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February 7, 2014

Via Electronic Mail

Douglas MacNeal
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-1011

Re: Outfall **B** Dewatering Well Points
Groundwater Analytical Data for F110D, F82, MGP121S
Con Edison, Astoria Facility

Dear Mr. MacNeal:

The purpose of this letter is to present the results of groundwater monitoring conducted on select monitoring wells within the Consolidated Edison (Con Edison) Astoria facility. The groundwater monitoring events were conducted as requested by the New York State Department of Environmental Conservation (NYSDEC) following a dewatering event for the Astoria Outfall B replacement project.

In September of 2013, during the Outfall B replacement project, 52 temporary dewatering well points were installed along 19th Drive on the Astoria facility to allow for construction dewatering. During construction, groundwater was pumped at a rate of up to 400 gallons per minute from the dewatering system. Groundwater pumped from these temporary well points was treated on site via an approved water treatment system, sampled, and discharged to the stormwater system. The New NYSDEC requested groundwater monitoring to assess any impacts that the dewatering activities could have on the groundwater conditions on the Astoria site. In response to the NYSDEC request, Con Edison conducted groundwater monitoring on three wells (F110D, MGP121S, and F82) located near the dewatering system. The results from these three monitoring wells were compared to historical analytical results from the sampling events conducted prior to dewatering.

The groundwater samples were collected from monitoring wells F110D, MGP121S, and F82 on August, 7, 9, and 15, 2013, respectively prior to dewatering and again on October 23, 2013 after dewatering activities were completed in this area. A duplicate sample was collected from MGP121S during each sampling event. The groundwater samples were analyzed for Volatile Organic Compounds (VOCs) by EPA SW-846 Methods 8260C, Semivolatile Organic Compounds (SVOCs) by EPA SW-846 Method 8270D, metals by EPA SW-846 Method 6010B, mercury by EPA SW-846 Methods 7470A, cyanide by EPA Method 335.4, and polychlorinated biphenyls (PCBs) by EPA SW-846 Method 8082A. The samples were analyzed by Test America, Inc. of New York City. The groundwater analytical results are included in Table 1. Where available, historic groundwater data from the monitoring wells has also been included in Table 1. The location of the dewatering wells, and the location of the wells that were sampled are shown on Figure 1.

The analytical results were compared to the ambient water quality standards or guidance values (AWQSGVs) listed in NYSDEC Technical and Operations Guidance Series 1.1.1. Benzene, ethylbenzene, toluene, total xylene, isopropylbenzene, styrene, and napthalene exceednaces above the AWQSGV were documented only in the sample collected from F110D. Chromium was detected at concentration exceeding the AWQSGV only in the sample collected from F82. Iron and manganese were detected at concentration exceeding the AWQSGV in the samples collected from F110D and

MGP121S. Sodium was detected in all three monitoring wells at concentrations exceeding the AWQSGV. Total cyanide exceedances above the AWQSGV were documented in F110D and F82.

No significant increase in contaminant concentrations was noted in the monitoring wells between the August and October 2013 sampling events. F110D did show a general slight increase in concentration during the October sampling event, and will be resampled in the first quarter of 2014.

Please note that the dewatering wells installed along the 19th Drive between 23rd Street and 21st Street were abandoned by overdrilling and grouting between December 9 through 16, 2013. The hard copies of the well decommissioning records will be submitted to NYSDEC separately.

Additional dewatering wells will be installed along the 19th Drive from 21st street to the entry gate to the USPowergen property as part of the ongoing Outfall B replacement project. Additional information on the new dewatering wells, as well as the adjacent monitoring wells that will be sampled both prior to and after the dewatering event, will be provided shortly under a separate cover.

If you have any questions, please contact me at (718) 267-3866 or Barry Cohen at (718) 204-4252.

