



# HYGIENETECH

Hygiene Technologies International, Inc.

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January 6, 2012

California State Board of Equalization  
450 N Street  
Sacramento, California 95814

Document No. 21112001.1

Attention: David Gau

Regarding: Limited Drinking Water Quality Assessment  
6<sup>th</sup> Floor, M Floor, 19<sup>th</sup> Floor, and Penthouse

Dear Mr. Gau:

On December 20, 2011, Lakhpreet H. Sandhu, Industrial Hygienist, with Hygiene Technologies International, Inc. (HygieneTech), visited the above referenced floors in the California State Board of Equalization (BOE) building located at 450 N Street in Sacramento, California, for the purpose of conducting a limited drinking water quality assessment. On that date, HygieneTech collected several water samples from the drinking water fountains of those floors for analyses. The survey findings, along with the analytical data, conclusions, a discussion of the recently recorded observations, and recommendations when applicable, appear below.

Drinking water samples were collected on the BOE occupied floors at northwestern and northeastern drinking fountains on the 6<sup>th</sup> and 19<sup>th</sup> Floors. Additionally, drinking water samples were also collected from one location each on the M Floor and Penthouse. Two samples were collected at each location for general chemistry parameters (physical characteristics), and microbiological parameters (heterotrophic plate count for bacteria). The water samples were analyzed by Sierra Analytical Labs, Inc. (Sierra) and the resultant data appear in the enclosed table. Note that all water samples were collected using a "first run" technique, meaning that the water was collected immediately after turning on the fountain faucet. This prevents flushing of the plumbing system prior to sampling and allows for a worst-case scenario.

As shown in Table 21112001-17, water sample results collected from all six locations indicated levels of bacteria and chlorine residual that were either not detected above the laboratory analytical detection limit or were detectable at levels well below the applicable California established California Primary Maximum Contaminant Levels (MCLs) as defined in Title 22 of the California Code of Regulations, Division 4 Environmental Health, Chapter 15 Domestic Water Quality and Monitoring Regulations. Additionally, color, odor and turbidity testing results were below the applicable California established Secondary Maximum Contaminant Levels (Secondary MCLs) that set non-mandatory water quality standards for specific contaminants. California does not enforce these secondary standards, and the select contaminants are not considered to present a risk to human health at or below the applicable secondary standard. They are established only as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor.

Based on the assessment information, analytical data, the California MCLs, and secondary standards, HygieneTech has concluded that the water sample findings for the sampled locations do not present a risk to



human health. All findings are the results of "first run" sampling and expected to only decrease as water is allowed to flush through the plumbing system.

Be advised that the data provided with this correspondence only represent exposure potentials to bacteria and chlorine residual under the conditions that existed at the time the survey was performed. Exposure potentials, taste, color, turbidity, and odor involving the drinking fountain water may change due to changes in operations and/or environmental conditions, use of mechanical systems, or other factors.

If you have any comments or questions regarding the information contained in this report, please do not hesitate to contact our offices directly at (310) 370-8370.

Sincerely,

**HYGIENE TECHNOLOGIES INTERNATIONAL, INC.**

A handwritten signature in black ink, appearing to read 'Kenny', is written over a solid horizontal line.

Kenny K. Hsi, CIH  
Technical Director

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

# APPENDIX A



CLIENT: California State Board of Equalization  
450 N Street  
Sacramento, California 95814

## TABLE 21112001-17 POTABLE WATER SAMPLE RESULTS SACRAMENTO, CALIFORNIA DECEMBER 20, 2011

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SAMPLE NUMBER	21112001-17 W01			21112001-17 W02		
SAMPLING LOCATION/TYPE	6 <sup>th</sup> Floor; northeastern drinking fountain/First run			6 <sup>th</sup> Floor; northwestern drinking fountain/First run		
ANALYSES	Results	California MCL	California Secondary Standard	Results CFU/mL	California MCL	California Secondary Standard
<b>Conventional Chemistry Parameters</b>						
Chlorine Residual by EPA 330.5	<0.1 mg/L	4 mg/L	NL	0.170 mg/L	4 mg/L	NL
Color by EPA 110.2	1.0 Color Units	NL	15 Color Units	1.00 Color Units	NL	15 Color Units
Odor by EPA 140.1	1.0 T.O.N	NL	3.0 T.O.N	1.00 T.O.N	NL	3.0 T.O.N
Turbidity by EPA 180.1	0.750 NTU	NL	5.0 NTU	0.450 NTU	NL	5.0 NTU

