation of CSA 11's distribution system.

This permit supersedes all previous domestic water supply permits issued for this public water system and shall remain in effect unless and until it is amended, revised, reissued, or declared to be null and void by the Division of Drinking Water. This permit is non-transferable.

Any change in the source of water for the water system, any modification of the method of treatment as described in the Permit Report, or any addition of distribution system storage reservoirs shall not be made unless an application for such change is submitted to the Division of Drinking Water.

This permit shall be effective as of the date shown below.

FOR THE DIVISION OF DRINKING WATER

August 5, 2015
Date

Eric Lacy, P.E.
District Engineer
Santa Clara District
Drinking Water Field Operations Branch
Division of Drinking Water

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State Water Resources Control Board
Division of Drinking Water

Engineering Report
In the Matter of the Permit Application
From the
County Service Area 11
Water System No. 4100582
San Mateo County
August 2015

State Water Resource Control Board – Division of Drinking Water
Drinking Water Field Operations Branch
Van Tsang, P.E., Associate Sanitary Engineer
Eric Lacy, P.E., District Engineer

I. Introduction

1.1 Purpose of Report

During the 1970s and 1980s, domestic water for the Pescadero community was supplied by small shallow groundwater supply wells and surface impoundments. The water contained high levels of nitrate and fecal coliform contamination. The County Service Area 11 (CSA 11) was formed in 1988 to finance the development of a new water source and serve as the water provider for the Pescadero community. The CSA 11 water system is operated by the San Mateo County Department of Public Works (DPW).

A domestic water supply permit was issued to the CSA 11 public water system by the San Mateo County Environmental Health (hereinafter, County) in July 1992. The drinking water regulatory authority over CSA 11 was transferred from the County to the Drinking Water Field Operations Branch of the State Water Resource Control Board – Division of Drinking Water (hereinafter, Division) on July 1, 2011. After a thorough investigation of the CSA 11 water system, the Division has determined to issue a permit to CSA 11 to maintain and operate the existing CSA 11 water system, as in accordance with Section 116525 of the California Health and Safety Code.

The purpose of this report is to present a sanitary engineering and public health evaluation of the existing water system regarding the issuance of the permit.

1.2 Brief Description of Water System

County Service Area 11 provides potable water to 97 active service connections with an estimated population of 450. All of the potable water supply is produced from one active groundwater supply well, Well 01 (Primary Station Code (PSCode) 4100582-001). A standby well, Well 02 (PSCode

4100582-002), is also available as an emergency supply. The CSA 11 water system also consists of a 140,000 gallon welded steel storage tank, a pump/chlorination house (for emergency disinfection), seventeen fire hydrants and approximately 11,660 feet of 4 inch to 8 inch polyvinyl (PVC) and ductile iron (DI) pipes.

1.3 Source of Information

The information used in preparing this report was collected from the water system's files and the field inspection conducted on May 27, 2015 by Ms. Van Tsang of the Division.

II. Investigations and Findings

2.1 Service Area and Use

The CSA 11 services are located on Pescadero Creek Road, between Butano Creek Road and Goulson Street, including the San Mateo Fire Station; along Stage Road up to North Street; and on North Street up to the Pescadero-La Honda School. There are currently 8 undeveloped parcels zoned for residential or commercial use. The CSA 11 boundaries are limited by the San Mateo County Local Coastal Program as a Rural Service Center and services cannot be extended beyond the boundaries. A copy of the CSA 11 service area is included in Appendix A.

According to the 2014 Annual Report to the Division, CSA 11 used approximately 10.5 million gallons (MG) of water in 2014, with a maximum month production of approximately 1.1 MG in August. As discussed in more details below, Well 01 can produce approximately 55 gallons per minute (gpm) or approximately 2.4 MG in a month.

2.2 Source of Supply

Well 01 was drilled reverse rotary method in January 1992 to a depth of 265 feet. The sanitary seal was provided to a depth of 50 feet with a thickness of 4 inches wide. The well is equipped with a Grundfos 7.5 horse power (HP) submersible pump capable of producing approximately 55 gpm. The pump is positioned 242 feet below ground surface. The 10 inch PVC well casing is installed within an 18 inch borehole and extended to a depth of 260 feet. The screened interval is located at depths of 210 feet to 250 feet. The aquifer material consists of clay, sand, gravel and sandstone. A copy of the Well Completion Report for Well 01 is included in Appendix B of this report.

Well 02, located approximately 150 feet from Well 01, was drilled in 1983 and is assumed to be equipped with at least a 50 feet annular seal. A Well Completion Report is not available to determine the below ground construction for Well 02. Recent pumping of Well 02 only yielded 5 to 7 gpm.

Both wells are equipped with a swing check valve, sample tap, pump to waste line, casing vent and air release valve. The wells are enclosed within a concrete and steel structure.

2.3 Treatment

Water produced from Well 01 and 02 is not treated prior to storage and distribution. Emergency disinfection is available if needed.

2.4 Storage

Storage is provided by a 140,000 gallon welded steel storage tank. The tank appeared to be in good condition during the May 27, 2015 inspection.

2.5 Alarms Features

An alarm is triggered and operators are notified by the control system via cell phone when the treated water storage tank level reaches 10 feet (low level) and 16.7 feet (high level). The alarm is tested quarterly to ensure proper operation.

2.6 Operation and Maintenance

Operation and maintenance of the CSA 11 water supply distribution system is performed under contract with an outside entity. Currently, it is contracted with Bracewell Engineering Inc. (BEI) and Mr. Christopher Hauge serves as the designated certified chief operator. Mr. Hauge is a certified Grade T3 Water Treatment Operator (30792) and Grade D3 Water Distribution Operator (36120). Bracewell Engineering operators visit and inspect the water system facilities at least three times per week. A copy of the operations plan, dated December 1, 2011, is included in Appendix C.

2.7 Drinking Water Source Assessment

According to the December 2002, Drinking Water Source Assessments for Wells 01 and 02, the wells are considered vulnerable to historic waste dumps and landfills. The landfills are located more than 600 feet from the well sites and consists of an older seven acre portion and a newer 54 acre portion. The older portion of the landfill received waste from 1962 to 1973. The new portion of the landfill received waste from 1973 to 1986. Waste received at the landfill consists of residential, commercial and industrial solid wastes classified as Class III wastes. Class III wastes includes but is not limited to: all putrescible and nonputresible solid, semi-solid, and liquid wastes including household garbage, green waste, paper, metal, animal waste, industrial wastes, demolition and construction wastes and soil. Both landfills were closed and are monitored in accordance with the Regional Water Quality Control Board requirements. A copy of the Final Order for the landfills is included in Appendix D.

2.8 Water Quality Monitoring

2.8.1 Source Monitoring

As a community water system, CSA 11 is required to monitor Well 01 and Well 02 for General Mineral (GM), General Physical (GP), Inorganic Chemicals (IOC), Radioactivity (Gross Alpha), Volatile Organic Chemicals (VOC) and Synthetic Organic Chemicals (SOC). The monitoring frequencies and status for Well 01 and 02 are attached in Appendix E.

2.8.2 Bacteriological Quality – Distribution System

Section 64423, Chapter 15, Title 22 of the CCR (Total Coliform Rule) requires community water systems to collect routine bacteriological water samples from sites that represent the water throughout the distribution system. Based on the classification, population served and total number of service connections, CSA 11 must collect a minimum of one bacteriological sample from the distribution system each month. If the routine sample contains coliform bacteria, CSA 11 is required to collect a repeat sample set consisted of four sample sites. If one or more samples are

positive for total coliform in a month, CSA 11 is required to collect five routine samples during the following month. Analytical results of all required samples collected shall be reported to the Division no later than the tenth day of the following month. Attached in Appendix F of this report is a copy of the Bacteriological Sampling Plan.

2.8.3 Lead and Copper Rule

The Lead and Copper Rule (LCR) requires community water systems to monitor lead and copper levels at the consumers' tap. The initial phase of the lead and copper monitoring consists of two consecutive six-month monitoring periods. Monitoring may be reduced to annually if the result of the two consecutive six-month monitoring rounds does not exceed the lead and copper action levels as specified in Section 64685 (c) (2), CCR. CSA 11 must complete the three annual monitoring rounds (with the two initial six-month monitoring rounds counted as one year) with no exceedance of the lead and copper action levels before it is eligible for triennial reduced monitoring.

The number of sites that need to be sampled for each round of testing is based on the number of people served. According to Division records, CSA 11 currently serves approximately 450 people. According to Table 64684 of the CCR, standard and reduced monitoring requires that 10 and 5 sites be sampled, respectively.

Attached in Appendix G are the initial, annual and triennial sample dates and results. All lead and copper results were below the action levels. The second triennial round of monitoring is due by September 30, 2015.

2.9 Cross Connection Control Program

Section 7584, Chapter 5, Title 17, CCR requires water suppliers to protect the public water supply from contamination by implementation of a cross-connection control program (CCCP). The CCCP shall include, but not be limited to, the following elements:

a. The adoption of operating rules or ordinances to implement the cross-connection program.
b. The conducting of surveys to identify water user premises where cross-connections are likely to occur,
c. The provisions of backflow protection by the water user at the user's connection or within the user's premises or both,
d. The provision of at least one person trained in cross-connection control to carry out the cross-connection program,
e. The establishment of a procedure or system for testing backflow preventers, and
f. The maintenance of records of locations, tests, and repairs of backflow preventers.

According to the 2014 Annual Report, there are currently 100 backflow prevention assemblies installed at the service meters. All 100 assemblies were tested for proper operation in 2014. However, the water system has not developed and adopted operating rules and ordinances to implement the cross-connection program or conducted a thorough survey of all connections to determine if there are other potential hazards.

2.10 Technical, Managerial and Financial Capacity (TMF)

The concept of TMF capacity involves a public water system having the capacity through its financial resources, technical resources, organizational structure and personnel to comply with all applicable drinking water standards and regulations. In addition, the concept of capacity involves being able to plan for the future and use the necessary resources to assure the delivery of pure, wholesome and potable drinking water.

The water system is owned by CSA 11, a county service area, and operated and maintained by the San Mateo County Department of Public Works. Administrative decisions concerning current and future needs of the CSA 11 water system are made by DPW management staff and presented to the County Board of Supervisors, as needed. Daily management and operation and technical capacity of the water system are provided by BEI and their operators. A structural organization chart is attached in Appendix H, showing the positions associated with the water system.

Written policies regarding nonpayment of water charges and unauthorized use of water is covered by County Ordinances. Hours worked and overtime by DPW staff are handled through the personnel departments of County of San Mateo. Customer complaints received by DPW staff or the contract operator are recorded on a Computerized Maintenance Management System with a service request number assigned to the complaint. Complaints are responded to by the contract operator.

A 5-year budget projection listing all of the expenses and revenues of the water system is included in Appendix I. The annual budget for the water system is prepared by DPW in conjunction with the water system contract operator. The budget is then submitted to the Board of Supervisors for review and adoption. After the budget is adopted, the funding requirements are then met through collection of the water service charges from the water customers. The total funds available allocated for the 2015/2016 fiscal year was $1,013,473 which includes $700,000 from the Department of Water Resources' Integrated Regional Water Management Plan Proposition 84 grant funding to construct the new well and storage tank. It is anticipated that all funds will be used for the management, operation and maintenance of the water system and construction of the new well and storage tank, with zero funds left in the reserves.

III. Appraisal of Sanitary Hazards and Safeguards

CSA 11's water supply is provided predominately by Well 01, with Well 02 activated during water quality or supply emergencies. As noted below and illustrated in the CSA 11 Production Well Configuration diagram included in Appendix J, the groundwater levels measured in Well 01 were as follow:

Date	Depth Above Mean Sea Level (ft)	Depth Below Ground Surface (ft)
1992	106	170
2002	90	186
January 2004	85	191
January 2006	83	193
October 2008	81	195
August 2011	79.25	196.75
August 2013	77.9	198.1

Depth from ground surface to sea level – 276 feet

The screened interval is located at depths of 210 feet to 250 feet below ground surface (bgs). In August 2011, the groundwater table dropped below the pump depth, causing the pump and motor to fail, which led to a system wide water outage. The exact depth of the pump at that time was unknown but was lowered to 225 feet bgs. The pump was again lowered to 242 feet bgs in 2013. With the continuing decrease in the groundwater table, it is critical that CSA 11 routinely monitor the static and pumping groundwater level in Well 01 to ensure that there is sufficient hydraulic head above the well pump.

Pursuant to the California Waterworks Standard, community water systems using only groundwater should have a minimum of two approved sources and be capable of meeting the maximum day demand with the highest-capacity source off-line. With Well 02 only producing 5 to 7 gpm and the longevity of Well 01 uncertain, it is crucial that CSA 11 move forward with the construction of the new well and storage tank to ensure a reliable supply of water for the community.

As the below ground construction features of Well 02 is unknown, it is important that CSA 11 prevent surface contaminants from reaching the well sites. Routine inspections of the wells should be conducted as specified within the operations plan, dated December 1, 2011. In addition to the source monitoring requirements specified above, CSA 11 should monitor Well 02 for bacteriological quality, using the enumeration method, on a quarterly basis to detect any potential contamination or surface influence.

CSA 11 has not developed or adopted operating rules and ordinances to implement the cross-connection program or conducted a thorough survey of all connections to determine if there are other potential hazards. Rules and ordinances should be adopted to establish CSA 11's authority and responsibility for the implementation of an effective cross-connection control program and for the enforcement of the provisions in the ordinance. After adopting the ordinance, CSA 11 should conduct surveys of all locations that currently do not have backflow prevention assemblies to locate potential hazards that are not easily identified from the meter or connection classification.

Section 64413.5 and 64413.7 of the CCR requires water systems to designate at least one chief and shift operator in accordance with the system's classification. Based on the population served and complexities of the water system, CSA 11 meets the criteria of a D1 system. Therefore, a chief operator with at least a D1 must be assigned. CSA 11 currently contract with Bracewell Engineering Inc. (BEI) and Mr. Christopher Hauge serves as the designated certified chief

operator. Mr. Hauge is a certified Grade T3 Water Treatment Operator (30792) and Grade D3 Water Distribution Operator (36120). Bracewell Engineering also currently employs three shift operators with a D2 certificate.

IV. Conclusion and Recommendations

It is the finding of this report that County Service Area 11 can meet the requirements specified in Section 116270 through 116750, inclusive of the California Health and Safety Code providing the provisions recommended below are met. It is recommended that a water supply permit be granted to County Service Area 11 to operate the water system subject to the following provisions:

1. County Service Area 11 shall comply with all the requirements set forth in the California Safe Drinking Water Act, California Health and Safety Code and any regulations, standards or orders adopted thereunder.

2. County Service Area 11 shall serve water to its customers only from approved sources. No other sources shall be used without prior approval from the Division. The only approved sources for CSA 11 are Well 01, Primary Station Code 4100582-001, and Well 02, Primary Station Code 4100582-002.

3. County Service Area 11 shall operate the CSA 11 water supply and distribution system in accordance with the approved operations plan, dated December 1, 2011. Planed modifications to incorporate new operating procedures shall be submitted to the Division for review and approval prior to implementation.

4. County Service Area 11 shall develop and adopt operating rules and ordinances to implement the cross-connection control program by **December 31, 2015**. By **July 1, 2016**, CSA 11 shall survey and identify all water user premises where cross-connections are likely to occur. By **December 31, 2016**, CSA 11 shall install and test all required backflow prevention assemblies to ensure their operation. By **December 31, 2016**, CSA 11 shall be in full compliance with Section 7584, CCR.

5. County Service Area 11 shall comply with the water quality monitoring and reporting requirements for the following water quality constituents:

    a. Bacteriological quality, in accordance with Article 3, Chapter 15, Title 22, CCR.

    b. Inorganic chemicals, except for Nitrate, Nitrite, Asbestos and Perchlorate, in accordance with Section 64432, Chapter 15, Title 22, CCR.

    c. Nitrate and Nitrite, in accordance with Section 64432.1, Chapter 15, Title 22, CCR.

    d. Asbestos, in accordance with Section 64432.2, Chapter 15, Title 22, CCR.

    e. Perchlorate, in accordance with Section 64432.3, Chapter 15, Title 22, CCR.

    f. Radiological Chemicals, in accordance with Section 64442, Chapter 15, Tile 22, CCR.

    g. Volatile and Synthetic Organic Chemicals, in accordance with Section 64444, Chapter 15, Title 22, CCR.

h. Lead and Copper, in accordance with Section 64675, Chapter 17.5, Title 22, CCR.

All source water quality monitoring results analyzed by a certified laboratory shall be submitted to the Division via Electronic Data Transfer (EDT) using the assigned Primary Station Code (PS Code) of the monitoring site.

6. All persons responsible for the operation and maintenance of the water system shall be certified in accordance with Sections 63750.1 through 64413.7, inclusive, Title 22, CCR. A chief operator licensed at, as a minimum, Grade D1, shall be responsible for the operation of CSA 11's distribution system.