Very truly yours,

Matthew Madsen
Project Manager
Remediation
Environment, Health and Safety

cc: Barry Cohen, Con Edison (cohenba@coned.com)
Phil Flax, USEPA (flax.phil@epa.gov)

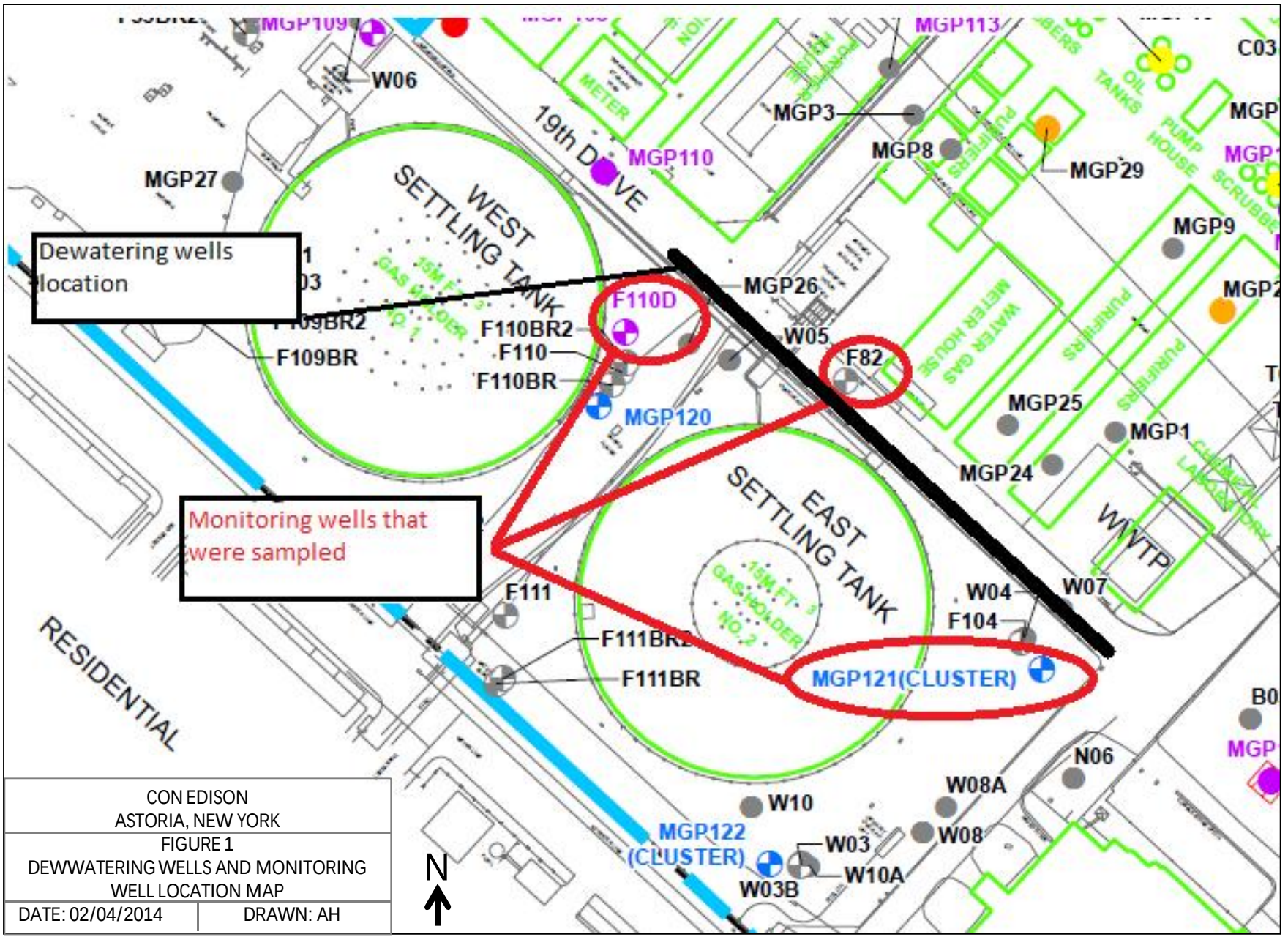
Dewatering wells location
Monitoring wells that were sampled
WEST SETTLING TANK
EAST SETTLING TANK
19th DRIVE
RESIDENTIAL
WWTP
MGP109
MGP113
MGP110
MGP27
MGP3
MGP8
MGP29
MGP9
MGP26
MGP25
MGP1
MGP24
MGP120
MGP121(CLUSTER)
MGP122 (CLUSTER)
W06
W05
W04
W07
W10
W08A
W08
W03
W10A
W03B
N06
F110D
F110BR2
F110
F110BR
F109BR
F82
F104
F111
F111BR
C03
B0
N
CON EDISON
ASTORIA, NEW YORK
FIGURE 1
DEWWATERING WELLS AND MONITORING WELL LOCATION MAP
DATE: 02/04/2014
DRAWN: AH

