



36-15A 23rd Street
Long Island City, NY 11106
Tel: 718.383.2626 Fax: 718.383.7780
www.precision-enviro.com

June 1, 2015

Mr. Bernard P. Orlan
New York City Department of Education
Director, Office of Environmental Health & Safety Unit
44-36 Vernon Blvd
Long Island City, NY 11101

**Re: Drinking water sampling & analysis interim report for:
P.S. 80 (PETR BLDG B) – S.I. [R880]
715 Ocean Terrace, Staten Island, NY 10301
Precision Project No. 1958-15-7086**

Dear Mr. Orlan:

At the request of New York City Department of Education (DOE) Precision Environmental Inc. (Precision) performed water sampling at P.S. 80 (PETR BLDG B) – S.I. [R880], located at 715 Ocean Terrace, Staten Island, NY 10301. Water samples were collected from the following 5 drinking water fountains and 2 kitchen sink faucet (The water dispense by the tested kitchen sink faucet is use for washing food and for cooking) indicated to Precision by the school's custodian engineer during the water sampling event.

1. Drinking water fountain in 1st floor hallway between rooms C140 and C139 – Building C
2. Drinking water fountain in 1st floor Conference Center, by entrance door – Building C
3. Drinking water fountain in 1st floor hallway by rooms C115 – Building C
4. 1st floor kitchen cafeteria food prep area sink faucet – Building E
5. 1st floor kitchen cook station sink faucet – Building E
6. Drinking water fountain in 1st floor, Girls Gym side – Building D
7. Drinking water fountain in 1st floor hallway by room D101 – Building D

The water sampling was performed in order to evaluate the quality of water dispense by the aforementioned 7 drinking water outlets after the break and repair of a 6 inch domestic water pipe servicing the said locations. The water sampling was performed by Precision's industrial hygienist Ms. Daisy Nieves on June 1st, 2015.

All water samples collected were hand delivered to a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP) certified laboratory for drinking water potability analysis. The range of parameters analyzed is based on those used by New York City Department of Environmental Protection (NYCDEP) to establish general potability at drinking water outlets. Laboratory results were compared to New York State Department of Health (NYSDOH) Maximum Contaminant Levels (MCLs). The samples collected were analyzed for the list of parameters / possible contaminants indicated in the Table 1 below.

TABLE 1: List of parameters / possible contaminants examined

Contaminant	NYSDOH MCL	Range for NYC Drinking Water ¹
Turbidity	5 NTU	0.5 – 8.6 NTU (1.4 Average)
Color	15 Color Units	5 – 8 Units (6 Units Average)
Odor	3 TON	-
pH (pH unit)	6.8 – 8.2	6.9 – 9.1 (7.3 Average)
Specific Conductivity (µS/cm)	No designated limit	75 – 109 (87 Average)
Free Residual Chlorine (mg/L)	4	0.00 – 1.51 (0.63 Average)
Copper (µg/L)	1,300	3 – 38 (6 Average)
Iron (µg/L)	300	21 – 313 (38 Average)
Zinc (µg/L)	5,000	ND – 17 (ND Average)
Manganese (µg/L)	300	9 – 206 (17 Average)

Abbreviations

ND = None Detected
µg/L = micrograms per liter

NTU = Nephelometric Turbidity Units
MCL = Maximum Contaminant Level

µhos/cm = micromhos per centimeter
µS/cm = microsiemens per centimeter

During the water sampling event on June 1st, 2015, Precision collected water samples from 7 drinking water outlets. The locations of the drinking water outlets to be tested were indicated to Precision by the school’s custodian engineer escorting Precision’s representative during the water sampling event. All water samples to be analyzed for the parameters indicated in table 1 were collected in laboratory-supplied plastic containers. The water samples to be analyzed for the group of 4 metals, Copper (Cu), Iron (Fe), Zinc (Zn) and Manganese (Mn) were collected in 250 ml containers preserved with nitric acid (HNO₃) and the water samples to be analyzed for Turbidity, Color, Odor, pH, Specific Conductivity and Free Residual Chlorine were collected in 1 liter containers without preservative.

Upon completion of the sampling, all water samples collected were immediately hand delivered to New York Environmental & Analytical Laboratories, Inc. in Port Washington, NY (ELAP certification number 11510) for analysis. All collected water samples were delivered and analyzed within the applicable holding time for each parameter. The samples were analyzed using standard analytical methods approved by United States Environmental Protection Agency (EPA).

Laboratory analysis of the water samples collected showed concentrations above the NYSDOH MCL of more than one parameter in one of the outlet tested in Building D. The concentrations of the remaining outlets in Building C and E were satisfactory.