Report Prepared by:

Van Tsang

Van Tsang, P.E.
Associate Sanitary Engineer

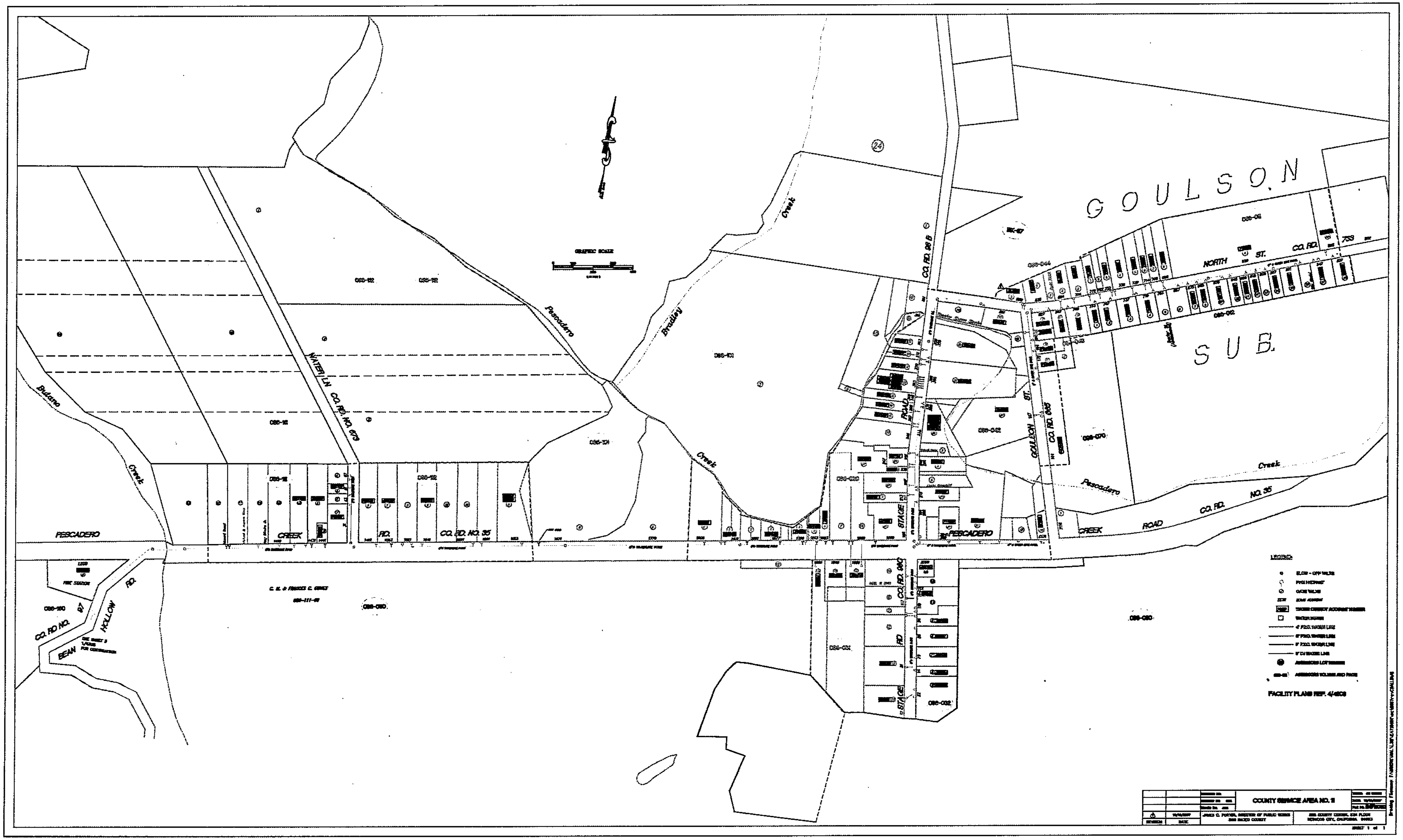
Report Reviewed by:

Eric Lacy, P.E.
District Engineer
Santa Clara District

APPENDIX

A

CSA 11 Service Area


GOULSON
SUB.
NORTH ST.
CO. RD. 753
GOULSON ST.
CO. RD. 665
CO. RD. 98 B
STAGE RD.
CO. RD. 98C
STAGE ROAD
PESCADERO
PESCADERO CREEK RD.
CO. RD. NO. 35
PESCADERO CREEK ROAD CO. RD. NO. 35
WATER LN CO. RD. NO. 673
Pescadero Creek
Bradley Creek
Butano Creek
BEAN HOLLOW RD.
CO. RD NO. 97
GRAPHIC SCALE
LEGEND:
FACILITY PLANS REF. 4/4603
COUNTY SERVICE AREA NO. 11

B

Well 01 Well Completion Report

CSA 11

Attachment E

Well 1

TRIPLICATE
Owner's Copy
Page 1 of 1
Owner's Well No. 11348-1
Date Work Began 12-03-91, Ended 01-14-92
Local Permit Agency San Mateo County Department of Health Services
Permit No. W-271-91 Permit Date 11-08-91

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. 483241

DWR USE ONLY — DO NOT FILL IN
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DEPTH TO FIRST WATER ___ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft. to	Ft.	DESCRIPTION (Describe material, grain size, color, etc.)
0	15	Brn. clay, sand and gravel
15	45	Grey sand and clay
45	60	Fine sand
60	105	Fine sand and sandstone
105	265	Fine sand

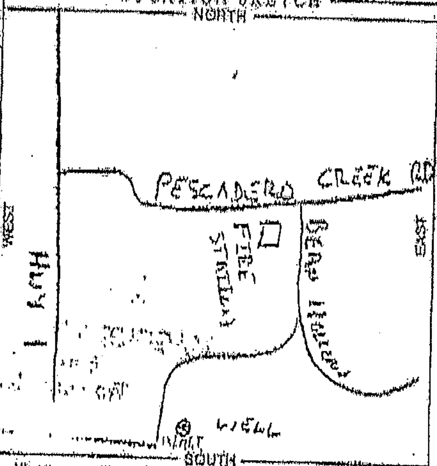
TOTAL DEPTH OF BORING 265 (Feet)
TOTAL DEPTH OF COMPLETED WELL 260 (Feet)

WELL OWNER
Name Dept. of General Services
Mailing Address 590 Hamilton Street
Redwood City, CA 94063
CITY STATE ZIP

WELL LOCATION
Address Bean Hollow Road
City Pescadero
County San Mateo
APN Book 086 Page 780 Parcel 060
Township ___ Range ___ Section ___
Latitude ___ NORTH Longitude ___ WEST
DEG. MIN. SEC. DEG. MIN. SEC.

LOCATION SKETCH

NORTH



SOUTH

WEST EAST

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)
X NEW WELL
MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
___ DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USE(S) (✓)
___ MONITORING
WATER SUPPLY
X Domestic
___ Public
___ Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD Reverse rotary FLUID Water

WATER LEVEL & YIELD OF COMPLETED WELL
DEPTH OF STATIC WATER LEVEL 170 150 (Ft.) & DATE MEASURED 01-13-92
ESTIMATED YIELD* 5 (GPM) & TEST TYPE 29 Pump
TEST LENGTH ___ (Hrs.) TOTAL DRAWDOWN ___ (Ft.)
* *May not be representative of a well's long-term yield.*

CASING(S)

DEPTH FROM SURFACE Ft. to	Ft.	BORE-HOLE DIA. (Inches)	TYPE: BLANK	SCREEN	CON-DUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	210	18	X				PVC	10	SDR-21	
210	250	18		X			PVC	10	SDR-21	.040
250	260	18	X				PVC	10	SDR-21	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to	Ft.	CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	X			
50	265			X	8 X 16

ATTACHMENTS (✓)
___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT
I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Maggiora Bros. Drilling, Inc.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

595 Airport Blvd. Watsonville, CA 95076
ADDRESS CITY STATE ZIP

Signed [signature] 01-16-92 249957
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

DWR 188 REV. 7-90 IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

:PUMPSET

SUBMERSIBLE PUMP INSTALLATION

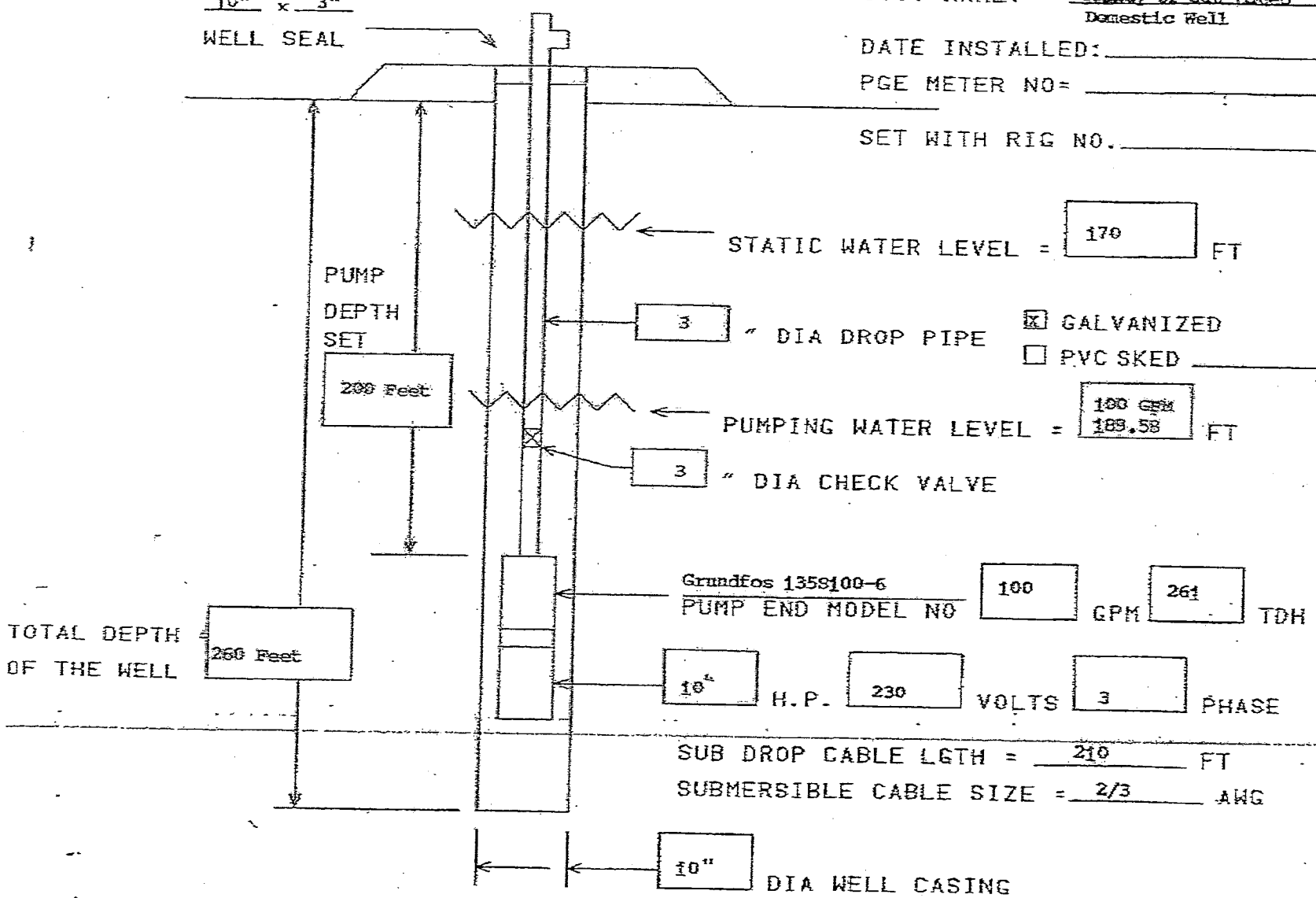
MBD JOB NO = 11348-1

CUST NAME: County of San Mateo
Domestic Well

DATE INSTALLED: _____

PGE METER NO= _____

SET WITH RIG NO. _____



AGGIORA BROS DRILLING, INC.

CSA 11

Well 1

C

December 1, 2011 Operations Plan

COUNTY SERVICE AREA NO. 11 WATER SYSTEM

OPERATION and MAINTENANCE PLAN

The County Service Area No. 11 (CSA 11) water system is a small public water system with a production well, standby well, storage tank, pump house and distribution system serving approximately 100 customers. The County of San Mateo Department of Public Works (County) operates and maintains the water system. State certified operators from Bracewell Engineering, Inc. (Bracewell) have been retained by the County to serve as chief operators of the CSA 11 water system. Bracewell operators are to make decisions regarding system supply and quality, as well as taking water samples every month. The County's Facility Maintenance and Operation Division staff provide help in maintaining and operating the water system under the supervision of Bracewell Engineering.

The CSA 11's water source is an underground aquifer located in the Pigeon Point Formation, about one mile west of the Town of Pescadero on the top of a northwest trending ridge, and adjacent to the Pacific Ocean. The CSA 11 water system consists of the following:

1. A production well.
2. A standby well.
3. A 140,000 gallon welded steel storage tank.
4. Approximately 11,660 lineal feet of 4" to 8" diameter polyvinyl (PVC) and ductile iron (DIP) pipes.
5. A pump/chlorination house.
6. Seventeen fire hydrants.

Groundwater is pumped to the storage tank from the aquifer through the production well which was constructed in 1992. The production well is 260 feet deep with a 10" diameter casing and a 50-foot cement grout sanitary seal. The standby well is 247 feet deep with a 6" diameter casing. The distribution system consists of approximately 7,960 feet of 8-inch pipes, 2,570 feet of 6-inch pipes, 1,130 feet of 4-inch pipes, and approximately 200 feet of 1-inch laterals connecting each residence/business. The welded steel storage tank maintains the water pressure. The system has one pressure zone. There is a flow meter located in the pump house to record the amount and rate of water pumped to the storage tank.

- Routine Operational Procedures for Each Component of the System.
  - A. Visual inspection of **WELLS** (three times every two weeks - Mon., Wed., Fri. preferable).
    1. Check for the following; leaks, openings, lubricants, electrical hazards, chemical hazards, etc. Record observations on CSA 11 Well #1 Monthly Report and the CSA 11 Wells and Water Tank Inspection log sheet.
    2. Correct any problems.
    3. Check the pump for proper operation.

  - B. Visual inspection of the **STORAGE TANK**
    1. Inspect the water level and exterior of the **STORAGE TANK** for any leaks or damage (three times every two weeks - Mon., Wed., Fri. preferable). Record observations on the CSA 11 Wells and Water Tank Inspection log sheet and make repairs as needed.

2. Inspect the interior of the **STORAGE TANK** (quarterly). Record date and observations.

C. Testing of **ALARM SYSTEM**.
1. Test the alarm system quarterly.
2. Critical alarm set points are 10 feet (low water level warning) and 16.7 feet (high water level warning).
3. Notifications are to be sent to Facilities Maintenance & Operation Division and On-call Stationary Engineer (650-312-5257).

D. Maintenance of **GAUGES and METERS**.
1. Inspect all gauges and meters for leaks and proper function periodically. Repair or replace as needed (keep record of replacement date).

E. Inspection and exercising of the **VALVES**.
1. Inspect valves for leaks periodically (record observations, repair or replace if leaking).
2. Exercise valves (semi-annually on October and April, record dates on the Valve Operation Worksheet).

F. Operation and maintenance of **DISTRIBUTION** facilities.
1. Visually inspect the distribution system for leaks on a regular basis (three times every two weeks - Mon., Wed., and Fri.). Look for standing water in low areas. Record date and observations.
2. Flush dead end mains annually. Record date and observations on Flushing Log.

G. Testing of **BACKFLOW PREVENTION DEVICES**.
4. Test Backflow Prevention Devices (annually) and complete the Backflow Prevention Assembly Test Report.
5. Perform minor repairs, if needed, while testing. Major repairs are to be performed by the property owner.
6. Notify administration staff of device failures immediately.

- Monitoring and Reporting.

A. **BACTERIOLOGICAL MONITORING**; Samples for bacteriological monitoring are to be taken per the CSA 11 Bacteriological Sample Siting Plan. Report monthly to the State Department of Public Health (DPH) by the 10th of each month, following the sampling.
1. If sample result is positive, take four repeat samples at Repeat Sample Sites.
2. Take five routine samples the month following a positive sample.
3. Keep bacteriological results for five years.
4. Keep any corrective action for sampling for three years.

B. **CHEMICAL MONITORING**; Sampling for chemical monitoring shall be conducted as required by the DPH. Report results to the DPH.
1. Keep chemical results for ten years.
2. Keep variance and exemptions for five years.

- Response to Violations.
  - A. **PUBLIC NOTIFICATION;** Issue public notifications of violations as required.
    1. Notification shall be given in accordance with "Emergency Public Notification" method on record with the DPH (included in Emergency Response Plan), or in a manner directed by the DPH.
    2. State problem and what has been done to correct it.
    3. Send a copy of the notification to the DPH.

- Consumer Complaint Response Procedures.
  - A. **CONSUMER COMPLAINT** procedures.
    1. Record details of complaint (name, address and nature of the problem) in Customer Complaint Form.
    2. Investigate the complaint.
    3. Verify or dismiss the complaint.
    4. Record the steps taken to address or correct the problem.
    5. Notify complainant of action taken.
    6. Keep complaint records with corrective action for five years.

- Emergency Operational Practices. (*See Emergency/Disaster Response Plan for complete description).*
  - A. List of **equipment on hand** for emergency repairs.
    1. Miscellaneous wrenches
    2. Leak clamps
    3. Pipes and fittings (various sizes)
    4. Digging equipment
    5. Electrical repair
    6. Generator

  - B. List of distributors or suppliers of **replacement parts** for the system.

Equipment/Sources	Name of Supplier	Address	Phone #	Under Contract
Pipes, valves, fittings, pumps, gauges, pump replacement and pump repairs	Capitola Pump Company, Inc.	300 Kennedy Drive, Capitola, CA 95010	(831) 475-5364	NA
	Pump Repair Service Co.	P.O. Box 34327 San Francisco, CA 94134	(415) 467-2150	NA
	Bruce Barton Pump Service, Inc	940 S. First Street, San Jose, CA 95110	(408) 292-6426	NA
	Simm's Plumbing & Water Equipment	1805 Pescadero Creek Road, Pescadero, CA 94060	(650) 879-0739	NA
Backhoe and digging equipment, PVC pipe , valves, and fittings, steel tank welding	West Valley Construction Company	580 E McGlincy Lane, Campbell, CA 95008	(408) 371-5510	NA

Equipment/Sources	Name of Supplier	Address	Phone #	Under Contract
Valves and fittings	Hopkins Technical Products	P.O. Box 31, Brentwood, CA 94513	(925) 240-2160	NA
Disinfection Chemicals	Esbro Chemical	775 Seaport Blv., Suite C, Redwood City, CA 94063	(650) 365-0441	NA

C. **List of emergency contact numbers:**

	Name	Phone #
1.	California Department of Public Health (DPH) – Santa Clara District	(510) 620-3474
2.	San Mateo County Environmental Health Division	(650) 372-6200
3.	Local Law Enforcement (Sheriff)	(650) 780-7122
4.	Facilities Maintenance/Electrician (Dept. of Public Works)	(650) 312-5257
5.	Bracewell Engineering, Inc.	(831) 325-8296
6.	Laboratory (County Medical Center)	(650) 573-2500
7.	Pump Repair Service	(415) 467-2150
8.	Chemical Disinfectant Supplier	(650) 365-0441
9.	Equipment Supplier	(408) 371-5510
10.	Owner (Dept. of Public Works)	(650) 363-4100

- Qualification and Training of Operating Personnel.
  - A. CSA 11 treatment facilities shall be operated under the supervision of T1 operators certified in accordance with Title 22, Section 63765, California Code of Regulations.
  - B. CSA 11 distribution system shall be operated under the supervision of D1 operators certified in accordance with Title 22, Section 63770 or 63810, California code of Regulations.
  - C. CSA 11 may provide staff opportunities to attend training, seminars for operators, and certification classes and testing.

Procedure 1 Flushing Dead Ends

1. Pre-plan the flushing sequence using the system map. Select the flush-out locations. Flushing should start near the water source.
2. Review drainage (where water will be directed).
3. Notify customers in in advance of possible impacts due to flushing.
4. Ensure that the storage tank is full to provide adequate amount of flushing water.
5. Flushing velocity should be 0.75 m/sec (2.5 ft/s) to ensure biofilm removal.
6. Open dead ends and fire hydrants for a period of 2-5 minutes to stir up deposits inside the water main. Flush until the water is clear.
7. Make sure that the pressure in other parts of the distribution system do not drop below 20 psi.
8. Collect a minimum of 2 water samples from a flowing hydrant and test, the first after 2 minutes of flushing and the other before closing and measure turbidity to evaluate the effectiveness of flushing.
9. Document results in the flushing log.

Procedure 2 Inspection, Cleaning, and Disinfection of Storage Tank

Inspect Tank – Evaluate the Need for Cleaning (every four months)

1. Open the gate valve located at the base of the storage tank
2. Discharge the water for at least two minutes or until the water is clear and free of visible particles
3. If flushing takes more than fifteen minutes, the water tank should be cleaned

Cleaning and Disinfection (when required)

Method A – Storage Tank Not to be Drained:

Retain professional services to clean and disinfect the tank.

Method B – Storage Tank Drained:

1. Apply a solution of 200mg/L of chlorine solution to the surfaces of all parts of the storage tank that are in contact with water.
2. Fill the storage tank after 30 minutes of applying the chlorine solution (step 1).
3. The disinfected water shall be diluted enough to be introduced to the distribution system.

Procedure 3 Inspecting and Exercising Water Main Valves

1. Verify the location of the valve boxes in the system map and update map where necessary.
2. Remove valve box cover (if possible) and inspect stem and nut for damage or leakage.
3. Close the valve fully and record the number of turns to the fully closed position (close the valve slowly to prevent water hammer).
4. Reverse (open valve).
5. Close the valve fully.
6. To determine if the valve is closed, use an earphone or an ear to the gate key.
7. Once the valve is fully closed, open a couple of turns to flush away debris.
8. Record whether the valve is right or left hand closing.
9. Record condition of the valve and any maintenance that is required.
10. Replace any valve that does not completely open or close.
11. Clean the valve box cover seat.
12. Place the valve in its operating position (open or closed) when inspection is complete.