SAMPLE NUMBER	21112001-17 W03			21112001-17 W04		
SAMPLING LOCATION/TYPE	19 <sup>th</sup> Floor; northwestern drinking fountain/First run			19 <sup>th</sup> Floor; northeastern drinking fountain/First run		
ANALYSES	Results	California MCL	California Secondary Standard	Results CFU/mL	California MCL	California Secondary Standard
<b>Conventional Chemistry Parameters</b>						
Chlorine Residual by EPA 330.5	<0.1 mg/L	4 mg/L	NL	0.15 mg/L	4 mg/L	NL
Color by EPA 110.2	1.0 Color Units	NL	15 Color Units	1.00 Color Units	NL	15 Color Units
Odor by EPA 140.1	1.0 T.O.N	NL	3.0 T.O.N	1.00 T.O.N	NL	3.0 T.O.N
Turbidity by EPA 180.1	0.420 NTU	NL	5.0 NTU	0.330 NTU	NL	5.0 NTU

SAMPLE NUMBER	21112001-17 W05			21112001-17 W06		
SAMPLING LOCATION/TYPE	M Floor; drinking fountain/First run			Penthouse; Break Room sink/First run		
ANALYSES	Results	California MCL	California Secondary Standard	Results CFU/mL	California MCL	California Secondary Standard
<b>Conventional Chemistry Parameters</b>						
Chlorine Residual by EPA 330.5	<0.1 mg/L	4 mg/L	NL	<0.1 mg/L	4 mg/L	NL
Color by EPA 110.2	1.0 Color Units	NL	15 Color Units	1.00 Color Units	NL	15 Color Units
Odor by EPA 140.1	1.0 T.O.N	NL	3.0 T.O.N	1.00 T.O.N	NL	3.0 T.O.N
Turbidity by EPA 180.1	0.660 NTU	NL	5.0 NTU	0.400 NTU	NL	5.0 NTU

\* U.S. EPA Secondary Standard  
EPA: (U.S.) Environmental Protection Agency  
SM: Standard Method  
NTU Nephelometric Turbidity Unit

mg/L: Milligrams per liter  
NL: Not listed  
MCL: Maximum Contaminant Level

APHA: American Public Health Association  
CFU/mL: Colony forming units per milliliter  
T.O.N: Threshold Odor Number

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

# APPENDIX A



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## TABLE 21112001-17 POTABLE WATER SAMPLE RESULTS SACRAMENTO, CALIFORNIA DECEMBER 20, 2011

Page 2

SAMPLE NUMBER	21112001-17 W01			21112001-17 W02		
SAMPLING LOCATION/TYPE	6 <sup>th</sup> Floor; northeastern drinking fountain/First run			6 <sup>th</sup> Floor; northwestern drinking fountain/First run		
ANALYSES	Results	California MCL	California Secondary Standard	Results	California MCL	California Secondary Standard
<b>Heterotrophic Plate Count</b>						
Microbial Parameters by APHA SM 9215B	<1 CFU/mL	500 CFU/mL (for surface water)	NL	<1 CFU/mL	500 CFU/mL (for surface water)	NL

SAMPLE NUMBER	21112001-17 W03			21112001-17 W04		
SAMPLING LOCATION/TYPE	19 <sup>th</sup> Floor; northwestern drinking fountain/First run			19 <sup>th</sup> Floor; northeastern drinking fountain/First run		
ANALYSES	Results	California MCL	California Secondary Standard	Results	California MCL	California Secondary Standard
<b>Heterotrophic Plate Count</b>						
Microbial Parameters by APHA SM 9215B	<1 CFU/mL	500 CFU/mL (for surface water)	NL	<1 CFU/mL	500 CFU/mL (for surface water)	NL

SAMPLE NUMBER	21112001-17 W05			21112001-17 W06		
SAMPLING LOCATION/TYPE	M Floor; drinking fountain/First run			Penthouse; Break Room sink/First run		
ANALYSES	Results	California MCL	California Secondary Standard	Results	California MCL	California Secondary Standard
<b>Heterotrophic Plate Count</b>						
Microbial Parameters by APHA SM 9215B	<1 CFU/mL	500 CFU/mL (for surface water)	NL	8 CFU/mL	500 CFU/mL (for surface water)	NL

\* U.S. EPA Secondary Standard  
EPA: (U.S.) Environmental Protection Agency  
SM: Standard Method  
NTU Nephelometric Turbidity Unit

mg/L: Milligrams per liter  
NL: Not listed  
MCL: Maximum Contaminant Level

APHA: American Public Health Association  
CFU/mL: Colony forming units per milliliter  
T.O.N. Threshold Odor Number