The laboratory results are summarized in Table 2 below. The results above the NYSDOH MCL and outlet location are denoted in **bold**.

¹ As reported in the NYC 2014 Drinking Water Supply and Quality Report by the NYC Department of Environmental Protection (NYC – DEP)

TABLE 2: Summary of Laboratory Results

Sample Location	Parameter (NYSDOH MCL)							
	Turbidity (5 NTU)	Color (15 Color Units)	Odor (3 TON)	pH (6.8 – 8.2)	Specific Conductivity (No Designated Limit)	Free Residual Chlorine (4)		
1. Drinking water fountain in 1st floor hallway between rooms C140 and C139 – Building C	1.56	13	ND	7.178	84.1	0.04		
2. Drinking water fountain in 1st floor Conference Center, by entrance door – Building C	2.28	13	ND	7.150	83.1	0.05		
3. Drinking water fountain in 1st floor hallway by rooms C115 – Building C	1.33	5	ND	7.048	85.5	0.02		
4. 1st floor kitchen cafeteria food prep area sink faucet – Building E	1.36	5	ND	7.495	77.1	0.32		
5. 1st floor kitchen cook station sink faucet – Building E	1.01	4	ND	7.399	79.3	0.32		
6. Drinking water fountain in 1st floor, Girls Gym side – Building D	0.81	3	ND	7.333	81.3	0.07		
7. Drinking water fountain in 1st floor hallway by room D101 – Building D	9.69	15	ND	7.234	86.4	0.19		
Sample Location	Parameter (NYSDOH MCL)							
	Copper (1,300 µg/L)		Iron (300 µg/L)		Manganese (300 µg/L)		Zinc (5,000 µg/L)	
	1 st Draw	30 Second Flush	1 st Draw	30 Second Flush	1 st Draw	30 Second Flush	1 st Draw	30 Second Flush
1. Drinking water fountain in 1st floor hallway between rooms C140 and C139 – Building C	212	199	<80	<80	<25	<25	<80	<80
2. Drinking water fountain in 1st floor Conference Center, by entrance door – Building C	419	1,056	<80	93	<25	52	<80	<80
3. Drinking water fountain in 1st floor hallway by rooms C115 – Building C	476	647	<80	<80	<25	<25	112	<80
4. 1st floor kitchen cafeteria food prep area sink faucet – Building E	96	<40	<80	<80	<25	<25	148	<80
5. 1st floor kitchen cook station sink faucet – Building E	134	47	<80	<80	25	<25	166	<80
6. Drinking water fountain in 1st floor, Girls Gym side – Building D	203	75	<80	<80	<25	<25	<80	<80
7. Drinking water fountain in 1st floor hallway by room D101 – Building D	6,452	8,721	353	452	236	316	123	126

The above exceedances are consistent with major disruption/disturbance of the plumbing system resulted from the brake and repair of the 6” domestic line servicing the outlet(s) in question.

Thus, Precision recommends the following:

- Remove drinking water fountain in 1st floor hallway by room D101 – Building D from services.
- Thoroughly flush drinking water fountain in 1st floor hallway by room D101 – Building D. Flushing the entire water system in Building D should be considered as an added precaution.
- Retest drinking water fountain in 1st floor hallway by room D101 – Building D after the flushing is completed.
- Drinking water fountain in 1st floor hallway by room D101 – Building D should not return back to service until two consecutive satisfactory sets of results are obtain.
- The water dispensed by the remaining outlets tested was suitable for consumption, at the time of the testing, for the parameters tested.

A final detailed report will be submitted after the above recommendations are implemented.

Thank you for giving Precision the opportunity to provide these services to New York City Department of Education. If you should have any questions regarding the information presented in this report, please feel free to call me at (718) 383-2626.

Sincerely yours,

Precision Environmental Inc.

Michael Parpounas
Senior Project Manager

Attachments: Potable Water Chain of Custody and Laboratory Results

WATER SAMPLING FOR POTABILITY AND CHAIN OF CUSTODY FORM

RUSH
 12 hrs 24hrs 48 hrs
 Standard Other _____

66367

CLIENT INFORMATION		PROJECT INFORMATION			PRECISION PROJECT INFORMATION	
Client Name: NYC Department Of Education		Project Name: P.S. (Petr Building B) – R [R880]			Project No: 1958-15-7086	
Client Address: 44-36 Vernon Boulevard Long Island City, NY 11101		Project Address: 715 Ocean Terrace, Staten Island, NY 10301			Project Manager: Andreas C. Andreou	
Phone No.: 718-361-3807	Fax No.: 718-361-3844	Work Order No.:	Proceed Order No.:		Sampling Hygienist(s): Daisy Nieves	
Client Contact/Project Manager: Mohamed Hemida		Phone No.: 718-361-3807	Sampling Date: 6/1/15	Sampling Start Time: 6:35A	Sampling End Time: 7:40A	