Procedure 4 Repairing and Replacing Water Mains

1. In the event of a major water main break, contact the State Department of Public Health for assistance in providing mitigating measures to ensure the protection of public health.

2. Keep sections of new pipe sealed at both ends to prevent dirt and foreign matter from entering. Plug existing open water main ends until tie-in or repair is made.

3. Excavate around pipe to prevent soil intrusion into opened pipe section. Maintain a de-watering system where necessary.

4. Ensure that tools, equipment and any other items that come into contact with the water main are properly cleaned and disinfected.

5. Ensure proper disinfection of all piping, fittings and appurtenances.

6. Ensure the repair is tight and not leaking.

7. Investigate possible sources of cross contamination after installation or repair (e.g. leaking valve, backflow through distribution).

8. Implement disinfection and flushing of the water supply and distribution system.

9. Prior to placing the main back in service, verify with bacteriological testing as instructed by the Department of Public Health or per AWWA Standard C651.

Attachments

Emergency Response Plan

CSA 11 Well #1 Monthly Report

CSA 11 Wells and Water Tank Inspection Log

Valve Operation Worksheet

Backflow Prevention Assembly Test Report

CSA 11 Water System Bacteriological Sample Siting Plan

Customer Complaint Form

Emergency/Disaster Response Plan

Water System Name: County Service Area No. 11 (CSA11)

Water System ID No: 4100582

Number of Service Connections: 100

Population Served: 450

To continue minimum service levels and mitigate the public health risks from drinking water contamination that may occur during a disaster or other emergency events and in order to provide reliable water service and minimize public health risks from unsafe drinking water during those events, the CSA11 water system proposes the following plan that defines how it will respond to emergencies and/or disasters that are likely to affect its operation.

Disasters/emergencies that are likely to occur in the water system's service area that are addressed are: earthquake, major fire emergencies, water outages due to loss of power, localized flooding, water contamination, and acts of sabotage.

1) **DESIGNATED RESPONSIBLE PERSONNEL:** For designated responsible personnel and chain of command and identified responsibilities, see the attached table "Water System Emergency /Disaster Personnel and Responsibilities".
2) **INVENTORY OF RESOURCES:** An inventory of system resources that are used for normal operations and available for emergencies; includes maps and schematic diagrams of the water system, lists of emergency equipment, equipment suppliers, and emergency contract agreements that are kept at the water system office.
3) **EMERGENCY OPERATIONS CENTER:** The water system office has been designated as the communication network emergency operations center. Emergency contact information for equipment suppliers is attached. The telephone will be the primary mode of communication in an emergency.

Agency	Address, City	Phone #	FAX #
Water System (Primary Site)	555 County Center 5th Floor Redwood City, CA 94063	(650) 363-4100	(650) 361-8220
Fire Department	Redwood City	(650) 780-7400	
Law Enforcement	San Mateo County Sheriff Office	(650) 363-4000	

4) **OTHER AGENCY COORDINATION:** Coordination procedures with governmental agencies for health and safety protection; technical, legal, and

financial assistance, and public notification procedures are continually being developed and updated through regulation and experience and will be added as necessary to this plan. (See External Emergency Contact sheet.)

5) **RESPONSE PROCEDURES:** Personnel will, as quickly as possible, determine the status of other employees, assess damage to water system facilities, provide logistics for emergency repairs, monitor progress of repairs and restoration efforts, communicate with health officials and water users according to the "Emergency Notification Plan" on file with the regulatory agency (i.e., California Department of Public Health (CDPH) or Local Primacy Agency (LPA)), and document damage and repairs. A copy of the approved "Emergency Notification Plan" (ENP) and user notification templates is attached.

6) **PUBLIC NOTIFICATION PROCEDURES:** Public notice procedures should be developed before a disaster and not during the event. Public notices are a significant part of communicating with customers. Standard public notifications have been developed by CDHS for use during an emergency such as: 1) precautions during a water outage or low pressure problem; 2) Boil Water Notice (BWN); 3) Unsafe Water Alert (UWA), or; 4) Do Not Drink Notices. Each utility will need to modify the standard forms with specific contact information and guidance to customers depending on the nature of the emergency event. In addition, water systems need to have copies of public notices in the appropriate languages for use by non-English language speaking customers in their service areas.

A BWN, UWA or Do Not Drink Notice can be issued by one, or a combination of the following agencies:

- CDHS – Drinking Water Program (Designated personnel-District Engineer, Regional Engineer or Branch Chief).
- Local County Health Department or local Environmental Health Agency (Designated personnel-County Health Officer or Director of Environmental Health Department for small water systems under county jurisdiction).
- Affected Water System (Designated personnel-responsible person in charge of the affected water system, i.e., Manager, Owner, Operator, etc. The water systems ERP should identify the designated personnel in their ERP).

All public notifications (BWN, UWA or Do Not Drink Notices) should be coordinated with the CDPH District Engineer, County Environmental Health Department and the County Health Officer prior to issuing a public notice. However, any one of the three agencies can act in an emergency to immediately issue a BWN or UWA, if delays would jeopardize public health and safety. The CDPH District Engineer or the water system must notify the County Health Department and the County Health Officer prior to or immediately after issuing a public notice. Notice must be given directly to

a person, and a message left on voicemail or answering machine is not sufficient to meet this requirement. Details of the person responsible for completing this notification and the method that will be utilized is contained in the ERP, and is attached to this plan.

The following standard public notices are provided in the Appendix of this report.

Consumer Alert During Water Outages or Periods of Low Pressure – If a water system is experiencing power outages, water outages or low pressure problems, a consumer alert may be issued to the public. The notice provides consumers information on conserving water and how to treat the water with household bleach if the water quality is questionable.

Boil Water Notice (BWN) – A BWN should be issued when minimum bacteriological water quality standards cannot be reasonably assured. To assure public health protection a BWN should be issued as soon as it is concluded by the designated personnel that the water supply is or may be biologically unsafe. Examples of these situations include:

1. Biological contamination of water supply system, including but not limited to:
   - Positive total or fecal coliform bacteriological samples;
   - Prolonged water outages in areas of ruptured sewer and/or water mains;
   - Failed septic tank systems in close proximity to ruptured water mains;
   - Ruptured water treatment, storage, and/or distribution facilities in areas of known sewage spills
   - Known biological contamination;
   - Cross-connection contamination problems;
   - Illness attributed to water supply.
2. Unusual system characteristics, including but not limited to:
   - Prolonged loss of pressure;
   - Severe discoloration and odor;
   - Inability to implement emergency chlorination.
3. Implemented due to treatment inadequacies.

A BWN is not appropriate in response to most types of chemical contamination. A BWN may also be inappropriate in cases where boiling the water may tend to concentrate regulated contaminants that are known to be in the water and that are just below an MCL (e.g. Nitrates or Nitrites that are over 50% of the MCL).

Unsafe Water Alert (UWA)/"Do Not Drink" – In the event a water quality emergency due to known or suspected chemical (non-bacteriological) contamination to a water system a UWA or "Do Not Drink" should be issued.

Water should not be used for drinking and cooking, but may be used for sanitation purposes (e.g. toilet flushing, clothes washing, etc.). Examples of these situations include:

1. Known or suspected widespread chemical or hazardous contamination in water supply distribution, including but not limited to:
   - Ruptured water distribution system (storage tanks, mains) in area of known chemical spill coupled with loss of pressure;
   - Severe odor and discoloration;
   - Loss of chlorine residual;
   - Inability of existing water treatment process to neutralize chemical contaminants prior to entering the distribution system.
2. Threatened or suspected acts of sabotage confirmed by analytical results, including but not limited to:
   - Suspected contamination triggered by acts of sabotage or vandalism.
3. Emergency use of an unapproved source to provide a supplemental water supply.

Unsafe Water Alert (UWA)/"Do Not Use" – In the event a known or suspected contamination event to a water system, where the contaminate may be chemical, biological or radiological a UWA or "Do Not Use" should be issued. Water should not be used for drinking, cooking, or sanitation purposes. Examples of these situations include:

1. Known or suspected widespread chemical or hazardous contamination in water supply distribution, including but not limited to
   - Terrorist contamination event.

Cancellation of Public Notification

Once a BWN/UWA is issued, the only agency that can rescind the public notice is the drinking water primacy agency. CDPH DWP or the LPA will not lift the BWN for a microbial contaminant until two rounds of samples, collected one day apart, for coliform bacteria samples have been analyzed and the results are negative. The two sets of sample results should be faxed to the CDPH DWP District Office or LPA office for final approval before rescinding the BWN. Special chemical sampling may be required to get approval to rescind an UWA, please contact the CDPH DWP District Office or LPA to determine what sampling will be required.

7) RESUME NORMAL OPERATIONS: The steps that will be taken to resume normal operations and to prepare and submit reports to appropriate agencies will include identifying the nature of the emergency (e.g., earthquake-causing water

outage/leaks, fire or power outage causing water shortage/outage, sabotage resulting in facility destruction or water contamination).

a. **Leaks (Result of earthquake, etc.)**

   i. Immediately increase system disinfectant residual as a precaution, until normal service is resumed. Determine the locations of leaks and make temporary repairs using clamps and other pipe repair devices that will allow for repairs to be made while system pressure is maintained. If this is not possible, isolate leaks by turning off power or flow, to repair or replace the pipe. Repair or isolate major breaks to allow service to the maximum system population possible.
   ii. Disinfect all repairs as per attached AWWA Standards;
   iii. Reestablish normal service.

b. **Low pressure or service interruption (Result of earthquake, fire, storm, water source outage, power outage, etc.) – See also section on Leaks, above.**

   i. Increase production, if possible, to provide maximum system output.
   ii. Increase disinfectant residual as a precaution against potential contamination.

If any customers have experienced low pressure or a water outage as a result of an earthquake, fire, storm, water source outage, power outage or any other event or failure, immediately contact your CDHS or the LPA to determine if a Boil Water Notice (BWN) must be issued to users. ***Note: Whether issued by the water system or a regulatory agency, the BWN can only be rescinded or lifted by CDPH or the LPA. Normally the regulatory agency will consider rescinding a BWO after total coliform sampling on two consecutive days show an absence of total and fecal coliform organisms.***

c. **Power outage**

   i. Place emergency generator on line to provide minimum water pressure to system.
   ii. Increase disinfectant residual as precaution to potential contamination.
   iii. See also water outages, above.

d. **Contamination**

   i. Immediately, contact CDPH or LPA in accordance with the Emergency Notification Plan. Follow the directions of CDPH or the LPA regarding steps to be taken, emergency notification of users, and public notification.
   ii. Identify location and source of contamination.

iii. If contamination is from system source, isolate or treat source.
iv. If contamination is an act of sabotage, take appropriate action based on nature of contamination. Immediately contact local law enforcement and your regulatory agency (CDHS or LPA). Actions should be taken in consultation with the regulatory agency and could include shutting off water until all contaminants are identified.

e. Physical destruction of facility or evidence of tampering (sabotage)

i. Immediately contact local law enforcement and regulatory agency for consultation.
ii. Consider the steps necessary to isolate the facilities or portions of the system that may be affected (close valves, turn off pumps, etc.).

All emergencies will be documented along with action taken, and kept in the files of the water system office. Acts of sabotage will be reported to the local law enforcement agency.

Water System Emergency/Disaster Personnel and Responsibilities

Name Title	Telephone No. (Work) Telephone No. (Home)	Role
Varies	(650) 363-4100	Initial contact at office, in charge for all emergencies (during non-business hours). Transfers the call or notification of the emergency to the people listed below. Contacts the operator, other sections of the department, contract services and outside agencies (if needed).
Secretary	NA	
Mark Chow	(650) 599-1489	In charge of all emergencies (During business and non-business hours). Contacts the operator, other sections of the department, contract services and outside agencies (if needed).
Principal Civil Engineer	(650) 399-6630	
Gary Webb	(650) 333-3443	Notifies his personnel to provide support.
Supervisor, Stationary Engineer		
Gary Behrens	(650) 333-3441	Notifies personnel to provide support, in case the stationary engineer supervisor cannot be reached.
Facilities Manager		
Danny Gonzales	(831) 207-3767	Responds to the emergency and communicates with the above listed people.
Bracewell Engineering (Operator)	(831) 537-5057	
Christopher Hauge	(831) 325-8296	Responds to the emergency and communicates with the above listed people.
Bracewell Engineering (Operator)	(408) 316-7877	

Emergency calls during the non-business hours including weekends, holidays and after hours, will go to the County Dispatch Center at (650) 363-4000. The Dispatch Center will direct the emergency calls to the proper field staff based on the information provided by the Utilities and Flood Control Section. Following is a list of staff that is responsible for responding all emergencies during non-business hours. Dispatch Center has the same list:

External Emergency Contact List

Agency/Department	Telephone No. (Day) Telephone No. (After Hours)
Fire Department	650-780-7400
Local Law Enforcement (Sheriff)	650-780-7122
County Office of Emergency Services	650-363-4790
California Office of Emergency Services — Warning Center (24-hr. number)—*Note: Ask for referral to CDHS Duty Officer-Drinking Water Program*	(800) 852-7550 or (916) 845-8911
San Mateo County Environmental Health Division	650 -372-6200

Water system contact information:

Name: Mark Chow
Address: 555 County Center, 5th Floor
Redwood City, CA 94063
Phone: 650-599-1489
FAX: 650-361-8220

Emergency Supplier Contact Numbers and Supplier List

Equipment/Sources	Name of Supplier	Address	Phone #	Under Contract
Pipes, valves, fittings, pumps, gauges, pump replacement and pump repairs	Capitola Pump Company, Inc.	300 Kennedy Drive, Capitola, CA 95010	(831) 475-5364	NA
	Pump Repair Service Co.	P.O. Box 34327 San Francisco, CA 94134	(415) 467-2150	NA
	Bruce Barton Pump Service, Inc	940 S. First Street, San Jose, CA 95110	(408) 292-6426	NA
	Simm's Plumbing & Water Equipment	1805 Pescadero Creek Road Pescadero, CA 94060	(650) 879-0739	NA
Backhoe and digging equipment, PVC pipe, valves, and fittings, generator, steel tank welding	West Valley Construction Company	580 E McGlincy Lane, Campbell, CA 95008	(408) 371-5510	NA
Valves and fittings	Hopkins Technical Products	P.O. Box 31, Brentwood, CA 94513	(925) 240-2160	NA
Disinfection Chemicals	Esbro Chemicals	775 Seaport Blvd. Suite C Redwood City, CA 94063	(650) 365-0441	NA

APPENDIX

Emergency Notification Plan (ENP)

System Map of Sources and Distribution Area

Consumer Alert During Water Outages or Periods of Low Pressure

Boil Water Order (Emergency Situation)

Unsafe Water Alert – Do Not Drink

Unsafe Water Alert – Do Not Use

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

DRINKING WATER FIELD OPERATIONS BRANCH
850 MARINA BAY PARKWAY, BUILDING P, 2ND FLOOR, RICHMOND, CA 94804
(510) 620-3474 FAX (510) 620-3455

WATER QUALITY EMERGENCY NOTIFICATION PLAN

Name of System: County Service Area No. 11 (CSA 11) System No.: 4100582

System Location: Pescadero County: San Mateo

The following persons have been designated to implement the plan upon notification by the State Department of Public Health that an imminent danger to the health of the water users exists:

	Name	Title	Day Phone	Evening Phone
1.	Mark Chow	Principal Civil Engineer	(650) 599-1489	(650) 399-6630
2.	Ann Stillman	Deputy Director	(650) 599-1497	(650) 222-0930
3.	Jim Porter	Director of Public Works	(650) 599-1421	(650) 954-3320

The implementation of the plan will be carried out with the following State and County Health Department personnel:

	Name	Title	Day Phone	Evening Phone
1.	Eric Lacy	District Engineer	(510) 620-3453	(925) 299-6936
2.	Van Tsang	Sanitary Engineer	(510) 620-3602	(510) 390-0600
3.	Greg Smith	San Mateo County Environmental Health Specialist	(650) 372-6279	(650) 867-9434

After reaching the San Mateo County Switchboard, ask for the on-call Environmental Health personnel.

4. If the above personnel cannot be reached, contact:

The State Office of Emergency Services Warning Center (24 hours) **(916) 845-8911 or (800) 852-7550.** When reporting a water quality emergency to the Warning Center, please ask for the California Department of Public Health – Drinking Water Program Duty Officer.

NOTIFICATION PLAN

Describe methods or combination of methods to be used (radio, television, door-to-door, sound truck, etc.). For each section of your plan, give an estimate of the time required, necessary personnel, estimated coverage, etc. Consideration must be given to special organizations (such as schools), non-English speaking groups and outlying water users. Ensure that the notification procedures you describe are practical and that you will be able to implement them in the event of an emergency. (Use the other side if necessary or attach additional pages.)

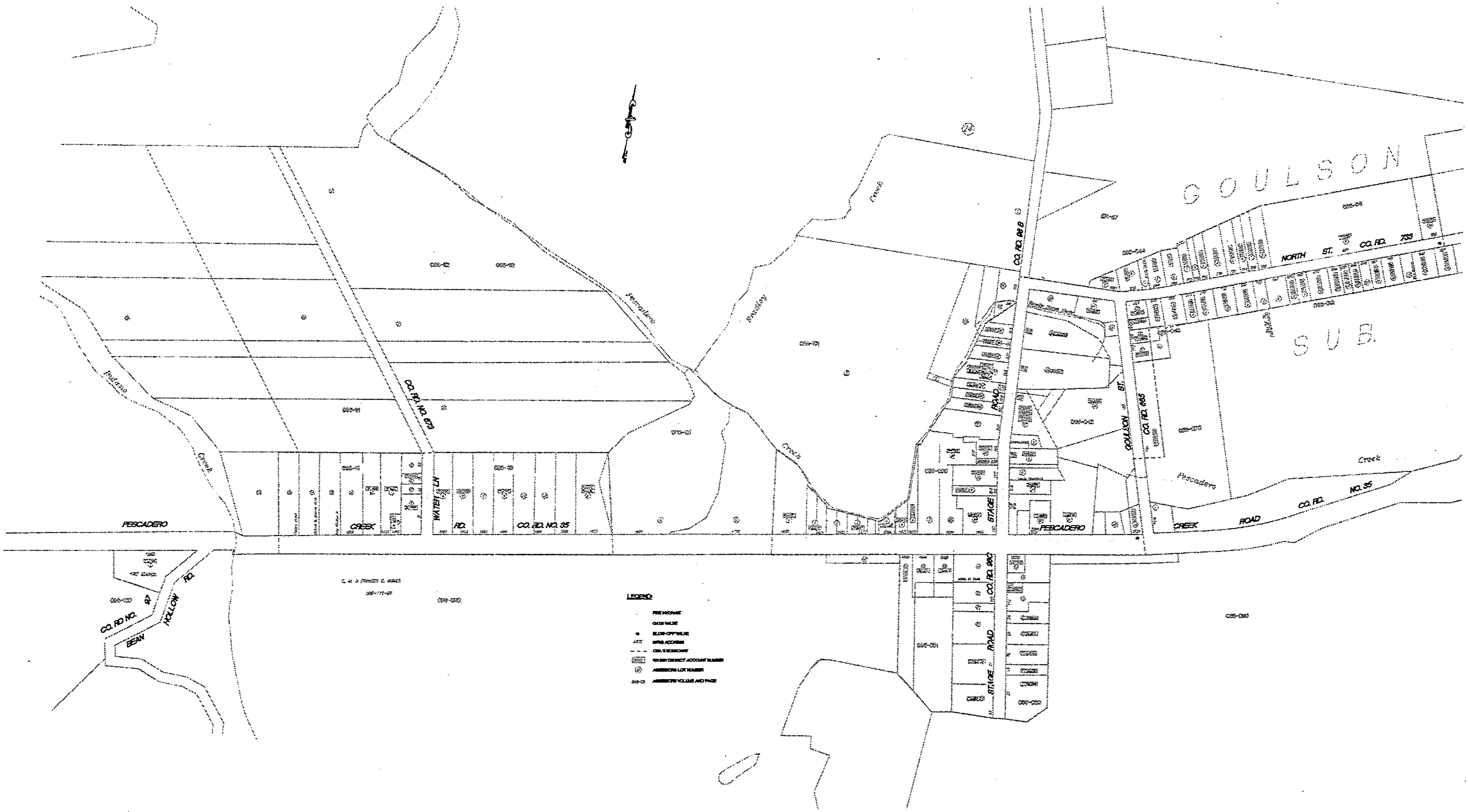
Notification would be hand-delivered and affixed to the front of the door if no one is home. CSA 11 has only 100 customers (water accounts). Telephone and electronic mails can also be utilized to notify customers. On-call personnel can typically respond to site within one hour

Report Prepared by:

Monica Sanchez Associate Engineer 7/25/11

Signature and Title Date

Last Revised 9/2008


GOULSON
SUB.
NORTH ST.
CO. RD. 733
CO. RD. 98 B
GOULSON ST.
CO. RD. 665
PESCADERO
CREEK
ROAD
CO. RD.
NO. 35
STAGE
ROAD
CO. RD. 98C
CO. RD. NO. 673
WATER LN
RD.
CO. RD. NO. 35
BEAN
HOLLOW
RD.
CO. RD NO. 97
Pescadero
Creek
Butano
LEGEND

PUBLIC NOTICE

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

CONSUMER ALERT DURING WATER OUTAGES OR PERIODS OF LOW PRESSURE

1. If you are experiencing water outages or low water pressure, immediately discontinue any non-essential water usage. This includes all outdoor irrigation and car washing. Minimizing usage will reduce the potential for the water system to lose pressure or completely run out of water. Please notify your water system of the outage or low pressure.