Hygiene Technologies International, Inc.  
3625 Del Amo Boulevard Suite 180  
Torrance CA, 90503-1643

Project: 21112001-17  
Project Number: [none]  
Project Manager: Kenny Hsi

**Reported:**  
01/03/12 10:28

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
21112001-17 W01	1112289-01	Water	12/20/11 08:33	12/21/11 14:30
21112001-17 W02	1112289-02	Water	12/20/11 08:36	12/21/11 14:30
21112001-17 W03	1112289-03	Water	12/20/11 08:46	12/21/11 14:30
21112001-17 W04	1112289-04	Water	12/20/11 08:49	12/21/11 14:30
21112001-17 W05	1112289-05	Water	12/20/11 09:07	12/21/11 14:30
21112001-17 W06	1112289-06	Water	12/20/11 09:27	12/21/11 14:30

#### CASE NARRATIVE

SAMPLE RECEIPT: Samples were received intact, at 6 °C, and accompanied by chain of custody documentation.  
PRESERVATION: Samples requiring preservation were verified prior to sample preparation and analysis.  
HOLDING TIMES: All holding times were met, unless otherwise noted in the report with data qualifiers.  
QA/QC CRITERIA: All quality objective criteria were met, except as noted in the report with data qualifiers.

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 01/03/12 10:28

**Microbiological Parameters by APHA Standard Methods**  
**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>21112001-17 W01 (1112289-01) Water    Sampled: 12/20/11 08:33    Received: 12/21/11 14:30</b>									
Plate Count (1 ml)	<1	1	CFU/mL	1	B1L2201	12/21/11	12/21/11 14:40	SM 9215B	
<b>21112001-17 W02 (1112289-02) Water    Sampled: 12/20/11 08:36    Received: 12/21/11 14:30</b>									
Plate Count (1 ml)	<1	1	CFU/mL	1	B1L2201	12/21/11	12/21/11 14:40	SM 9215B	
<b>21112001-17 W03 (1112289-03) Water    Sampled: 12/20/11 08:46    Received: 12/21/11 14:30</b>									
Plate Count (1 ml)	<1	1	CFU/mL	1	B1L2201	12/21/11	12/21/11 14:40	SM 9215B	
<b>21112001-17 W04 (1112289-04) Water    Sampled: 12/20/11 08:49    Received: 12/21/11 14:30</b>									
Plate Count (1 ml)	<1	1	CFU/mL	1	B1L2201	12/21/11	12/21/11 14:40	SM 9215B	
<b>21112001-17 W05 (1112289-05) Water    Sampled: 12/20/11 09:07    Received: 12/21/11 14:30</b>									
Plate Count (1 ml)	<1	1	CFU/mL	1	B1L2201	12/21/11	12/21/11 14:40	SM 9215B	
<b>21112001-17 W06 (1112289-06) Water    Sampled: 12/20/11 09:27    Received: 12/21/11 14:30</b>									
<b>Plate Count (1 ml)</b>	<b>8</b>	1	CFU/mL	1	B1L2201	12/21/11	12/21/11 14:40	SM 9215B	