WATER SAMPLE DATA:

Sample ID	Sample Location	Container Capacity	Laboratory Results					
			Turbidity	Color	Odor	pH	Specific Conductivity	Free Residual Chlorine
R880-6/1-1P	Bldg C, 1st floor, DWF b/w rooms C140 + C139.	1 Liter	1.56	13	Not detected	7.178	84.1	—
R880-6/1-2P	Bldg C, 1st floor, DWF in Conference Center, near ENI door W2	1 Liter	2.28	13	Not detected	7.150	83.1	—
R880-6/1-3P	Bldg C, 1st floor, DWF next to room C115	1 Liter	1.33	5	Not detected	7.048	85.5	—
R880-6/1-4P	Bldg E, 1st floor, kitchen cafeteria prep area, sink washing faucet	1 Liter	1.36	5	Not detected	7.495	77.1	—
R880-6/1-5P	Bldg E, 1st floor, kitchen cook station, sink washing faucet	1 Liter	1.01	4	Not detected	7.399	79.3	—
R880-6/1-6P	Bldg D, 1st floor, girls gym side, DWF wall #2	1 Liter	0.81	3	Not detected	7.333	81.3	—
R880-6/1-7P	Bldg D, 1st floor, DWF near room D101	1 Liter	9.69	15	Not detected	7.234	86.4	—

CHAIN OF CUSTODY

Relinquished by:	Received by:	Date	Time	Delivery Method:
<i>[Signature]</i>	<i>[Signature]</i>	6-1-15	10:30	<input checked="" type="checkbox"/> Hand Delivered by _____ <input type="checkbox"/> Picked up by _____ <input type="checkbox"/> Shipped Via _____
I				
II				
III				

LABORATORY INFORMATION

Lab Name:	Date	Time
Analyzed by: Alvin Lee	6/1/15	1:00 pm
QC by:		
Lab Batch #		

INSTRUCTIONS TO THE LABORATORY:

Report Results to:	<input checked="" type="checkbox"/> Michael Parpounas	<input checked="" type="checkbox"/> Andreas Andreou	<input type="checkbox"/> _____	COMMENTS:
Via Phone:	<input type="checkbox"/> (917) 295-2600	<input type="checkbox"/> (917) 642-2375	<input type="checkbox"/> (718) 383-2626	
Via Fax::	<input type="checkbox"/> (914) 788-5440	<input type="checkbox"/> (201) 689-1118	<input type="checkbox"/> (718) 383-7780	
Via e-mail:	<input checked="" type="checkbox"/> michael@precision-enviro.com	<input checked="" type="checkbox"/> andreas@precision-enviro.com	<input checked="" type="checkbox"/> info@precision-enviro.com	

WATER SAMPLING FOR POTABILITY AND CHAIN OF CUSTODY FORM

- RUSH
 12 hrs 24hrs 48 hrs
 Standard Other _____

6367

CLIENT INFORMATION		PROJECT INFORMATION			PRECISION PROJECT INFORMATION	
Client Name: NYC Department Of Education		Project Name: P.S. (Petr Building B) – R [R880]			Project No: 1958-15-7086	
Client Address: 44-36 Vernon Boulevard Long Island City, NY 11101		Project Address: 715 Ocean Terrace, Staten Island, NY 10301			Project Manager: Andreas C. Andreou	
Phone No.: 718-361-3807	Fax No.: 718-361-3844	Work Order No.:	Proceed Order No.:		Sampling Hygienist(s): Daisy Nieves	
Client Contact/Project Manager: Mohamed Hemida		Phone No.: 718-361-3807	Sampling Date: 6/1/15	Sampling Start Time: 6:30 A	Sampling End Time: 11:40 A	

WATER SAMPLE DATA:

Sample ID	Sample Location	Container Capacity	Laboratory Results					
			Turbidity	Color	Odor	pH	Specific Conductivity	Free Residual Chlorine
R880-6/1-1P	Bldg C, 1st floor, DWF b/w rooms C138 + C139	1 Liter	—	—	—	—	—	0.04
R880-6/1-2P	Bldg C, 1st floor, DWF in Conference Center, NEAR ENL door W2	1 Liter	—	—	—	—	—	0.05
R880-6/1-3P	Bldg C, 1st floor, DWF next to room C138	1 Liter	—	—	—	—	—	0.02
R880-6/1-4P	Bldg E, 1st floor, kitchen exterior area, Grey Sink washing faucet	1 Liter	—	—	—	—	—	0.32
R880-6/1-5P	Bldg E, 1st floor, kitchen Cook station, Sink washing faucet	1 Liter	—	—	—	—	—	0.32
R880-6/1-6P	Bldg D, 1st floor, Girl's GYM area, DWF wall #2	1 Liter	—	—	—	—	—	0.07
R880-6/1-7P	Bldg D, 1st floor, DWF NEAR the room D101	1 Liter	—	—	—	—	—	0.19

CHAIN OF CUSTODY

Relinquished by:	Received by:	Date	Time	Delivery Method:
I <i>[Signature]</i>	<i>Emilia [Signature]</i>	6-1-15	10:30	<input checked="" type="checkbox"/> Hand Delivered by _____ <input type="checkbox"/> Picked up by _____ <input type="checkbox"/> Shipped Via _____
II				
III				

LABORATORY INFORMATION

Lab Name:	Date	Time
Analyzed by: <i>Alvin Lee</i>	6/1/15	12:00 PM
QC by:		
Lab Batch #		

INSTRUCTIONS TO THE LABORATORY:

Report Results to: Michael Parpounas Andreas Andreou _____
 Via Phone: (917) 295-2600 (917) 642-2375 (718) 383-2626 _____
 Via Fax: (914) 788-5440 (201) 689-1118 (718) 383-7780 _____
 Via e-mail: michael@precision-enviro.com andreas@precision-enviro.com info@precision-enviro.com

COMMENTS:



SAMPLING FOR METALS OF CUSTODY FORM

43059

RUSH
 12 hrs
 Standard

Page 1 of 2
TURNAROUND TIME
 24hrs
 48 hrs
 Other _____

CLIENT INFORMATION		PROJECT INFORMATION		PRECISION PROJECT INFORMATION	
Client Name: NYC Department of Education		Project Name: P.S. 80 (Petr Building B) – R [R880]		Project No: 1958-14-7086	
Client Address: 44-36 Vernon Boulevard Long Island City, NY 11101		Project Address: 715 Ocean Terrace, Staten Island, NY 10301		Project Manager: Andreas Andreou	
Phone No.: 718-361-3807	Fax No.: 718-361-3844	Work Order No.:	Proceed Order No.:	Sampling Hygienist(s): Daisy Nieves	
Client Contact/Project Manager: Mohamed Hemida		Sampling Date: 6/1/15	Sampling Start Time: 6:33	Sampling End Time: 7:39	

WATER SAMPLE DATA:

Sample ID	Sample Location	Sample Type	Container Capacity	Preservative	Laboratory Results (µg/L)			
					Cu	Fe	Mn	Zn
R880-6/1-1M	Bldg C, 1st floor, DWF b/w rooms C139 + C140.	1 st Draw	250 ml	HNO ₃	212	280	225	280
R880-6/1-2M		30 seconds Flush	250 ml	HNO ₃	199	280	225	280
R880-6/1-3M	Bldg C, 1st floor, DWF in Conference center, NEAR ent. down ON wall #2.	1 st Draw	250 ml	HNO ₃	419	280	225	280
R880-6/1-4M		30 seconds Flush	250 ml	HNO ₃	1056	93	52	280
R880-6/1-5M	Bldg C, 1st floor, DWF next to ROOM C115.	1 st Draw	250 ml	HNO ₃	476	280	225	112
R880-6/1-6M		30 seconds Flush	250 ml	HNO ₃	647	280	225	280
R880-6/1-7M	Bldg E, 1st floor kitchen cafeteria prep area, sink washing faucet.	1 st Draw	250 ml	HNO ₃	96	280	225	148
R880-6/1-8M		30 seconds Flush	250 ml	HNO ₃	240	280	225	280

CHAIN OF CUSTODY

Relinquished by:	Received by:	Date	Time	Delivery Method:
I <i>Randy</i>	<i>Emily</i>	6-1-15	10:30	<input checked="" type="checkbox"/> Hand Delivered by _____ <input type="checkbox"/> Picked up by _____ <input type="checkbox"/> Shipped Via _____
II				
III				

LABORATORY INFORMATION

Lab Name:	Date	Time
Analyzed by: <i>Wass Cheung</i>	6/1/15	1700
QC by: <i>AL</i>	6-1-15	1820
Lab Batch # <i>AL</i>		