2. If the water looks cloudy or dirty, you should not drink it. Upon return of normal water service, you should flush the hot and cold water lines until the water appears clear and the water quality returns to normal.

3. If you are concerned about the water quality or are uncertain of its safety, you may add eight drops of household bleach to one gallon of water and let it sit for 30 minutes or alternatively, if you are able, water can be boiled for one minute at a rolling boil to ensure its safety.

4. Use of home treatment devices does not guarantee the water supply is safe after low pressure situations.

5. Do not be alarmed if you experience higher than normal chlorine concentrations in your water supply since the California Department of Health Services is advising public water utilities to increase chlorine residuals in areas subject to low pressure or outages.

6. The California Department of Health Services has also advised public water systems to increase the bacteriological water quality monitoring of the distribution system in areas subject to low pressure. They may be collecting samples in your area to confirm that the water remains safe. You will be advised if the sampling reveals a water quality problem.

7. Your water system is committed to make certain that an adequate quantity of clean, wholesome, and potable water is delivered to you. We recommend that you discuss the information in this notice with members of your family to ensure that all family members are prepared should water outages or low water pressure occur.

Date:

BOIL WATER ORDER

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

BOIL YOUR WATER BEFORE USING

Hierva su Aqua antes de Usaria

Failure to follow this advisory could result in stomach or intestinal illness.
Falta de seguir este aviso podria tener resultados estómago o enfermedad intestinal

Due to the recent event [e.g., water outage, power outage, flood, fire, earthquake or other emergency situation], the California Department of Health Services in conjunction with the San Mateo County Health Department, and County Service Area No. 11 Water System are advising residents of Pescadero to use boiled tap water or bottled water for drinking and cooking purposes as a safety precaution.

DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST. *Bring all water to a boil,* ***let it boil for one (1) minute,*** *and let it cool before using, or use bottled water. Boiled or bottled water should be used for drinking and food preparation* ***until further notice.*** *Boiling kills bacteria and other organisms in the water. [or This is the preferred method to assure that the water is safe to drink.]*

Optional alternative to include for prolonged situations where it fits.

- An alternative method of purification for residents that do not have gas or electricity available is to use fresh liquid household bleach (Clorox®, Purex®, etc.). To do so, add 8 drops (or 1/4 teaspoon) of bleach per gallon of clear water or 16 drops (or 1/2 teaspoon) per gallon of cloudy water, mix thoroughly, and allow to stand for 30 minutes before using. A chlorine-like taste and odor will result from this purification procedure and is an indication that adequate disinfection has taken place.

- Water purification tablets may also be used by following the manufacturer's instructions.
- Optional: Potable water is available at the following locations: [List locations]
  Please bring a clean water container (5 gallons maximum capacity).

We will inform you when tests show no bacteria and you no longer need to boil your water. We anticipate resolving the problem within [estimated time frame].

For more information call:
Water Utility contact: America Sanchez, Associate Engineer, 650 599-1473, 555 County Center, Redwood City, CA 94063
California Department of Health Services – Drinking Water Field Operations Branch- District Office at 510-620-2602
Local Environmental Health Jurisdiction: San Mateo County at 650-372-6200

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Date:

UNSAFE WATER ALERT

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien

County Service Area No. 11 water is possibly contaminated with [an unknown substance]

DO NOT DRINK YOUR WATER

Failure to follow this advisory could result in illness.

An unknown substance has been added to the drinking water supplied by the County Service Area No. 11 due to a recent [intrusion; break-in] at [one of the wells; our treatment plant; storage tank; specific facility]. The California Department of Health Services, San Mateo County Health Department, and County Service Area No. 11 Water System are advising residents of Pescadero to NOT USE THE TAP WATER FOR DRINKING AND COOKING UNTIL FURTHER NOTICE.

What should I do?

- ***DO NOT DRINK YOUR TAP WATER---USE ONLY BOTTLED WATER.*** *Bottled water should be used for all drinking (including baby formula and juice), brushing teeth, washing dishes, making ice and food preparation* ***until further notice.***

- ***DO NOT TRY AND TREAT THE WATER YOURSELF.*** *Boiling, freezing, filtering, adding chlorine or other disinfectants, or letting water stand will not make the water safe.*

OPTIONS

- Optional: Potable water is available at the following locations: [List locations]
  Please bring a clean water container (5 gallons maximum capacity).

We will inform you when tests show that the water is safe again. We expect to resolve the problem within [estimated time frame].

For more information call:
Water Utility contact: America Sanchez, Associate Engineer, 650 599-1473, 555 County Center, Redwood City, CA 94063
California Department of Health Services – Drinking Water Field Operations Branch- District Office at 510-620-2602
Local Environmental Health Jurisdiction: San Mateo County at 650-372-6200

This notice is being sent to you by County Service Area No 11. California Public Water System ID # 4100582. Date Distributed: [date].

Please share this information with all other people who receive this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand.

Date:

UNSAFE WATER ALERT

[Insert one-liner language for non-English speakers here, otherwise delete.]

County Service Area No. 11 water is possibly contaminated with [an unknown substance]

DO NOT USE YOUR WATER

Failure to follow this advisory could result in illness.

An unknown substance has been added to the drinking water supplied by the County Service Area No. 11 due to a recent [intrusion; break-in] at [one of the wells; our treatment plant; storage tank; specific facility]. The California Department of Health Services, San Mateo County Health Department, and County Service Area No.11 Water System are advising residents of Pescadero to NOT USE THE TAP WATER FOR DRINKING, COOKING, HAND WASHING, OR BATHING UNTIL FURTHER NOTICE.

What should I do?

- ***DO NOT USE YOUR TAP WATER---USE ONLY BOTTLED WATER.*** *Bottled water should be used for all drinking (including baby formula and juice), brushing teeth, washing dishes, making ice, food preparation and bathing* ***until further notice.***

- ***DO NOT TRY AND TREAT THE WATER YOURSELF.*** *Boiling, freezing, filtering, adding chlorine or other disinfectants, or letting water stand will not make the water safe.*

OPTIONS

- Optional: Potable water is available at the following locations: [List locations] Please bring a clean water container (5 gallons maximum capacity).

We will inform you when tests show that the water is safe again. We expect to resolve the problem within [estimated time frame].

For more information call:
Water Utility contact: [Name, title, phone & address of responsible utility representative].
California Department of Health Services at: [insert local district office, DE and phone number].
Local County Health Department: [insert phone number of local health department].

This notice is being sent to you by County Service Area No 11. California Public Water System ID # 4100582. Date Distributed: [date].

Please share this information with all other people who receive this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand.

CSA11 WELL # 1 MONTHLY REPORT

Month / Year: _____ / _____

Well's Depth: _____

Date	Water Meter (ft^3)	Tank Level (ft)	Pump hrs.	Run Time (hrs)	Gallons	GPM

Performed by: _____

CSA 11 Wells and Water Tank Inspection

Water tank								*Wells*	
Date	Fence	Roof	Hatches	Screen	Weeds	Paint	H_2O in Tank	Production Well observations	Standby well observations

Comments _____

VALVE OPERATION WORKSHEET

Date	Valve No.	Location	Size	# of Turns	Direction of Closing	Remarks/ Maintenance/ Deficiencies

San Mateo County Department of Public Works **Backflow Prevention Assembly Test Report**

Sequence Number: **700**

Meter Number: **52235173**

Service Address

SAN MATEO CO. FIRE DEPT
1200 PESCADERO ROAD
PESCADERO, CA

Contact Person

Ann M. Stillman
555 County Center, 5th Floor
Redwood City, CA 94063
Phone: (650) 363-4100
Fax: (650) 361-8220

Device Location: North side of building

		Check if Correct	Corrections
Serial #:	**H14938**	☐	
Manufacturer:	**Febco**	☐	
Model:	**825Y**	☐	
Size:	**1-1/2**	☐	
Type:		☐	
Orientation:		☐	

Domestic ☐ Irrigation ☐ Fire-Public ☐ Combination ☐ Reclaimed ☐ Fire – Private ☐

Protection Service ☐ Internal ☐

Agriculture ☐ Apartment ☐ Commercial ☐ Construction ☐ Industrial ☐ Public Authority ☐ Residential ☐ Multi-Residential ☐

Test Due No Later Than:

Existing ☐ Removed ☐ New ☐ Replaced ☐

RP ☐ RPDA ☐ PVB ☐ Air Gap ☐ DC ☐ DCDA ☐ SVB ☐ AVB ☐

Reduced Pressure Principle Assembly
Double Check Valve Assembly

Air Gap
PVB/SVB

	Check Valve #1	Check Valve #2	Relief Valve	Air Inlet	Check Valve
Initial Test	Leaked Closed Tight Held at _____ PSID	Leaked Closed Tight Held at _____ PSID	Did not open Opened at _____ PSID	Did not open Opened at _____ PSID	Leaked Held at _____ PSID
Repairs	Cleaned ☐ Replaced ☐ Rubber Kit ☐ CV Assembly ☐ Disc ☐ O-rings ☐ Seat ☐ Spring ☐ Stemguide ☐ Retainer ☐ Lock Nuts ☐ Other ☐	Cleaned ☐ Replaced ☐ Rubber Kit ☐ CV Assembly ☐ Disc ☐ O-rings ☐ Seat ☐ Spring ☐ Stemguide ☐ Retainer ☐ Lock Nuts ☐ Other ☐	Cleaned ☐ Replaced ☐ Rubber Kit ☐ RV Assembly ☐ Disc ☐ Diaphram(s) ☐ Seat ☐ Spring ☐ Guide ☐ O-rings ☐ Other ☐	Cleaned ☐ Replaced ☐ Rubber Kit ☐ Disc ☐ Spring ☐ Retainer ☐ Guide ☐ O-rings ☐ Other ☐	Cleaned ☐ Replaced ☐ Rubber Kit ☐ CV Assembly ☐ Disc ☐ Spring ☐ Retainer ☐ Guide ☐ O-rings ☐ Other ☐
Initial Test	Closed Tight ☐ Held at _____ PSID	Closed Tight ☐ Held at _____ PSID	Opened at _____ PSID	Opened at _____ PSID	Held at _____ PSID

Notify us if failed assemblies cannot be repaired within 24 hours. Comments:

_____

_____

_____

	Yes	No
Proper Installation	☐	☐
Held Backpressure	☐	☐
RV Exercised	☐	☐
#2 Shutoff Closed	☐	☐
Service Restored	☐	☐

I certify all information on this report is true and accurate

Tester _____

Signature _____ Certification # _____

Test Kit Serial # _____ Calibration Date _____

Company _____ Phone _____

Test Date _____

Test Time _____

Tag # _____

Passed ☐ Failed ☐

Customer Complaint Form

Name of person making complaint: _____

Telephone Number: _____

Address: _____

Nature of complaint: _____

Results of investigation: _____

Action taken: _____

Date complainant contacted with the results of the investigation and action taken:

Initials of person investigating Complaint:_____

Initials of person taking complaint:_____

D

RWQCB Final Order

California Regional Water Quality Control Board
San Francisco Bay Region

Linda S. Adams
Secretary for
Environmental Protection

1515 Clay Street, Suite 1400, Oakland, California 94612
(510) 622-2300 • Fax (510) 622-2460
http://www.waterboards.ca.gov/sanfranciscobay

Arnold Schwarzenegger
Governor

Date DEC 19 2006
File No. 2179.7118 (CSF)

Certified Mail No. 7003 3110 0002 6556 2803
Mr. Mark Chow
San Mateo County Department of Public Works
555 County Center, 5th Floor
Redwood City, CA 94063-1665

SUBJECT: **Transmittal of Final Order for Pescadero Landfill**
Pescadero, San Mateo County

Dear Mr. Chow:

Enclosed is the Final Order (No. R2-2006-0083) for the Pescadero Landfill. The Order was adopted by the Regional Board in its December 13, 2006 hearing. If you have any questions regarding the Order, please contact Cecilio Felix at (510) 622-2343, or by email at cfelix@waterboards.ca.gov.

Sincerely,

Cecilio Felix
Associate Engineering Geologist

Attachment: Tentative Order for Updated Waste Discharge Requirements

CC:

Greg Schirle
San Mateo County Health Services Agency
Environmental Health Services Division
455 County Center
Redwood City, CA 94063

Beatrice Poroli
CIWMB
1001 I Street
Sacramento, CA 95814

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

ORDER NO. RB2-2006-0083

**UPDATED WASTE DISCHARGE REQUIREMENTS AND
RESCISSION OF ORDER NO. 96-153 FOR:**

**PESCADERO SOLID WASTE DISPOSAL SITE
COUNTY OF SAN MATEO
PESCADERO, MATEO COUNTY**

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board), finds that:

DISCHARGER AND LOCATION

1. Owner, operator, and discharger named: The inactive Pescadero Solid Waste Disposal Site (Pescadero Landfill) is owned by San Mateo County. San Mateo County is hereinafter referred to as the Discharger.

   Landfill location and description: Pescadero Landfill is located approximately 1.5 miles from the town of Pescadero (see Figure 1) and consists of an older seven acre portion, and a newer 54 acre portion. Both the older and newer portions of the landfill were formed by placing waste directly upon the ground surface. The older portion of the landfill is gently graded and utilized as a vehicle maintenance facility. The newer portion of the landfill is undeveloped; adjacent to the newer portion is a transfer station operated by Allied Waste (formerly Browning Ferris Industries).. The areas surrounding the landfill are predominantly agricultural and recreational areas and open space.

PURPOSE OF ORDER UPDATE

3. Update of Waste Discharge Requirements: This order updates Waste Discharge Requirements (WDRs) for the Pescadero Landfill to include general provisions and tasks necessary to continue the established design criteria for the landfill's containment systems and to update and revise the landfill's groundwater, surface water, and leachate monitoring programs. In addition, this order rescinds Order No. 96-153.

SITE DESCRIPTION

4. Waste placement: Pescadero Landfill is an unlined landfill located in the coastal hills. The older portion of the landfill received waste from 1962 to 1973. The newer portion of the landfill received waste from 1973 to 1986.

5. Waste types and classification: Waste received at the landfill consists of non-hazardous residential, commercial and industrial solid waste classified in CCR Title 27, Section 20220(a) as Class III wastes. Class III waste includes but is not limited to: all putresible and nonputresible solid, semi-solid, and liquid wastes including household garbage, green waste, paper, metal, animal waste, industrial wastes, demolition and construction wastes, and soil.

6. Leachate containment and minimization: At the older portion of the landfill, water quality impacts are reduced by surface grading, which minimizes the infiltration of precipitation and generation of landfill leachate.

   At the newer portion of the landfill, the following methods are utilized to reduce the potential for water quality impacts:

   - promotion of runoff by surface grading;
   - peripheral drainage ditches which divert surface water runoff away from the landfill;
   - diversion of groundwater by an underdrain in upgradient areas of the landfill; and,
   - installation of subsurface clay barriers at the landfill toe which reduce the potential for migration of leachate beyond the landfill footprint.

7. Landfill cap: Landfill waste is contained at both the older and newer portions by grading waste materials and covering with clean dirt. The older portion of the landfill is graded nearly flat, compacted, and covered with gravel. The cover at the older portion of the

landfill is consistent with closure requirements prior to establishment of Title 27 closure standards. The newer portion of the landfill is graded with slopes of less than 30%. Erosion of cover materials at the newer portion is prevented by grassy vegetation. A final engineered cap needs to be installed at the newer portion of the landfill (Provision 5 and 6). A prescriptive engineered cap consistent with Title 27 includes: 1) a foundation layer of 2 feet minimum thickness consisting of clean soil or treated soil placed above compacted waste; 2) a low permeability layer of 1 foot minimum thickness with a hydraulic conductivity of 1×10^{-6} cm/s or less; 3) a protective/vegetative soil layer of 1 foot minimum thickness.

REGULATORY HISTORY

8. Previous Order: The most recent Board Order for the site is Order No. 96-153, Waste Discharge Requirements for the Pescardero Landfill, adopted in November, 1996.

SITE GEOLOGIC AND HYDROGEOLOGIC SETTING

9. Stratigraphy: The materials immediately underlying the Pescadero Landfill include surficial deposits of black adobe soils, colluvium, and landslide deposits. The surficial deposits are underlain by terrace deposits of gravel, sand and silt. Underlying the terrace deposits is bedrock of the Pigeon Point Formation, consisting of conglomerate, sandstone, siltstone, and shale.

10. Surface water: Within the valley containing the landfill are a small stream and spring which flow only during the rainy season. The older portion of the landfill is located near the mouth of the valley at the confluence of Butano and Pescadero Creek. The newer portion of the landfill is located on a sideslope at the upper portion of the valley. No perennial surface waters or large volumes of concentrated precipitation flow through the landfilled areas. The primary source of surface waters at the landfill is precipitation directly to the landfill.

11. Groundwater: Groundwater flows to the north-northwest, following the general canyon topography. Depth to groundwater varies according to lithologies and season, ranging from less than 5 feet to greater than 40 feet below the ground surface. The major water-bearing unit identified at the site includes the permeable surficial and terrace deposits, which transmit enough water to be considered an aquifer. The lower hydrostratigraphic unit, consisting of the bedrock of the Pigeon Point Formation, is relatively impermeable

and is not considered an aquifer. The bedrock creates perched water conditions in the overlying terrace deposits and surficial materials. During periods of high rain, groundwater is discharged at the surface in the form of springs and small streams.