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 01/03/12 10:28

**Conventional Chemistry Parameters by APHA/EPA Methods**  
**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>21112001-17 W01 (1112289-01) Water    Sampled: 12/20/11 08:33    Received: 12/21/11 14:30</b>									
Chlorine Residual	ND	0.100	mg/L	1	B1L2225	12/21/11	12/21/11 15:45	EPA 330.5	
<b>Color</b>	<b>1.00</b>	1.00	Color Units	"	"	"	"	EPA 110.2	
<b>Odor</b>	<b>1.00</b>	1.00	T.O.N.	"	"	"	"	EPA 140.1	
<b>Turbidity</b>	<b>0.750</b>	0.0200	NTU	"	"	"	"	EPA 180.1	
<b>21112001-17 W02 (1112289-02) Water    Sampled: 12/20/11 08:36    Received: 12/21/11 14:30</b>									
Chlorine Residual	<b>0.170</b>	0.100	mg/L	1	B1L2225	12/21/11	12/21/11 15:45	EPA 330.5	
<b>Color</b>	<b>1.00</b>	1.00	Color Units	"	"	"	"	EPA 110.2	
<b>Odor</b>	<b>1.00</b>	1.00	T.O.N.	"	"	"	"	EPA 140.1	
<b>Turbidity</b>	<b>0.450</b>	0.0200	NTU	"	"	"	"	EPA 180.1	
<b>21112001-17 W03 (1112289-03) Water    Sampled: 12/20/11 08:46    Received: 12/21/11 14:30</b>									
Chlorine Residual	ND	0.100	mg/L	1	B1L2225	12/21/11	12/21/11 15:45	EPA 330.5	
<b>Color</b>	<b>1.00</b>	1.00	Color Units	"	"	"	"	EPA 110.2	
<b>Odor</b>	<b>1.00</b>	1.00	T.O.N.	"	"	"	"	EPA 140.1	
<b>Turbidity</b>	<b>0.420</b>	0.0200	NTU	"	"	"	"	EPA 180.1	
<b>21112001-17 W04 (1112289-04) Water    Sampled: 12/20/11 08:49    Received: 12/21/11 14:30</b>									
Chlorine Residual	<b>0.150</b>	0.100	mg/L	1	B1L2225	12/21/11	12/21/11 15:45	EPA 330.5	
<b>Color</b>	<b>1.00</b>	1.00	Color Units	"	"	"	"	EPA 110.2	
<b>Odor</b>	<b>1.00</b>	1.00	T.O.N.	"	"	"	"	EPA 140.1	
<b>Turbidity</b>	<b>0.330</b>	0.0200	NTU	"	"	"	"	EPA 180.1	
<b>21112001-17 W05 (1112289-05) Water    Sampled: 12/20/11 09:07    Received: 12/21/11 14:30</b>									
Chlorine Residual	ND	0.100	mg/L	1	B1L2225	12/21/11	12/21/11 15:45	EPA 330.5	
<b>Color</b>	<b>1.00</b>	1.00	Color Units	"	"	"	"	EPA 110.2	
<b>Odor</b>	<b>1.00</b>	1.00	T.O.N.	"	"	"	"	EPA 140.1	
<b>Turbidity</b>	<b>0.660</b>	0.0200	NTU	"	"	"	"	EPA 180.1	

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**Reported:**  
 01/03/12 10:28

**Conventional Chemistry Parameters by APHA/EPA Methods**  
**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>21112001-17 W06 (1112289-06) Water    Sampled: 12/20/11 09:27    Received: 12/21/11 14:30</b>									
Chlorine Residual	ND	0.100	mg/L	1	B1L2225	12/21/11	12/21/11 15:45	EPA 330.5	
<b>Color</b>	<b>1.00</b>	1.00	Color Units	"	"	"	"	EPA 110.2	
<b>Odor</b>	<b>1.00</b>	1.00	T.O.N.	"	"	"	"	EPA 140.1	
<b>Turbidity</b>	<b>0.400</b>	0.0200	NTU	"	"	"	"	EPA 180.1	

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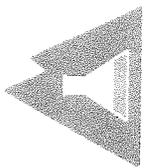
**Reported:**  
01/03/12 10:28

### Notes and Definitions

\_ND<1 <1  
DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference

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CHAIN OF CUSTODY RECORD

Client: Hygiene Technologies  
 Client Address: 3625 Delano Blvd  
 ST E #150  
 Turbance, CA 90503  
 Client Tel No: 310-370-8370  
 Client Fax No: 310-370-2474  
 Client Prod. Mgr: Kenny HSI

Client Project ID: 2112001-17  
 Turn Around Time Requested:  
 Immediate  
 48 Hour  
 4 Day  
 Normal  
 24 Hour  
 72 Hour  
 3 Day  
 Mobile

Client Sample ID	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	Analysis Requested	Field Point Names/Comments
2112001-17 W01	01	12-20-11	8:33					X	LABORATORY
2112001-17 W02	02	12-20-11	8:36					X	LABORATORY
2112001-17 W03	03	12-20-11	8:46					X	LABORATORY
2112001-17 W04	04	12-20-11	8:49					X	LABORATORY
2112001-17 W05	05	12-20-11	9:07					X	LABORATORY
2112001-17 W06	06	12-20-11	9:27					X	LABORATORY

Geotracker EDD Info:  
 Client LOGCODE  
 Site Global ID  
 Field Point Names/Comments  
 Laboratory: ~~LABORATORY~~  
 Lab: LABORATORY  
 559-212-3411  
 1191083

Sample Disposal:  
 Return to Client  
 Lab Disposal  
 Archive 3 mos.  
 Other

Total Number of Containers Submitted to Laboratory: 6  
 Total Number of Containers Received by Laboratory: 6

FOR LABORATORY USE ONLY - Sample Receipt Conditions:  
 Chilled - Temp (°C) 4.0  
 Fresh/Active - Verified (Y)  
 Other  
 Storage Location: 1191083