INSTRUCTIONS TO THE LABORATORY:

Report Results to:	<input checked="" type="checkbox"/> Andreas Andreou	<input type="checkbox"/> _____	<input type="checkbox"/> Analyze follow-up (30 sec. flush) sample ONLY when the initial (1 st Draw) sample result exceeds regulatory limits. <input checked="" type="checkbox"/> Analyze both initial and follow-up samples <input type="checkbox"/> Other _____
Via Phone:	<input checked="" type="checkbox"/> (917) 642-2375	<input type="checkbox"/> (718) 383-2626	
Via Fax::	<input type="checkbox"/> (201) 689-1118	<input checked="" type="checkbox"/> (718) 383-7780	
Via e-mail:	<input type="checkbox"/> andreas@precision-enviro.com	<input checked="" type="checkbox"/> info@precision-enviro.com	

POTABLE WATER SAMPLING FOR METALS AND CHAIN OF CUSTODY FORM

TURNAROUND TIME

- RUSH
 12 hrs 24hrs 48 hrs
 Standard Other _____

CLIENT INFORMATION		PROJECT INFORMATION		PRECISION PROJECT INFORMATION	
Client Name: NYC Department of Education		Project Name: P.S. 80 (Petr Building B) – R [R880]		Project No: 1958-14-7086	
Client Address: 44-36 Vernon Boulevard Long Island City, NY 11101		Project Address: 715 Ocean Terrace, Staten Island, NY 10301		Project Manager: Andreas Andreou	
Phone No.: 718-361-3807	Fax No.: 718-361-3844	Work Order No.:	Proceed Order No.:	Sampling Hygienist(s): Daisy Nieves	
Client Contact/Project Manager: Mohamed Hemida		Sampling Date: 6/1/15	Sampling Start Time: 6:33	Sampling End Time: 7:39	

WATER SAMPLE DATA:

Sample ID	Sample Location	Sample Type	Container Capacity	Preservative	Laboratory Results (µg/L)			
					Cu	Fe	Mn	Zn
R880-6/1-9M	Bldg E, 1st floor kitchen cafeteria, cook station - sink washing faucet in front of stove	1 st Draw	250 ml	HNO ₃	134	480	225	166
R880-6/1-10M		30 seconds Flush	250 ml	HNO ₃	47	480	225	280
R880-6/1-11M	Bldg D, 1st floor girls gym side, DWF, wall #2	1 st Draw	250 ml	HNO ₃	203	480	225	280
R880-6/1-12M		30 seconds Flush	250 ml	HNO ₃	75	480	225	280
R880-6/1-13M	Bldg D, 1st floor, DWF NEAR ROOM D101	1 st Draw	250 ml	HNO ₃	6452	353	236	123
R880-6/1-14M		30 seconds Flush	250 ml	HNO ₃	8721	452	314	126
R880-6/1-15M	Blank	1 st Draw	250 ml	HNO ₃	240	480	225	280
R880-6/1-16M <i>DN</i>		30 seconds Flush	250 ml	HNO ₃				

CHAIN OF CUSTODY

Relinquished by:	Received by:	Date	Time	Delivery Method:
I <i>Daisy Nieves</i>	<i>Emilio Bruno</i>	<i>6-1-15</i>	<i>10:30</i>	<input checked="" type="checkbox"/> Hand Delivered by _____
II				<input type="checkbox"/> Picked up by _____
III				<input type="checkbox"/> Shipped Via _____

LABORATORY INFORMATION

Lab Name:	Date	Time
Analyzed by: <i>Wesley Chary</i>	<i>6/1/15</i>	<i>17:00</i>
QC by: <i>AL</i>	<i>6-1-15</i>	<i>18:20</i>
Lab Batch #		

INSTRUCTIONS TO THE LABORATORY:

Report Results to:	<input checked="" type="checkbox"/> Andreas Andreou	<input type="checkbox"/> _____	<input type="checkbox"/> Analyze follow-up (30 sec. flush) sample ONLY when the initial (1 st Draw) sample result exceeds regulatory limits. <input checked="" type="checkbox"/> Analyze both initial and follow-up samples <input type="checkbox"/> Other _____
Via Phone:	<input checked="" type="checkbox"/> (917) 642-2375	<input type="checkbox"/> (718) 383-2626	
Via Fax::	<input type="checkbox"/> (201) 689-1118	<input checked="" type="checkbox"/> (718) 383-7780	
Via e-mail:	<input type="checkbox"/> andreas@precision-enviro.com	<input checked="" type="checkbox"/> info@precision-enviro.com	