12. Geologic structure and landfill stability: No known active faults (defined as faults showing displacement within the past 11,000 years) were identified within the area of the landfill. An inactive fault is located ½ mile northeast of the landfill. The drainage area beneath the landfill is defined by the underlying synclinal fold; the fold axis is parallel to the drainage. The local folding and faulting is related to the San Andreas fault system. The seismic stability of the landfilled materials has not been evaluated.

SITE CONTAMINATION AND WATER QUALITY

13. Contamination originating at landfill: Because of the shallow depth to groundwater and the absence of a liner and leachate extraction, it is presumed that leachate generated at the landfill has migrated downward and commingled with groundwater. Groundwater monitoring at the newer portion of the landfill has been conducted since the mid-1970's. The monitoring indicates no significant impacts to groundwater quality from the landfill. Only trace levels of VOCs (below MCLs) have been detected in groundwater, and metals concentrations are below drinking water limits.

14. Board Resolution No. 89-39: Board Resolution 89-39, "Sources of Drinking Water," defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas containing high TDS (greater than 3000 mg/l TDS), high background contaminant levels, or those areas with a low-yield. Some groundwater underlying and adjacent to the site qualifies as a potential source of drinking water, although there is no current use of the site's groundwater, nor any anticipated plans for its use.

BASIN PLAN

15. The Board adopted a revised Water Quality Plan for the San Francisco Bay Basin (Basin Plan) on January 21, 2004. This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resource Control Board and the Office of the Administrative Law on July 22, 2004, and October 4, 2004, respectively, and approved by the U.S. Environmental Protection Agency, Region IX on January 5, 2005. A summary of regulatory provisions is contained in 23 CCR. The Basin Plan defines beneficial uses and

water quality objectives for waters of the State, including surface waters and groundwater.

BENEFICIAL USES

16. The beneficial uses of groundwater beneath the landfill include:

    a. Domestic and municipal supply
    b. Agricultural supply
    c. Industrial process and service supply
    d. Groundwater recharge
    e. Discharge to Butano Creek and Pescadero Creek

17. The beneficial uses of Butano Creek and Pescadero Creek include:

    a. Wildlife and estuarine habitat
    b. Contact and non-contact water recreation
    c. Fish migration and spawning
    d. Preservation of rare and endangered species
    e. Shellfish harvesting
    f. Groundwater recharge
    g. Agricultural supply
    h. Municipal and domestic supply

MONITORING PROGRAMS

18. Groundwater Monitoring – Currently, groundwater at the newer portion of the landfill is monitored by 3 groundwater monitoring wells. The monitoring wells, located at the landfill perimeter, are screened though the upper hydrostratigraphic unit, which includes the permeable surficial and terrace deposits. The wells are monitored on a yearly basis for general water quality parameters, and for a more extensive list of compounds every 5 years. Groundwater at the older portion of the landfill has historically not been monitored.

19. Leachate Monitoring – Leachate at the old portion of the landfill has not been monitored. Leachate at the new portion of the landfill has been monitored at the three groundwater monitoring wells at the landfill perimeter. Monitoring results indicate that leachate at the newer portion of the landfill is contained within the area of the landfill footprint, and that

the leachate has not significantly impacted groundwater. Only trace levels of VOCs have been detected in groundwater, and metals concentrations are below drinking water limits.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

20. CEQA: This action is an order to enforce the laws and regulations administered by the Board. As such, this action is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15301 of the Resources Agency Guidelines.

21. Public notice: The Board has notified the Discharger and interested agencies and persons of its intent to adopt revised, updated Waste Discharge Requirements for the Discharger and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

22. Public meeting: The Board, in a public meeting heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Discharger, its agents, successors and assigns shall meet the applicable provisions contained in Title 27, Division 2, Subdivision 1 of the California Code of Regulations and Division 7 of the California Water Code and shall comply with the following:

A. PROHIBITIONS

1. The relocation of wastes to or from any waste management unit shall not create a condition of pollution or nuisance as defined in Section 13050 (l) and (m) of the California Water Code. Any relocated waste shall not be placed in or allowed to contact ponded water from any source whatsoever. Wastes shall not be relocated to any location where they can be discharged into waters of the State or of the United States.

2. Leachate and ponded water containing leachate or in contact with waste shall not be discharged to waters of the State or of the United States unless specifically authorized under an NPDES permit.

3. Buildup or mounding of leachate levels within the landfill shall be prevented by operation of a leachate extraction system. The depth of leachate shall be kept at

levels sufficient to maintain an inward gradient as necessary to insure efficient operation of the leachate extraction system.

4. The creation of any new waste management units is prohibited without prior Board approval.

5. The Discharger shall not excavate within or reconfigure any existing waste management unit without prior Board approval.

6. No additional waste shall be deposited or stored at this site after closure is completed.

7. The Discharger, or any future owner or operator of the site, shall not cause the following conditions to exist in waters of the State at any place outside the waste management facility:

   a. Surface Waters

   - Floating, suspended, or deposited macroscopic particulate matter or foam. Bottom deposits or aquatic growths.
     Alteration of temperature, turbidity, or apparent color beyond natural background levels.
   - Visible, floating, suspended or deposited oil or other products of petroleum origin.
     Toxic or other deleterious substances to be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.

   b. Groundwater

   - Further degradation of groundwater quality.
   - Substantial worsening of existing groundwater impacts.

8. The Discharger shall not disc the landfill cap. Alternate methods of controlling vegetative growth, which do not affect the integrity of the landfill cap, shall be utilized.

B. SPECIFICATIONS

1. All reports pursuant to this order shall be prepared under the supervision of a California registered professional civil engineer, professional geologist or certified engineering geologist.

2. The site shall be protected from any washout or erosion of wastes or cover material and from inundation that could occur as a result of a 100-year, 24-hour precipitation event, or as the result of flooding with a return frequency of 100 years.

3. Surface drainage from tributary areas and internal site drainage from surface or subsurface sources shall not contact or percolate through wastes during the life of the site.

4. The existing containment, drainage, and monitoring systems at the facility, shall be maintained as long as leachate is present and poses a threat to water quality.

5. The Discharger shall assure that the structures, which control leachate, surface drainage, erosion and gas are constructed and maintained to withstand conditions generated during the maximum probable earthquake.

6. The final cap system shall be graded and maintained to promote lateral runoff and prevent ponding and infiltration of water.

7. The Discharger shall analyze the samples from any groundwater or leachate wells as outlined in the Discharge Monitoring Program (Attachment A).

8. The Discharger shall install any reasonable additional groundwater and leachate monitoring devices required to fulfill the terms of any future Discharge Monitoring Program issued by the Executive Officer.

9. Landfill gases shall be adequately vented, removed from the landfill, or otherwise controlled to minimize the danger of explosion, adverse health effects, nuisance conditions, or the impairment of beneficial uses of water.

10. The Discharger shall maintain all devices or designed features installed in accordance with this Order, such that they continue to operate as intended without interruption.

11. The Board shall be notified immediately of any failure occurring in the waste management unit. Any failure that threatens the integrity of containment features or the landfill shall be promptly corrected after approval of the method and schedule by the Executive Officer.

12. The Discharger shall comply with all applicable provisions of Title 27 that are not specifically referred to in this Order.

13. The Discharger shall maintain the facility so as to prevent a statistically significant increase in water quality parameters at points of compliance as provided in Section 20420 of Title 27.

14. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

C. PROVISIONS

1. The Discharger shall comply immediately, or as prescribed by the time schedule below, with all Prohibitions, Specifications and Provisions of this Order. All required submittals must be acceptable to the Executive Officer. The Discharger must also comply with all conditions of these WDRs. Violations may result in enforcement actions, including Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Board. [CWC Section 13261, 13263, 13265, 13267, 13268, 13300, 13301, 13304, 13340, 13350].

2. All technical and monitoring reports required pursuant to this Order are being requested pursuant to Section 13267 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order or failure to submit a report of sufficient technical quality acceptable to the Executive Officer may subject the Discharger to enforcement action pursuant to Section 13268 of the California Water Code.

PROVISION 3 and 4 APPLY ONLY TO THE OLDER PORTION OF THE LANDFILL

3. WORKPLAN FOR GROUNDWATER SAMPLING

COMPLIANCE DATE: **April 1, 2007**

The Discharger shall submit a workplan, acceptable to the Executive Officer, for evaluating whether groundwater at the older portion of the landfill has been significantly impacted by landfill waste. The workplan shall describe the investigation methods and a schedule of activities for evaluating hydrogeologic conditions and contaminant concentrations levels.

4. **RESULTS OF GROUNDWATER SAMPLING**

COMPLIANCE DATE: **August 1, 2008**

The Discharger shall submit a technical report, acceptable to the Executive Officer, which provides the results of implementation of the workplan described in Provision 3. If appropriate, the technical report shall also propose additional investigation necessary to sufficiently define the extent of any significant water quality impacts.

PROVISION 5 THROUGH 7 APPLY ONLY TO THE NEWER PORTION OF THE LANDFILL

LANDFILL CONSTRUCTION

5. **FINAL COVER CONSTRUCTION PLANS**

COMPLIANCE DATE: **April 1, 2008**

The Discharger shall submit a technical report, acceptable to the Executive Officer, which proposes methods and a schedule of activities necessary to install a final landfill cover at the newer portion of the landfill by **January 30, 2009**. The report shall address the final cover design and installation, and the associated issues pertinent to leachate and landfill gas extraction, containment, and minimization, as well as landfill monitoring programs. Any variance to the prescriptive landfill cover design specified in Title 27 must be described in detail.

6. **FINAL COVER CONSTRUCTION CERTIFICATION LETTER (CCL) AND CONSTRUCTION QUALITY ASSURANCE REPORT (CQA)**

COMPLIANCE DATE: 90 days after final cover is completed in area of newer portion of the landfill

The Discharger shall submit a CCL and a CQA report signed and stamped by a registered professional civil engineer or engineering geologist, following completion of final cover in newly closed areas of the landfill. The CCL letter

shall certify that the closure was completed in compliance with this Order, approved design plans, and Title 27. The CQA report shall be acceptable to the Executive Officer, and include, at a minimum, a detailed summary of the landfill final cover construction, as-built construction drawings, updated topographic maps, and results of quality assurance testing and monitoring.

LANDFILL STABILITY

7. **POST-EARTHQUAKE INSPECTION AND CORRECTIVE ACTION REPORTS**

COMPLIANCE DATE: Within 72 hours of the occurrence of an earthquake of magnitude 6 or higher

The Discharger shall submit a technical report, acceptable to the Executive Officer, which describes implementation of the Post Earthquake Inspection and Corrective Action Plan for the landfill for any earthquake greater than Richter Magnitude 6 at or within 30 miles of the landfill. The report shall describe the results of the post earthquake inspection and any corrective actions necessary to insure landfill stability and prevent water quality impacts which may result from seismic events.

WATER QUALITY IMPACTS AND LANDFILL MONITORING

8. **ANNUAL MONITORING REPORT**

COMPLIANCE DATE: January 31 of each year

The Discharger shall submit an Annual Monitoring Report, acceptable to the Executive Officer, by January 31 of each year in accordance with the attached Discharge Monitoring Program (Attachment A). The annual report to the Board shall cover the previous calendar year as described in Part A of the Monitoring Program. In addition to the requirements outlined in Attachment A, this report shall also include the following: location and operational condition of all leachate and groundwater monitoring wells; and a site map delineating groundwater and leachate levels for each monitoring event.

9. **SEMI-ANNUAL MONITORING REPORT**

COMPLIANCE DATE: July 31 and January 31 of each year

The Discharger shall submit semi-annual monitoring reports, no later than July 31 and January 31 of each year in accordance with the attached Discharge Monitoring Program (Attachment A). The January 31 semi-annual report may be combined with the annual report.

10. **ANNUAL MAINTENANCE REPORT**

COMPLIANCE DATE: January 31 of each year

The Discharger shall submit a technical report to the Board, acceptable to the Executive Officer, detailing the repair and maintenance activities that need to be completed prior to the commencement of the next rainy season (starting October 15 of each year). This letter report shall also include a description and schedule for repair and maintenance activities, and a cost analysis detailing the anticipated expense for all repairs, maintenance and monitoring during the next 12 months. Repair and maintenance estimates shall be based on rainy season inspections conducted throughout the winter as required in the Discharge Monitoring Program.

11. **WELL INSTALLATION REPORT**

COMPLIANCE DATE: 45 days following completion of well installation activities

The Discharger shall submit a technical report, acceptable to the Executive Officer, that provides well construction details, geologic boring logs, and well development logs for all new wells installed as part of the Discharge Monitoring Program (Attachment A). Additionally, rationale shall be included for the calculation of the extent of groundwater subdrain setback from the last observed sidewall seep or spring. This rationale shall consider estimated peak flow/discharge conditions, landfill containment structures, and variations in lithologies.

12. **CHANGE IN SITE CONDITIONS**

NOTIFICATION DUE DATE: Immediately upon occurrence
REPORTING DUE DATE: 30 days after initial notification

The Discharger shall immediately notify the Board of any flooding, ponding, settlement, equipment failure, slope failure, exposure of waste, liner leakage, or other change in site conditions that could impair the integrity of the landfill cap, waste or leachate containment facilities, and/or drainage control structures and

shall immediately make repairs. Within 30 days, the Discharger shall prepare and submit a technical report, acceptable to the Executive Officer, documenting the corrective measures taken.

13. The Discharger shall maintain a copy of these waste discharge requirements and these requirements shall be available to operating personnel at all times [CWC Section 13263].

14. The Discharger shall permit the Board or its authorized representative, upon presentation of credentials:

    a. Immediate entry upon the premises on which wastes are located or in which any required records are kept.
    b. Access to copy any records required under the terms and conditions of this order.
    c. Inspection of any treatment equipment, monitoring equipment, or monitoring methods required by this order or by any other California State Agency.
    d. Sampling of any discharge or groundwater governed by this order.

15. The Discharger shall submit, within 90 days after the closure of any portion of the landfill, a closure certification report which documents that the area has been closed according to the requirements of this Order and Title 27. The Discharger shall certify under penalty of perjury that all closure activities were performed in accordance with the most recently approved closure plan and in accordance with all applicable regulations.

16. In the event of any change in control/operator or ownership of land or parcel of land, or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office. The Discharger must notify the Executive Officer, in writing at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new discharger. The notice must include a written agreement between the existing and new discharger containing a specific date for the transfer of this order's responsibility and coverage between the current discharger and the new discharger. This agreement shall include an acknowledgment that the existing discharger is liable for violations up to the transfer date and that the new discharger is liable from the transfer date on. [CWC Sections 13267 and 13263]. The request must contain the requesting entity's full legal name, the address and telephone number of the persons responsible for contact with the Board and

statement. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code.

17. This Order is subject to Board review and updating, as necessary, to comply with changing State and Federal laws, regulations, policies, or guidelines; changes in the Board's Basin Plan; or changes in the discharge characteristics [CWC Section 13263]. The Executive Officer may specify minor changes to the Discharge Monitoring Plan as necessary.

18. Where the Discharger becomes aware that if they failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Board, shall promptly submit such facts or information [CWC Sections 13260 and 13267].

19. This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, do not protect the Discharger from its liability under Federal, State or local laws, nor do they create a vested right for the to continue the waste discharge [CWC Section 13263(g)].

20. Provisions of these waste discharge requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected.

21. The Discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this order [CWC Section 13263(f)].

22. Except for a discharge which is in compliance with these waste discharge requirements, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the office of Emergency Services of the discharge in

accordance with the spill reporting provision of the state toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with Section 8574.7) of Chapter 7 of Division 1 of Title 2 of the Government Code, and immediately notify the State Board or the Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of Section 13271 of the Water Code unless the Discharger is in violation of a prohibition in the applicable water Quality Control Plan [CWC Section 13271(a)].

23. The Discharger shall report any noncompliance that may endanger public health or the environment. Any such information shall be provided orally to the Executive Officer within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours [CWC Sections 13263 and 13267].

24. This Board's Order No. 96-153 is hereby rescinded.

I, Bruce H. Wolfe, Executive Officer, do hereby certify that the foregoing is a full, complete, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on December 13, 2006.

Bruce H. Wolfe
Executive Officer

Figures: Figure 1 - Location Map
Attachment: Attachment A - Discharge Monitoring Program

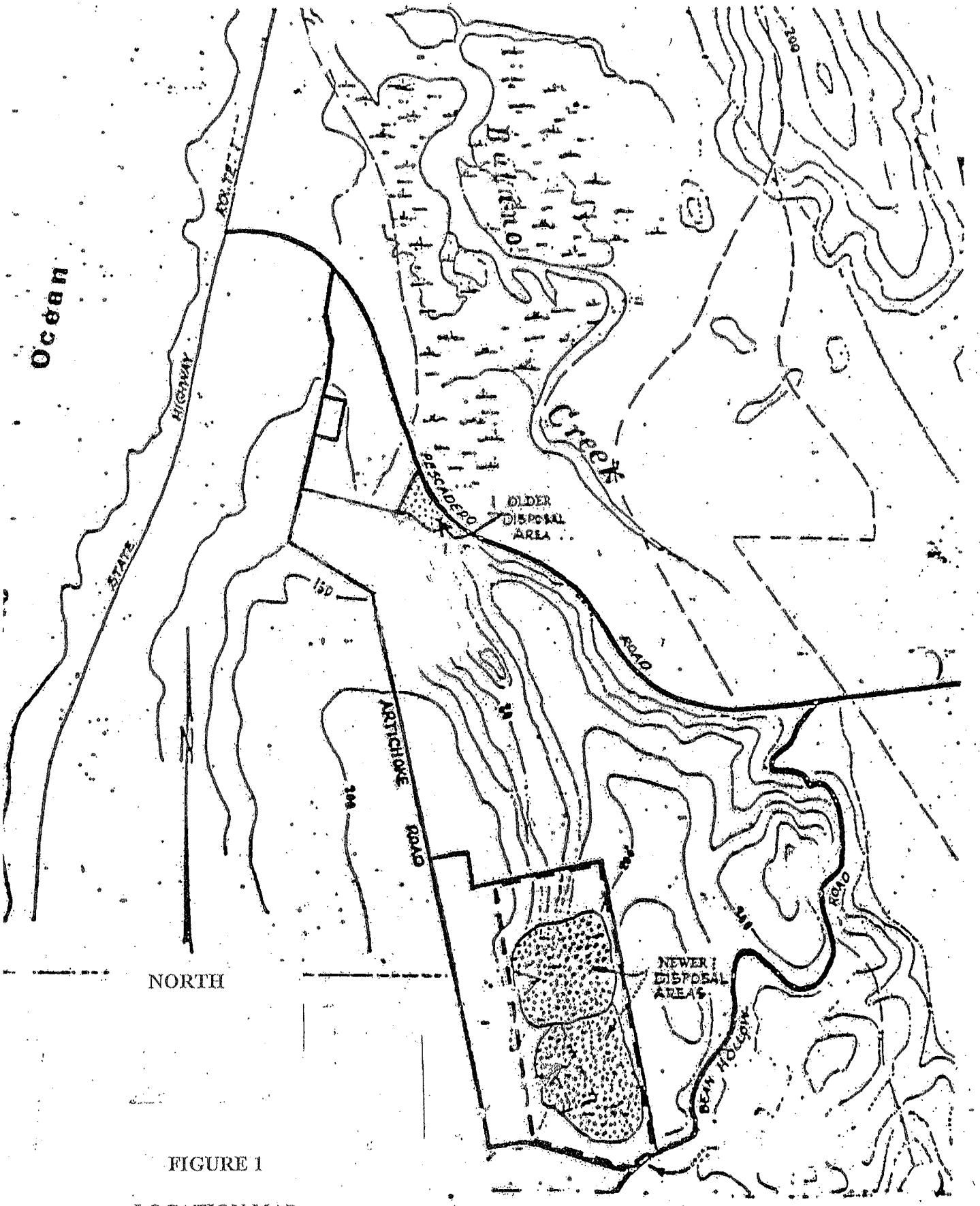


FIGURE 1

LOCATION MAP
PESCADERO LANDFILL

ATTACHMENT A

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

DISCHARGE MONITORING PROGRAM

FOR

PESCADERO SOLID WASTE DISPOSAL SITE
COUNTY OF SAN MATEO
PESCADERO, MATEO COUNTY

ORDER NO. RB2-2006-0083

CONSISTS OF

PART A

AND

PART B

PART A

A. GENERAL

Reporting responsibilities of waste discharges are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Board's Resolution No. 73-16. This Discharge Monitoring Program is issued in accordance with Title 27 of the California Code of Regulations.

The principal purposes of a discharge monitoring program are: (1) to document compliance with waste discharge requirements and prohibitions established by the Board, (2) to facilitate self-policing by the waste dischargers in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of standards of performance, and toxicity standards, (4) to assist the dischargers in complying with the requirements of Title 27.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the most recent version of EPA Standard Methods and in accordance with an approved sampling and analysis plan.

Water and waste analysis shall be performed by a laboratory approved for these analyses by the State of California. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and all reports of such work submitted to the Board shall be signed by a duly authorized representative of the laboratory.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. A grab sample is a discrete sample collected at any time.

2. Receiving waters refers to any surface that actually or potentially receives surface or groundwaters that pass over, through, or under waste materials or contaminated soils. In this case the groundwater beneath and adjacent to the landfill areas and the surface runoff from the site are considered receiving waters.

3. Standard observations refer to:

a. Receiving Waters

1) Floating and suspended materials of waste origin: presence or absence, source, and size of affected area.
2) Discoloration and turbidity: description of color, source, and size of affected area.
3) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
4) Evidence of beneficial use: presence of water associated wildlife.
5) Flow rate
6) Weather conditions: wind direction and estimated velocity, total precipitation during the previous five days and on the day of observation.

b. Perimeter of the waste management unit.

1) Evidence of liquid leaving or entering the waste management unit, estimated size of affected area and flow rate. (Show affected area on map)
2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
3) Evidence of erosion and/or daylighted refuse.

c. The waste management unit.

1) Evidence of ponded water at any point on the waste management facility.
2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
3) Evidence of erosion, slope or ground movement, and/or daylighted refuse.
4) Adequacy of access road
5) Standard Analysis and measurements are listed on Table A (attached)

D. SAMPLING, ANALYSIS, AND OBSERVATIONS

The Discharger is required to perform sampling, analyses, and observations in the following media:

1. Storm drain discharges per Section 20415
2. Groundwater and leachate per Section 20415

and per the general requirements specified in Section 20415(e) of Title 27.

E. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the Discharger or laboratory, and shall be retained for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Such records shall show the following for each sample:

1. Identity of sample and sample station number.

2. Date and time of sampling.

3. Date and time that analyses are started and completed, and name of the personnel performing the analyses.

4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used.

5. Calculation of results.

6. Results of analyses, and detection limits for each analysis.

F. REPORTS TO BE FILED WITH THE BOARD

1. Monitoring Reports

Written monitoring reports shall be filed by January 31 and July 31 of each year. In addition an annual report shall be filed by January 31 of each year. The reports shall be comprised of the following:

a. Letter of Transmittal

A letter transmitting the essential points in each report should accompany each report. Such a letter shall include a discussion of any requirement violations found during the last report period, and actions taken or planned for correcting the violations. If the Discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last report period this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

b. Each monitoring report shall include a compliance evaluation summary. The summary shall contain:

1) A graphic description of the direction of groundwater flow under/around the waste management unit, based upon the past and present water level elevations and pertinent visual observations.

2) The method and time of water level measurement, the type of pump used for purging, pump placement in the well; method of purging, pumping rate, equipment and methods used to monitor field pH, temperature, and conductivity during purging, calibration of the field equipment, results of the pH, temperature conductivity and turbidity testing, well recovery time, and method of disposing of the purge water.

3) Type of pump used, pump placement for sampling, a detailed description of the sampling procedure; number and description of equipment, field and travel blanks; number and description of duplicate samples; type of sample containers and preservatives used, the date and time of sampling, the name and qualifications of the person actually taking the samples, and any other observations.

4) A written discussion of the groundwater analyses indicating any change in the quality or characteristics of the groundwater.

c. A comprehensive discussion of the compliance record and status, as well as any corrective actions taken or planned which may be needed to bring the Discharger into full compliance with the Waste Discharge Requirements and 27CCR.

d. A map or aerial photograph shall accompany each report showing, observation and monitoring station locations.

e. Laboratory statements with the results of analyses specified in Part B must be included in each report. The director of the laboratory whose name appears on the laboratory certification shall supervise all analytical work in his/her laboratory and all reports of such work submitted to the Board shall be signed by a duly authorized representative of the laboratory.

1) The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review and approved by the Executive Officer prior to use.

2) In addition to the results of the analyses, laboratory quality assurance/quality control (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the method, equipment and analytical detection limits; the recovery rates; an explanation for any recovery rate that are outside laboratory control limits; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name and qualifications of the person(s) performing the analyses.

f. An evaluation of the effectiveness of the leachate monitoring facilities, which includes an evaluation of leachate buildup within the disposal units and sump areas, a summary of leachate volumes removed from the units, and a discussion of the leachate disposal/treatment methods utilized.

g. A summary and certification of completion of all standard observations for the waste management unit, the perimeter of the waste management unit, and the receiving waters.

h. The Annual Monitoring Report shall be submitted to the Board covering the previous year. The Report shall include, but is not limited to, the following:

i. A graphical presentation of the analytical data [Board-approved alternate procedure per 27CCR, Section 20415(e)(14)] for monitoring locations that have shown detectable concentrations during two consecutive monitoring events, or greater than ten percent detection frequency for any organic compound. Graphical representation must be provided for monitoring locations with metals and general chemistry analytical parameters that have an increasing trend for three consecutive monitoring events;

ii. A tabular summary of all the monitoring data obtained during the previous year;

iii. A comprehensive discussion of the compliance record, and the corrective actions taken or planed which may be needed to bring the Discharger into full compliance with the waste discharge requirements;

iv. A map showing the area, if any, in which filling has been completed during the previous calendar year;

v. A written summary of the groundwater analyses indicating any change in the quality of the groundwater; and

vi. An evaluation of the effectiveness of the leachate monitoring/control facilities, which includes an evaluation of leachate buildup within the disposal units, a summary of leachate control volumes removed from the units, and a discussion of the leachate disposal methods utilized.

1. Tabular and graphical summaries of the monitoring data obtained during the previous year; the annual report should be accompanied by a compact disc, MS-EXCEL format, tabulating the year's data.

2. **Contingency Reporting**

A report shall be made by telephone of any seepage from the disposal area immediately after it is discovered. A written report shall be filed with the Board within five days thereafter. This report shall contain the following information:

a) a map showing the location(s) of discharge if any;
b) approximate flow rate;
c) nature of effects; i.e. all pertinent observations and analyses; and
d) corrective measures underway, proposed, or as specified in the Waste Discharge Requirements.

3. **Well Logs**

A boring log and a monitoring well construction log shall be submitted for each new sampling well established for this monitoring program, as well as a report of inspection or certification that each well has been constructed in accordance with the construction standards of the Department of Water Resources. These shall be submitted within 45 days after well installation.

G. WATER QUALITY PROTECTION STANDARDS

1. Constituents of Concern: The Constituents of Concern (COC) for groundwater are those listed in Table 1 of this Discharge Monitoring Program.

2. Concentration Limits: Concentration Limits (CLs) for each COC are shown in Table 2. The CLs were set at the PQLs for most SVOCs and VOCs. CLs were set above the PQLs for certain constituents that were: 1) common laboratory contaminants (acetone, methylene chloride, bromoform, chloroform, toluene, phthalates, phenol); 2) derived from field sampling equipment and materials; and 3) periodically detected in some wells as a result of COC migration prior to implementation of corrective measures or as result of the presence of waste fill outboard of containment structures. The CLs are well below water quality criteria for Butano and

Pescadero Creeks and therefore are protective of human health and the environment.

3. Monitoring Points: Monitoring Points for the landfill are identified in Table 1 of this Discharge Monitoring Program. Because landfill operations predate collection of groundwater chemistry data at this site, background water quality monitoring locations do not exist; therefore, intra-well comparisons will be used for evaluating monitoring data. For those areas where COCs greater than the CLs existed prior to corrective measures (landfill closure), monitoring will be conducted to demonstrate that the levels of COCs have either stabilized or are decreasing.

4. Point of Compliance: The Point of Compliance for this facility is the vertical surface that extends from the outside edge of the lateral containment structures through the uppermost aquifer underlying the unit.

Part B

1. DESCRIPTION OF OBSERVATION STATIONS AND SCHEDULE OF OBSERVATIONS

A. GROUNDWATER, LEACHATE, AND STORMWATER MONITORING:

Semi-Annual Report: **due July 31 of each year**
Annual Report: **due January 31 of each year**

Groundwater shall be sampled and analyzed as detailed in Table 1. Monitoring well locations are shown in Figure A-1. CLs for groundwater sampled at the monitoring wells are shown in Table 2.

B. FACILITIES MONITORING - **Observe semi-annually, report annually**

Semi-Annual Report: **due July 31 of each year**
Annual Report: **due January 31 of each year**

The Discharger shall inspect all facilities to ensure proper and safe operation and report semi-annually. The facilities to be monitored shall include, but not be limited to:

1. Surface water ponding
2. Perimeter diversion channels and run-on/run-off control features
3. Interim and final cover system
4. Re-use areas

C. PHOTO DOCUMENTATION OF FACILITIES MONITORING - **Observe semi-annually, report annually**

Semi-Annual Report: **due July 31 of each year**
Annual Report: **due January 31 of each year**

The Discharger shall provide photo documentation of conditions at locations that include, but are not limited to the landfill facilities listed in Part B above. Locations from which photographs are taken should be permanent stations such that they can be used in successive reports.

D. SEEPAGE MONITORING

Semi-Annual Report: **due July 31 of each year**
Annual Report: **due January 31 of each year**

Seepage monitoring stations include any point at which seepage is found occurring from the disposal area. The landfill perimeter shall **be monitored semi-annually and the results reported semi-annually.**

Station	Description	Observations	Frequency
S-1 thru S-'n'	At any point(s) at which seepage is found occurring from the disposal area	Standard observations for the perimeter and standard analyses (Table 3, perform analyses once per seep)	Daily until remedial action is taken and seepage ceases

I, Bruce H. Wolfe, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedures set forth in this Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in this Board's Order No. RB2-2006-0083.

2. Is effective on the date shown below.

3. May be reviewed or modified at any time subsequent to the effective date, upon written notice from the Executive Officer.

Bruce H. Wolfe
Executive Officer

Date Ordered: December 13, 2006

Attachment: Figure A-1 – Newer Portion Monitoring Well Location Map
Tables 1-3

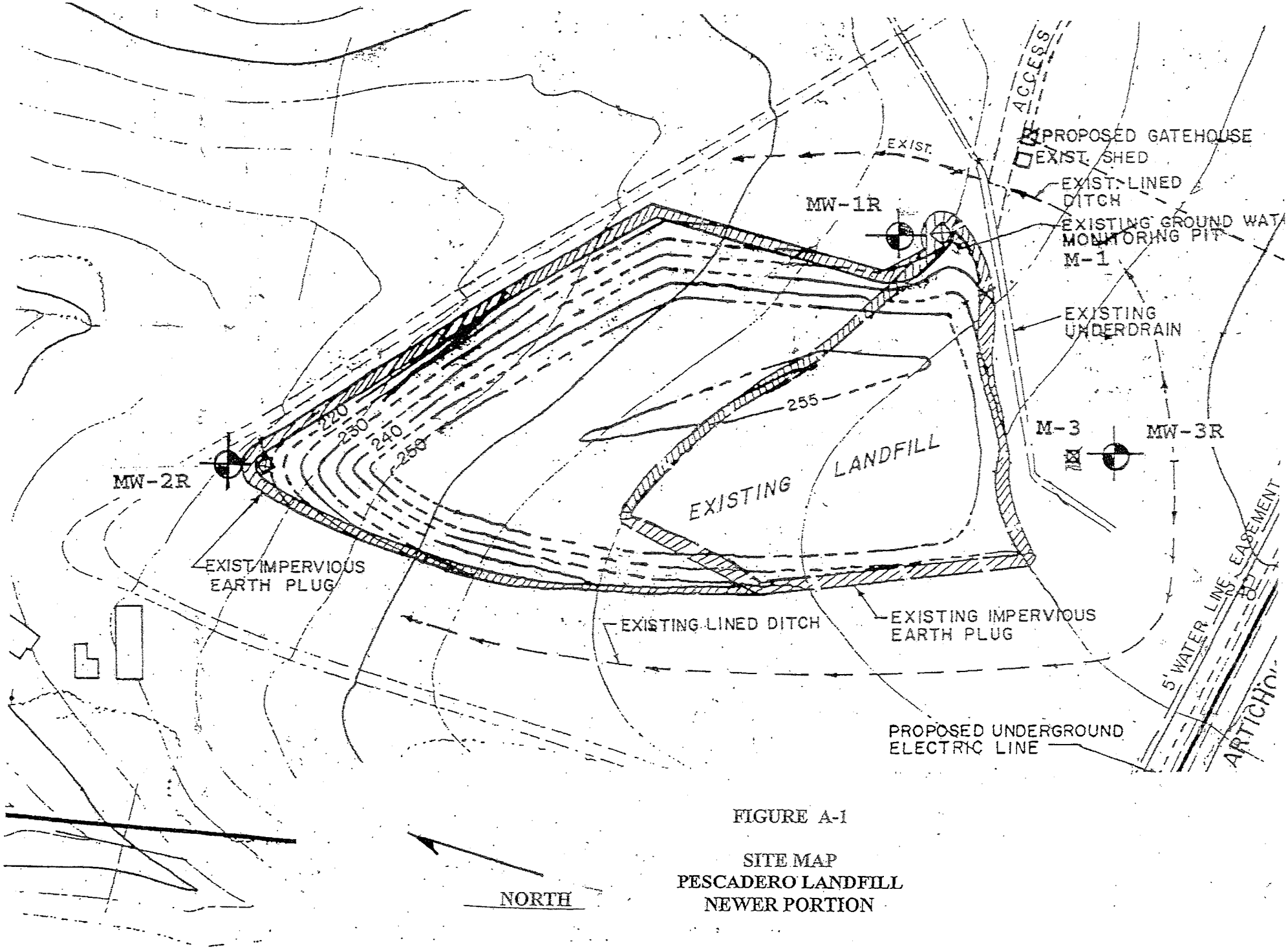


FIGURE A-1

SITE MAP
PESCADERO LANDFILL
NEWER PORTION

Table 1 - Groundwater Monitoring Points, Parameters and Sampling Frequency
Pescadero Landfill

Monitoring Wells	Analytical Parameters	Sampling Frequency
All Groundwater Monitoring Wells MW-1R MW-2R MW-3R	**General Water Quality Parameters:** pH, Ammonia (total and unionized)	Semi-Annually
	VOCs: EPA Method 8260	Once every 5 years beginning in April 2007
	SVOCs: EPA Method 8270	Once every 5 years beginning in April 2007
	Dissolved Metals Arsenic, Barium Cadmium, Copper, Chromium, Lead Mercury, Nickel, Vanadium, Zinc	Annually
	Additional Metals: Antimony, Beryllium, Cobalt, Selenium, Silver, Thallium, Tin	Once every 5 years beginning in April 2007
	40 CFR 258 Appendix II constituents: Pesticides & PCBs: EPA Method 8080 Chlorophenoxy Herbicides: EPA Method 8151	Once every 5 years beginning in April 2007
	Cyanide: EPA Method 9010 Sulfide: EPA Method 9030	Once every 5 years beginning in April 2007

Table 1 Notes:
EPA methods: Arsenic (7060 or 6010), Barium (6010), Chromium (6010), Copper (6010), Lead (7421 or 6010), Mercury (7470), Nickel (6010), Vanadium (6010), Zinc (6010), Antimony (6010), Beryllium (6010), Cobalt (6010), Selenium (7741 or 7740), Silver (6010), Thallium (7841), Tin (6010)

This subset of the 40 CFR 258 Appendix I metals is used as a surrogate for the entire suite of Appendix I metals

Table 2 - Concentration Limits for Groundwater
Pescadero Landfill

Constituent of Concern	Practical Quantitation Limit	US EPA Test Method	Concentration Limits (ppb)
Specified VOCs		8260	
Acetone	20		100
Methylene chloride	10		50
Bromoform	10		50
Chloroform	10		50
Benzene	10		30
Toluene	10		50
Ethylbenzene	10		50
Xylene	10		50
Other VOCs	varies	8260	PQLs
Specified SVOCs		8270	
Phthalates	10		100
bis(2ethylhexyl)	10		50
butylbenzyl	10		50
di-ethyl	10		50
di-methyl	10		50
di-n-butyl	10		50
di-n-oxtyl	10		50
Phenol	10		100
Other SVOCs	varies	8270	PQLs
Metals[1]			
Arsenic	7	7060 or 6010	PQL/Background[2]
Barium	20	6010	PQL/Background[2]
Cadmium	5	6010	PQL/Background[2]
Chromium	10	6010	PQL/Background[2]
Copper	10	6010	PQL/Background[2]
Lead	5	7421 or 6010	PQL/Background[2]
Mercury	1	7470	PQL/Background[2]
Nickel	40	6010	PQL/Background[2]
Vanadium	10	6010	PQL/Background[2]
Zinc	20	6010	PQL/Background[2]
Antimony	5	6010	PQL/Background[2]
Beryllium	5	6010	PQL/Background[2]
Cobalt	10	6010	PQL/Background[2]
Selenium	10	7740 or 7741	PQL/Background[2]
Silver	20	6010	PQL/Background[2]

Thallium	5	7841	PQL/Background[2]
Tin	50	6010	PQL/Background[2]
Pesticides and PCBs	varies		PQLs
Chloropheynoxy Herbicides	varies		PQLs
Cyanide	10		PQLs

Table 2 notes:
[1]PQLs may vary based on the results of the laboratory's annual MDL survey and any sample dilution required because of matrix interferences. Metals data will provide supplemental information to the VOC and SVOC analyses and are not intended for use as indicator parameters apart from the VOC and SVOC analyses.

[2]Concentration Limit is the higher of either the routine PQL or the background value.

Table 3 - Leachate and Seepage Monitoring Points, Parameters and Sampling Frequency – Pescadero Landfill

Monitoring Location	Analyses	EPA Method (or equivalent)	Sampling Frequency
Leachate discharge locations	VOCs	8260	Leachate discharge (seep) - Each occurrence; daily until remedial action is taken or seep ceases
	SVOCs	8270	
	Dissolved Metals		
	Arsenic	7060 or 6010	
	Barium	6010	
	Cadmium	6010	
	Copper	6010	
	Chromium	6010	
	Lead	7421 or 6010	
	Mercury	7470	
	Nickel	6010	
	Vanadium	6010	
	Zinc	6010	
	pH	9040	
	Ammonia (total and unionized)	350.1	
	Cyanide	335.2	
	Pesticides/PCB	8080	
	Total Oil and Grease	SM5520B	
	COD	410.1	
	96-hour Toxicity Bioassay using Mysid Shrimp	N/A	

E

Source Water Quality Monitoring Status for
Well 01 and Well 02

DATE: 08/13/15 STATE OF CALIFORNIA PAGE: 1
REPORT: R0117/1 DRINKING WATER PROGRAM TIME: 13:35
LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 4100582 NAME: COUNTY SERVICE AREA 11 COUNTY: SAN MATEO
SOURCE NO: 001 NAME: WELL #1 PSCODE: 4100582-001 CLASS: CSGS STATUS: AU

GROUP IDENTIFICATION / CONSTITUENT IDENTIFICATION	LAST SAMPLE	COUNT	FREQ	MODIFIED SCHEDULE	NEXT SAMPLE DUE	
SECONDARY/GP						
00440 BICARBONATE ALKALINITY	2012/01/25	2	36		2015/01	DUE NOW
00916 CALCIUM	2012/01/25	3	36		2015/01	DUE NOW
00445 CARBONATE ALKALINITY	2012/01/25	2	36		2015/01	DUE NOW
00940 CHLORIDE	2012/01/25	2	36		2015/01	DUE NOW
00081 COLOR	2012/01/25	2	36		2015/01	DUE NOW
01042 COPPER	2012/01/25	2	36		2015/01	DUE NOW
38260 FOAMING AGENTS (MBAS)	2012/01/25	2	36		2015/01	DUE NOW
00900 HARDNESS (TOTAL) AS CACO3	2012/01/25	3	36		2015/01	DUE NOW
71830 HYDROXIDE ALKALINITY	2012/01/25	2	36		2015/01	DUE NOW
01045 IRON	2012/01/25	2	36		2015/01	DUE NOW
00927 MAGNESIUM	2012/01/25	3	36		2015/01	DUE NOW
01055 MANGANESE	2012/03/20	4	36		2015/03	DUE NOW
00086 ODOR THRESHOLD @ 60 C	2012/01/25	2	36		2015/01	DUE NOW
00403 PH, LABORATORY	2012/01/25	2	36		2015/01	DUE NOW
01077 SILVER	2012/01/25	2	36		2015/01	DUE NOW
00929 SODIUM	2012/01/25	2	36		2015/01	DUE NOW
00095 SPECIFIC CONDUCTANCE	2012/05/02	3	36		2015/05	DUE NOW
00945 SULFATE	2012/01/25	2	36		2015/01	DUE NOW
70300 TOTAL DISSOLVED SOLIDS	2012/01/25	2	36		2015/01	DUE NOW
82079 TURBIDITY, LABORATORY	2012/01/25	2	36		2015/01	DUE NOW
01092 ZINC	2012/01/25	2	36		2015/01	DUE NOW
INORGANIC						
01105 ALUMINUM	2012/01/25	2	36		2015/01	DUE NOW
01097 ANTIMONY	2012/01/25	2	36		2015/01	DUE NOW
01002 ARSENIC	2012/01/25	2	36		2015/01	DUE NOW
01007 BARIUM	2012/01/25	2	36		2015/01	DUE NOW

FREQ IS NUMBER OF MONTHS BETWEEN SAMPLES. WHEN FREQ IS 0, SAMPLE IS DUE NOW.
WHEN FREQ IS 999, NO SAMPLES ARE REQUIRED. COUNT IS NUMBER OF SAMPLES IN THE DATABASE.

STATE OF CALIFORNIA
DRINKING WATER PROGRAM
LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 4100582 NAME: COUNTY SERVICE AREA 11 COUNTY: SAN MATEO
SOURCE NO: 001 NAME: WELL #1 PSCODE: 4100582-001 CLASS: CSGS STATUS: AU

GROUP IDENTIFICATION / CONSTITUENT IDENTIFICATION	LAST SAMPLE	COUNT	FREQ	MODIFIED SCHEDULE	NEXT SAMPLE DUE	
01012 BERYLLIUM	2012/01/25	2	36		2015/01	DUE NOW
01027 CADMIUM	2012/01/25	2	36		2015/01	DUE NOW
01034 CHROMIUM (TOTAL)	2012/01/25	4	36		2015/01	DUE NOW
01291 CYANIDE	2012/01/25	2	36		2015/01	DUE NOW
00951 FLUORIDE (F) (NATURAL-SOURCE)	2012/01/25	2	36		2015/01	DUE NOW
71900 MERCURY	2012/01/25	2	36		2015/01	DUE NOW
01067 NICKEL	2012/01/25	2	36		2015/01	DUE NOW
A-031 PERCHLORATE	2012/05/02	3	36		2015/05	DUE NOW
01147 SELENIUM	2012/01/25	2	36		2015/01	DUE NOW
01059 THALLIUM	2012/01/25	2	36		2015/01	DUE NOW
NITRATE/NITRITE						
71850 NITRATE (AS NO3)	2014/07/09	7	12		2015/07	DUE NOW
00620 NITRITE (AS N)	2012/01/25	3	36		2015/01	DUE NOW
RADIOLOGICAL						
01501 GROSS ALPHA	2013/02/20	2	108		2022/02	
REGULATED VOC						
34030 BENZENE	2012/01/25	3	36		2015/01	DUE NOW
32102 CARBON TETRACHLORIDE	2012/01/25	3	36		2015/01	DUE NOW
77093 CIS-1,2-DICHLOROETHYLENE	2012/01/25	3	36		2015/01	DUE NOW
34423 DICHLOROMETHANE	2012/01/25	3	36		2015/01	DUE NOW
34371 ETHYLBENZENE	2012/01/25	3	36		2015/01	DUE NOW
46491 METHYL-TERT-BUTYL-ETHER (MTBE)	2012/01/25	3	36		2015/01	DUE NOW
34301 MONOCHLOROBENZENE	2012/01/25	3	36		2015/01	DUE NOW
77128 STYRENE	2012/01/25	3	36		2015/01	DUE NOW
34475 TETRACHLOROETHYLENE	2012/01/25	3	36		2015/01	DUE NOW
34010 TOLUENE	2012/01/25	3	36		2015/01	DUE NOW
34546 TRANS-1,2-DICHLOROETHYLENE	2012/01/25	3	36		2015/01	DUE NOW

FREQ IS NUMBER OF MONTHS BETWEEN SAMPLES. WHEN FREQ IS 0, SAMPLE IS DUE NOW.
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SYSTEM NO: 4100582 NAME: COUNTY SERVICE AREA 11 COUNTY: SAN MATEO
SOURCE NO: 001 NAME: WELL #1 PSCODE: 4100582-001 CLASS: CSGS STATUS: AU

GROUP IDENTIFICATION / CONSTITUENT IDENTIFICATION	LAST SAMPLE	COUNT	FREQ	MODIFIED SCHEDULE	NEXT SAMPLE DUE	
39180 TRICHLOROETHYLENE	2012/01/25	3	36		2015/01	DUE NOW
34488 TRICHLOROFLUOROMETHANE	2012/01/25	3	36		2015/01	DUE NOW
39175 VINYL CHLORIDE	2012/01/25	3	36		2015/01	DUE NOW
81551 XYLENES (TOTAL)	2012/01/25	3	36		2015/01	DUE NOW
34496 1,1-DICHLOROETHANE	2012/01/25	3	36		2015/01	DUE NOW
34501 1,1-DICHLOROETHYLENE	2012/01/25	3	36		2015/01	DUE NOW
34506 1,1,1-TRICHLOROETHANE	2012/01/25	3	36		2015/01	DUE NOW
81611 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	2012/01/25	3	36		2015/01	DUE NOW
34511 1,1,2-TRICHLOROETHANE	2012/01/25	3	36		2015/01	DUE NOW
34516 1,1,2,2-TETRACHLOROETHANE	2012/01/25	2	36		2015/01	DUE NOW
34536 1,2-DICHLOROBENZENE	2012/01/25	3	36		2015/01	DUE NOW
34531 1,2-DICHLOROETHANE	2012/01/25	3	36		2015/01	DUE NOW
34541 1,2-DICHLOROPROPANE	2012/01/25	3	36		2015/01	DUE NOW
34551 1,2,4-TRICHLOROBENZENE	2012/01/25	3	36		2015/01	DUE NOW
34561 1,3-DICHLOROPROPENE (TOTAL)	2012/01/25	3	36		2015/01	DUE NOW
34571 1,4-DICHLOROBENZENE	2012/01/25	3	36		2015/01	DUE NOW
REGULATED SOC						
77825 ALACHLOR	2012/01/25	1	36	*	2015/01	DUE NOW
39033 ATRAZINE	2012/01/25	1	36	*	2015/01	DUE NOW
38710 BENTAZON	2012/01/25	1	36	*	2015/01	DUE NOW
34247 BENZO (A) PYRENE	2012/01/25	1	36	*	2015/01	DUE NOW
81405 CARBOFURAN	2012/01/25	1	36	*	2015/01	DUE NOW
39350 CHLORDANE	2012/01/25	1	36	*	2015/01	DUE NOW
38432 DALAPON	2012/01/25	1	36	*	2015/01	DUE NOW
A-026 DI(2-ETHYLHEXYL)ADIPATE	2012/01/25	1	36	*	2015/01	DUE NOW
39100 DI(2-ETHYLHEXYL)PHTHALATE	2012/01/25	1	36	*	2015/01	DUE NOW
38761 DIBROMOCHLOROPROPANE (DBCP)	2012/01/30	1	36	*	2015/01	DUE NOW

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LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 4100582 NAME: COUNTY SERVICE AREA 11 COUNTY: SAN MATEO
SOURCE NO: 001 NAME: WELL #1 PSCODE: 4100582-001 CLASS: CSGS STATUS: AU

GROUP IDENTIFICATION / CONSTITUENT IDENTIFICATION	LAST SAMPLE	COUNT	FREQ	MODIFIED SCHEDULE	NEXT SAMPLE DUE	
81287 DINOSEB	2012/01/25	1	36	*	2015/01	DUE NOW
78885 DIQUAT	2012/01/25	1	36	*	2015/01	DUE NOW
38926 ENDOTHALL	2012/01/30	1	36	*	2015/01	DUE NOW
39390 ENDRIN	2012/01/25	1	36	*	2015/01	DUE NOW
77651 ETHYLENE DIBROMIDE (EDB)	2012/01/30	1	36	*	2015/01	DUE NOW
79743 GLYPHOSATE	2012/01/30	1	36	*	2015/01	DUE NOW
39410 HEPTACHLOR	2012/01/25	1	36	*	2015/01	DUE NOW
39420 HEPTACHLOR EPOXIDE	2012/01/25	1	36	*	2015/01	DUE NOW
39700 HEXACHLOROBENZENE	2012/01/25	1	36	*	2015/01	DUE NOW
34386 HEXACHLOROCYCLOPENTADIENE	2012/01/25	1	36	*	2015/01	DUE NOW
39340 LINDANE	2012/01/25	1	36	*	2015/01	DUE NOW
39480 METHOXYCHLOR	2012/01/25	1	36	*	2015/01	DUE NOW
82199 MOLINATE	2012/01/25	1	36	*	2015/01	DUE NOW
38865 OXAMYL	2012/01/25	1	36	*	2015/01	DUE NOW
39032 PENTACHLOROPHENOL	2012/01/25	1	36	*	2015/01	DUE NOW
39720 PICLORAM	2012/01/25	1	36	*	2015/01	DUE NOW
39516 POLYCHLORINATED BIPHENYLS, TOTAL, AS DC	2012/01/25	1	36	*	2015/01	DUE NOW
39055 SIMAZINE	2012/01/25	1	36	*	2015/01	DUE NOW
A-001 THIOBENCARB	2012/01/25	2	36	*	2015/01	DUE NOW
39400 TOXAPHENE	2012/01/25	1	36	*	2015/01	DUE NOW
39730 2,4-D	2012/01/25	1	36	*	2015/01	DUE NOW
39045 2,4,5-TP (SILVEX)	2012/01/25	1	36	*	2015/01	DUE NOW

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DATE: 08/13/15 STATE OF CALIFORNIA PAGE: 1
REPORT: R0117/1 DRINKING WATER PROGRAM TIME: 13:35
LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 4100582 NAME: COUNTY SERVICE AREA 11 COUNTY: SAN MATEO
SOURCE NO: 002 NAME: WELL #2 (WARHEIT) - STANDBY PSCODE: 4100582-002 CLASS: STBY STATUS: SU

GROUP IDENTIFICATION / CONSTITUENT IDENTIFICATION	LAST SAMPLE	COUNT	FREQ	MODIFIED SCHEDULE	NEXT SAMPLE DUE
INORGANIC					
01105 ALUMINUM	2012/01/25	1	108		2021/01
01097 ANTIMONY	2012/01/25	1	108		2021/01
01002 ARSENIC	2012/01/25	1	108		2021/01
81855 ASBESTOS	2012/05/02	1	108		2021/05
01007 BARIUM	2012/01/25	1	108		2021/01
01012 BERYLLIUM	2012/01/25	1	108		2021/01
01027 CADMIUM	2012/01/25	1	108		2021/01
01034 CHROMIUM (TOTAL)	2012/01/25	1	108		2021/01
01291 CYANIDE	2012/01/25	1	108		2021/01
00951 FLUORIDE (F) (NATURAL-SOURCE)	2012/01/25	1	108		2021/01
71900 MERCURY	2012/01/25	1	108		2021/01
01067 NICKEL	2012/01/25	1	108		2021/01
A-031 PERCHLORATE	2012/05/02	1	108		2021/05
01147 SELENIUM	2012/01/25	1	108		2021/01
01059 THALLIUM	2012/01/25	1	108		2021/01
NITRATE/NITRITE					
71850 NITRATE (AS NO3)	2013/08/07	3	108		2022/08
00620 NITRITE (AS N)	2011/12/21	1	108		2020/12
RADIOLOGICAL					
01501 GROSS ALPHA	2012/05/02	1	108		2021/05
REGULATED VOC					
34030 BENZENE	2012/01/25	1	108		2021/01
32102 CARBON TETRACHLORIDE	2012/01/25	1	108		2021/01
77093 CIS-1,2-DICHLOROETHYLENE	2012/01/25	1	108		2021/01
34423 DICHLOROMETHANE	2012/01/25	1	108		2021/01
34371 ETHYLBENZENE	2012/01/25	1	108		2021/01

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LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 4100582 NAME: COUNTY SERVICE AREA 11 COUNTY: SAN MATEO
SOURCE NO: 002 NAME: WELL #2 (WARHEIT) - STANDBY PSCODE: 4100582-002 CLASS: STBY STATUS: SU

GROUP IDENTIFICATION / CONSTITUENT IDENTIFICATION	LAST SAMPLE	COUNT	FREQ	MODIFIED SCHEDULE	NEXT SAMPLE DUE
46491 METHYL-TERT-BUTYL-ETHER (MTBE)	2012/01/25	1	108		2021/01
34301 MONOCHLOROBENZENE	2012/01/25	1	108		2021/01
77128 STYRENE	2012/01/25	1	108		2021/01
34475 TETRACHLOROETHYLENE	2012/01/25	1	108		2021/01
34010 TOLUENE	2012/01/25	1	108		2021/01
34546 TRANS-1,2-DICHLOROETHYLENE	2012/01/25	1	108		2021/01
39180 TRICHLOROETHYLENE	2012/01/25	1	108		2021/01
34488 TRICHLOROFLUOROMETHANE	2012/01/25	1	108		2021/01
39175 VINYL CHLORIDE	2012/01/25	1	108		2021/01
81551 XYLENES (TOTAL)	2012/01/25	1	108		2021/01
34496 1,1-DICHLOROETHANE	2012/01/25	1	108		2021/01
34501 1,1-DICHLOROETHYLENE	2012/01/25	1	108		2021/01
34506 1,1,1-TRICHLOROETHANE	2012/01/25	1	108		2021/01
81611 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	2012/01/25	1	108		2021/01
34511 1,1,2-TRICHLOROETHANE	2012/01/25	1	108		2021/01
34516 1,1,2,2-TETRACHLOROETHANE	2012/01/25	1	108		2021/01
34536 1,2-DICHLOROBENZENE	2012/01/25	1	108		2021/01
34531 1,2-DICHLOROETHANE	2012/01/25	1	108		2021/01
34541 1,2-DICHLOROPROPANE	2012/01/25	1	108		2021/01
34551 1,2,4-TRICHLOROBENZENE	2012/01/25	1	108		2021/01
34561 1,3-DICHLOROPROPENE (TOTAL)	2012/01/25	1	108		2021/01
34571 1,4-DICHLOROBENZENE	2012/01/25	1	108		2021/01
REGULATED SOC					
77825 ALACHLOR	2012/01/25	1	108		2021/01
39033 ATRAZINE	2012/01/25	1	108		2021/01
38710 BENTAZON	2012/01/25	1	108		2021/01
34247 BENZO (A) PYRENE	2012/01/25	1	108		2021/01

FREQ IS NUMBER OF MONTHS BETWEEN SAMPLES. WHEN FREQ IS 0, SAMPLE IS DUE NOW.
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LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 4100582 NAME: COUNTY SERVICE AREA 11 COUNTY: SAN MATEO
SOURCE NO: 002 NAME: WELL #2 (WARHEIT) - STANDBY PSCODE: 4100582-002 CLASS: STBY STATUS: SU

GROUP IDENTIFICATION / CONSTITUENT IDENTIFICATION	LAST SAMPLE	COUNT	FREQ	MODIFIED SCHEDULE	NEXT SAMPLE DUE
81405 CARBOFURAN	2012/01/25	1	108		2021/01
39350 CHLORDANE	2012/01/25	1	108		2021/01
38432 DALAPON	2012/01/25	1	108		2021/01
A-026 DI(2-ETHYLHEXYL)ADIPATE	2012/01/25	1	108		2021/01
39100 DI(2-ETHYLHEXYL)PHTHALATE	2012/01/25	1	108		2021/01
38761 DIBROMOCHLOROPROPANE (DBCP)	2012/01/30	1	108		2021/01
81287 DINOSEB	2012/01/25	1	108		2021/01
78885 DIQUAT	2012/01/25	1	108		2021/01
38926 ENDOTHALL	2012/01/30	1	108		2021/01
39390 ENDRIN	2012/01/25	1	108		2021/01
77651 ETHYLENE DIBROMIDE (EDB)	2012/01/30	1	108		2021/01
79743 GLYPHOSATE	2012/01/30	1	108		2021/01
39410 HEPTACHLOR	2012/01/25	1	108		2021/01
39420 HEPTACHLOR EPOXIDE	2012/01/25	1	108		2021/01
39700 HEXACHLOROBENZENE	2012/01/25	1	108		2021/01
34386 HEXACHLOROCYCLOPENTADIENE	2012/01/25	1	108		2021/01
39340 LINDANE	2012/01/25	1	108		2021/01
39480 METHOXYCHLOR	2012/01/25	1	108		2021/01
82199 MOLINATE	2012/01/25	1	108		2021/01
38865 OXAMYL	2012/01/25	1	108		2021/01
39032 PENTACHLOROPHENOL	2012/01/25	1	108		2021/01
39720 PICLORAM	2012/01/25	1	108		2021/01
39516 POLYCHLORINATED BIPHENYLS, TOTAL, AS DC	2012/01/25	1	108		2021/01
39055 SIMAZINE	2012/01/25	1	108		2021/01
A-001 THIOBENCARB	2012/01/25	1	108		2021/01
39400 TOXAPHENE	2012/01/25	1	108		2021/01
39730 2,4-D	2012/01/25	1	108		2021/01

FREQ IS NUMBER OF MONTHS BETWEEN SAMPLES. WHEN FREQ IS 0, SAMPLE IS DUE NOW.
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STATE OF CALIFORNIA
DRINKING WATER PROGRAM
LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 4100582 NAME: COUNTY SERVICE AREA 11 COUNTY: SAN MATEO
SOURCE NO: 002 NAME: WELL #2 (WARHEIT) - STANDBY PSCODE: 4100582-002 CLASS: STBY STATUS: SU

GROUP IDENTIFICATION / CONSTITUENT IDENTIFICATION	LAST SAMPLE	COUNT	FREQ	MODIFIED SCHEDULE	NEXT SAMPLE DUE
39045 2,4,5-TP (SILVEX)	2012/01/25	1	108		2021/01

FREQ IS NUMBER OF MONTHS BETWEEN SAMPLES. WHEN FREQ IS 0, SAMPLE IS DUE NOW.
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F

Bacteriological Sampling Plan

Department of Health Services
Drinking Water Field Operations Branch
Santa Clara District

Small Water System Bacteriological Sample Siting Plan

System or Facility Name: County Service Area No. 11 System No.: 4100582

Service Connections: 100
(Number of residences and/or buildings served by the system)

Population: 450
(Number of individual served each day by system during busiest month)

Source(s): Two Wells (One reserved for emergency/standby use only)
(List all water supply sources, e.g., wells, springs, lakes, etc.)

Map or Diagram: Attach a map or diagram showing location of routine and repeat sample sites and the entry point of water from the source(s) into the system.

Routine Sampling

Sampling Frequency: Monthly
(List sampling frequency)

Please list routine sampling sites below. For simple systems, one sampling site is usually sufficient. For more complex systems, each pressure zone or separate area served by the system must be sampled routinely.

Routine Sample Site No. 1: APN 086-020-150 (287 Stage Rd , Pescadero – Norms Market)

Routine Sample Site No. 2:

Routine Sample Site No. 3:

Routine Sample Site No. 4:

Repeat Sampling

If a routine sample contains coliform bacteria, the water system will collect a repeat sample set within 24 hours of being notified of the result by the laboratory. Please list the location of the repeat sample set below. Each routine sample location must have a corresponding set of repeat sample locations. If you have more than one routine sample site, please list each set of corresponding repeat sample sites on a separate sheet.

Repeat Sample Site No. 1: APN 086-020-150 (287 Stage Rd , Pescadero – Norms Market)
(Collect one sample at the original routine sample site)

Repeat Sample Site No. 2: APN 086-020-260 (251 Stage Rd , Pescadero)
(Collect one sample within five connections upstream of the original site)

Repeat Sample Site No. 3: APN 086-020-160 (299 Stage Rd , Pescadero)
(Collect one sample within five connections downstream of the original site)

Repeat Sample Site No. 4: APN 086-160-050 (1200 Pescadero Rd , Pescadero)
(Collect one additional sample within five connections upstream or downstream of the original site)

Noncommunity systems which serve one service connection (i.e., one building) may collect all of the four repeat samples from the original routine sample site.

Sampling During the Month Following a Positive Sample

If one or more samples are positive for total coliforms in a month, the water system is required to collect five routine samples during the following month. These five samples can be collected over the course of the month or all on the same day. Please list the locations from which these five routine samples will be collected.

1. 287 Stage Rd , Pescadero 2. 251 Stage Rd , Pescadero 3. 299 Stage Rd , Pescadero

4. 1200 Pescadero Rd , Pescadero 5. 2020 Pescadero Rd , Pescadero

Personnel and Notification

Sampler: Bracewell
(Sample collection must be performed by a person trained in sample collection. Provide name of sampler.)

Laboratory: San Mateo Public Health Laboratory, Telephone No. (650) 573-2500
(Provide the name and phone number of the certified lab doing your water analysis. Arrangement must be made for weekend and holiday analysis if needed.)

Notification: Laboratory to notify persons designated below within 24 hours whenever a sample is found to contain coliform bacteria:

1.	Chris Hauge	(831) 325-8296	
	(Name)	(Daytime Phone Number)	(Evening Phone Number)
2.	Mark Chow	(650) 599-1489	(650) 380-6962
	(Name)	(Daytime Phone Number)	(Evening Phone Number)

Notification of the County Health Department: The water system will notify the County Health Department within 24 hours whenever a sample contains fecal coliform or E. coli bacteria or whenever a repeat sample is positive.

Submitted by: _____ Date: _____

Additional Information

When responding to a laboratory report of bacterial contamination, keep in mind the following:

1. Coliform bacteria should not be present in drinking water and the presence of coliforms indicates a potentially serious problem. Appropriate investigation should be performed immediately.

2. Check water system components such as water sources, filtration and/or chlorination equipment and storage tanks for indications of unusual conditions or problems.

3. Correct problems immediately, do not wait for results of follow-up samples to take action.

G

Lead and Copper Monitoring Status

Individual System Lead and Copper Rule Tracking Report

4100582 **County Service Area 11** Pop: **280** Eng: **Lead Action Level: 0.015 mg/L**

Copper Action Level: 1.3 mg/L

Sample Date Begin/(End)	Monitoring Period	Sample Set ID	Number Required	Number Sampled	Lead 90th % (mg/L)	Copper 90th % (mg/L)	Action Taken	Action Type	Next Due Date	Next Due Freq	Comments
(11/9/1995)	6M1ST-1995		10	11	0.007	0.860					
(1/24/1996)	6M1ST-1996		10	12	0.007	0.860					
(9/18/2003)	6M1ST-2003		10	10	0.006	1.6					
(6/9/2004)	6M1ST-2004		10	10	0.003	0.750					
(12/27/2004)	6M2ND-2004		10	10	0.003	0.880					
(9/22/2005)	YR2005		5	5	0.00	0.325					
(9/30/2008)	YR2008		5	5	0.00	0.455			9/30/2011		
(1/27/2012)	3Y2012-2014		5	5	0.00	0.465			9/30/2015		

Legend:

Cit: Citation
EL: Enforcement letter

1st 6: 1st initial 6-mo. round of monitoring
2nd 6: 2nd initial 6-mo. round of monitoring

A1: 1st Annual monitoring
A2: 2nd Annual monitoring

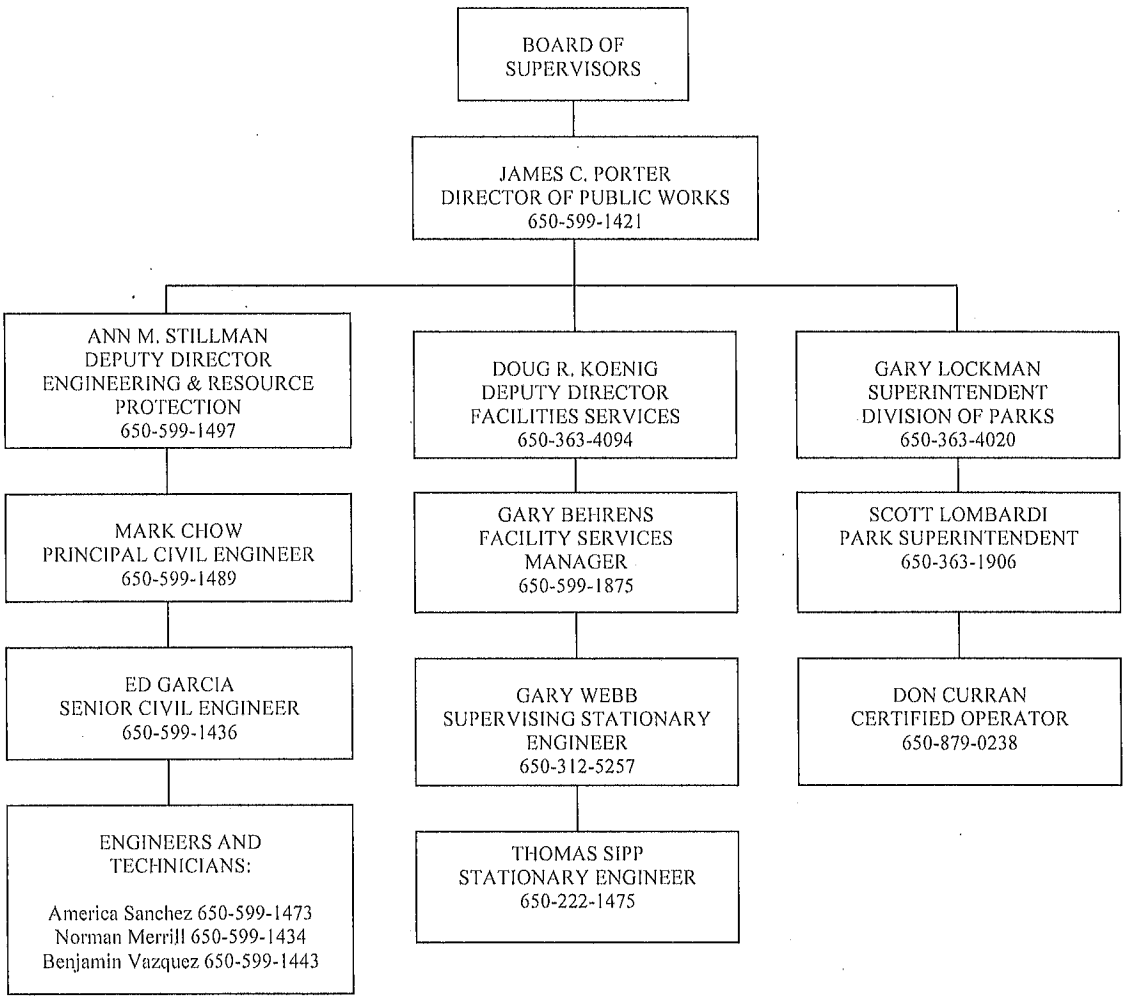
T1: 1st Triennial (3 yr) monitoring
T2: 2nd Triennial (3 yr) monitoring
T3: 3rd Triennial (3 yr) monitoring

H

Structural Organization Chart

Attachement A

COUNTY SERVICE AREAS NO. 7 & 11 WATER SYSTEMS ORGANIZATION CHART



I

5-Year Budget Projection

BUDGET UNIT	OBJECT	DESCRIPTION	ACTUAL ONLY 2012-13	ACTUAL ONLY 2013-14	ADOPTED BUDGET 2014-15	ACTUALS W/ENCUM 4/30/2015	RECOMM. BUDGET 2015-16	RECOMM. BUDGET 2016-17
48468		CSA 11						
	1521	Interest Earned	30	511	0	568	450	450
	1500	Use of Money and Property	30	511	0	568	450	450
	1871	All Other State Aid			700,000	0	700,000	0
	1600	Intergovenmental Revenues			700,000	0	700,000	0
	2063	Returned Check Charges	50	0	0	25	0	0
	2424	Connection Charges	1,650	0	0	0	0	0
	2432	Bonds - Special Charges	0	0	0	0	0	0
	2436	Surcharges & Penalties	1,640	1,800	0	2,160	0	0
	2437	Water Sales	74,943	79,487	53,072	64,266	53,072	53,072
	2438	Water Service Charges	0	0	34,608	0	34,608	34,608
	2439	Other Special Charges	0	0	0	0	0	0
	2000	Charges for Services	78,283	81,287	87,680	66,451	87,680	87,680
	2521	IFR - General Fund	58,800	0	140,000	26,059	105,000	0
	2545	Other Interfund Revenue	9,640	0	0	0	0	0
	2546	Loan Proceeds - Other Fund	0	0	0	0	0	0
	2500	Interfund Revenue	68,440	0	140,000	26,059	105,000	0
	2623	Other Client Reimbursement	0	0	0	0	0	0
	2632	Sale of Surplus & Salvage	0	0	0	0	0	0
	2643	Bad Debt Recoveries	447	1,595	0	0	0	0
	2647	Miscellaneous Reimbursements	10,359	0	0	0	0	0
	2600	Miscellaneous Revenue	10,806	1,595	0	0	0	0
	2731	Operating Tsfr In	150,509	0	0	0	0	0
	2700	Other Financing Sources	150,509	0	0	0	0	0
	TOTREV	Total Revenue	308,068	83,393	927,680	93,078	893,130	88,130
	333	Fund Balance	(25,722)	87,663	101,158		120,343	66,657
	TOTSRC	TOTAL SOURCES	282,346	171,056	1,028,838	93,078	1,013,473	154,787
	5184	Rfund - Prior Year Revenue	0	0	0	0	0	0

	5191	Outside Printing & Copy Service	0	0	0	0	0	0
	5192	Paper Products Expense	0	0	0	0	0	0
	5194	Books, Manuals & Literature	0	0	0	0	0	0
	5197	Postage & Mailing Expense	0	0	0	0	0	0
	5215	Software License/Maint Expense	780	0	1,000	0	1,000	0
	5231	Maintenance Tools & Equip	0	88	0	0	0	0
	5341	Legal Notices	0	0	0	0	0	0
	5428	Misc. Repairs & Maintenance	0	8,423	1,500	2,525	1,500	1,500
	5435	Concrete, Tile & Masonry Expense	0	0	0	0	0	0
	5438	Plumbing & Piping Expense	513	0	1,000	0	1,000	1,000
	5439	Paint, Solvents & Chemicals	0	0	0	0	0	0
	5445	General Electrical Expense	0	0	0	0	0	0
	5449	Motor, Pump & Generator Maintenance	0	0	0	0	0	0
	5455	Other General Maintenance Equip	0	0	0	0	0	0
	5456	Water Systems Maintenance	14,801	18,995	20,116	13,929	20,116	20,116
	5459	Misc. Other Maintenance Expense	0	0	0	0	0	0
	5631	Electric & Gas Utilities	5,539	4,653	5,000	2,982	5,000	5,000
	5635	Water Service	0	0	0	0	0	0
	5641	Telephone Charges	0	0	0	0	0	0
	5711	Freight & Delivery Service	0	0	0	0	0	0
	5722	Misc. Employee Exp. Reimbursement	0	0	0	0	0	0
	5826	Contract Laboratory Services	40	0	1,000	0	1,000	1,000
	5845	Contract Engineering Services	97,044	0	10,000	6,568	10,000	1,000
	5849	Contract Inspection & Testing	0	0	4,000	4,439	4,000	1,000
	5851	Contract Construction	0	0	0	0	0	0
	5858	Other Profession Contract Services	15,223	0	25,000	103	25,000	1,000
	5861	PW - Engineering Services	44,874	12,969	20,000	14,120	30,000	10,000
	5872	In-House Admin & Acctg Service	0	0	1,000	0	1,000	1,000
	5955	Registration & Filing Fees	0	0	400	0	400	400
	5963	Other Marina Operating Expense	0	0	0	0	0	0
	5969	Other Special Dept Expense	1,211	1,017	1,000	582	1,000	1,000
	5972	Other Expenses - Special Item	(13,578)	(1,594)	2,000	0	0	0
	5974	DPW Division Alloc Exp			0	0	2,000	2,000
	5000	Services and Supplies	166,447	44,551	93,016	45,248	103,016	46,016
	6322	Retirement of Long Term Debt	9,901	0	0	0	3,000	0
	6332	Interest on Long Term Debt	337	0	0	0	500	0
	6722	Copy Center Charges	0	0	0	0	0	0
	6734	County Service Area Operations	0	0	0	0	0	0
	6812	Depreciation Expense	0	0	0	0	0	0
	6813	Uncollectible Accounts	150	160	300	0	300	300
	6817	Depreciation - Water & Sewer	21,532	21,532	0	0	0	0

	6821	A-87 Expense			0	194	0	0
	6000	Other Charges	31,920	21,692	300	194	3,800	300
	7211	Fixed Assets-Structure/Improv	0	0	0	0	0	0
	7412	Fixed Assets-Water	115,042	3,655	840,000	30,332	840,000	0
	7000	Fixed Assets	115,042	3,655	840,000	30,332	840,000	0
	GRSAPP	Gross Appropriations	313,409	69,898	933,316	75,774	946,816	46,316
	8142	Other Intrafund Transfers	(97,194)	0	0	0	0	0
	8000	Intrafund Transfers	(97,194)	0	0	0	0	0
	NETAPP	Net Appropriations	216,215	69,898	933,316	75,774	946,816	46,316
	8611	Appropriation for Contingency	66,131	101,158	95,522	0	66,657	108,471
	8500	Contingencies/Dept Reserves	66,131	101,158	95,522	0	66,657	108,471
	TOTREQ	TOTAL REQUIREMENTS	282,346	171,056	1,028,838	75,774	1,013,473	154,787

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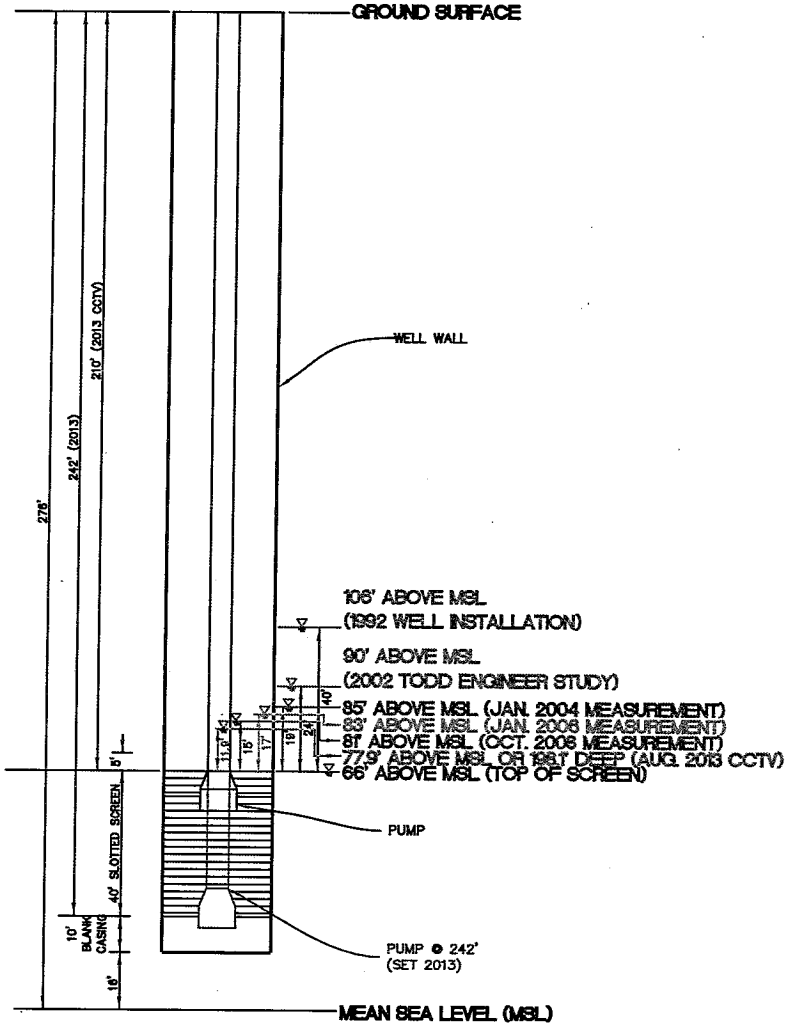
CSA 11 Production Well Configurations

PESCADERO MUNICIPAL WATER SYSTEM (CSA-11)
PRODUCTION WELL CONFIGURATION



SCALE: NOT TO SCALE