Table 1
Groundwater Analytical Data for F110D, F82, MGP121S
Con Edison, Astoria, NY

Location ID Sample Date Sample ID SDG	NYSDEC Groundwater Guidance or Standard Value	F110D 8/7/2013 DUP-080713 460-60706-1	F110D 8/7/2013 F110D-080713 460-60706-1	F110D 10/23/2013 F110D-102313 460654341	F82 1/26/2005 F82 R2524721	F82 11/16/2007 F82ZS R2740880	F82 1/26/2010 F82 ZS_012610 AECOM070	F82 1/28/2010 F83 ZD_012810 AECOM070	F82 8/15/2013 F82-081513 460-61164-1	F82 10/23/2013 F82-102313 460654341	MGP121S 8/9/2013 MGP121S-080913 460-60984-1	MGP121S 8/9/2013 DUP-080913 460-60984-1	MGP121S 10/23/2013 MGP121S-102313 460654341	MGP121SP 10/23/2013 MGP121SP-102313 460654341
BTEX (ug/L)														
Benzene	1	**6700**	**6900**	**7400**	< 5.0 U	< 1 U	NS	NS	< 1.0 U	**0.12**	< 1.0 U	< 1.0 U	< 1.0	**0.081**
Ethylbenzene	5	**460**	**460**	**530**	< 5.0 U	< 1 U	NS	NS	< 1.0 U	< 1.0	< 1.0 U	< 1.0 U	< 1.0	< 1.0
m&p-Xylene	NL	**120**	**130**	**130**	< 5.0 U	< 1 U	NS	NS	< 2.0 U	< 2.0	< 2.0 U	< 2.0 U	< 2.0	< 2.0
o-Xylene	NL	**120**	**120**	**120**	< 5.0 U	< 1 U	NS	NS	< 1.0 U	< 1.0	< 1.0 U	< 1.0 U	< 1.0	< 1.0
Toluene	5	**23 J**	**25**	**62**	< 5.0 U	< 1 U	NS	NS	< 1.0 U	< 1.0	< 1.0 U	< 1.0 U	< 1.0	< 1.0
Total Xylene (calculated)	5	**240**	**250**	**250**	< 5.0	< 1	NS	NS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total BTEX	*NL*	***7423***	***7635***	***8242***	*ND*	*ND*	*NS*	*NS*	*ND*	*0.12*	*ND*	*ND*	*ND*	*0.081*
VOCs (ug/L)														
2-Butanone	50	< 130 U	< 130 U	< 130	**1.3 J**	**0.81 J**	NS	NS	< 5.0 U	< 5.0	< 5.0 U	< 5.0 U	< 5.0	< 5.0
Chloroform	7	< 25 U	< 25 U	< 25	< 5.0 U	< 1 U	NS	NS	**0.14 J**	**0.22**	< 1.0 U	< 1.0 U	< 1.0	**0.25**
Isopropylbenzene	5	**17 J**	**19 J**	**20**	NS	< 1 U	NS	NS	< 1.0 U	< 1.0	< 1.0 U	< 1.0 U	< 1.0	< 1.0
Styrene	5	**13 J**	**14 J**	**35**	< 5.0 U	< 1 U	NS	NS	< 1.0 U	< 1.0	< 1.0 U	< 1.0 U	< 1.0	< 1.0
Tetrachloroethene	5	< 25 UJ	< 25 UJ	< 25	**1.0 J**	**2.6**	NS	NS	**1.1**	**0.48**	**2.4**	< 1.0 U	**0.72**	**0.71**
Trichloroethene	5	< 25 U	< 25 U	< 25	< 5.0 U	**0.62 J**	NS	NS	**0.19 J**	< 1.0	**0.31 J**	< 1.0 U	< 1.0	**0.22**
Total VOCs	*NL*	***7453***	***7668***	***8297***	***2.3***	***4.03***	*NS*	*NS*	***1.43***	***0.82***	***2.71***	*ND*	***0.72***	***1.261***
PAHs (ug/L)														
2-Methylnaphthalene	NL	**3.3 J**	**4.2 J**	< 50	< 9.6 U	< 9.5 U	NS	NS	< 10 U	< 10	< 10 U	< 10 U	< 10	< 10
Fluoranthene	50	< 20 U	< 22 U	< 50	**1.1 J**	< 9.5 U	NS	NS	< 10 U	< 10	< 10 U	< 10 U	< 10	< 10
Naphthalene	10	**360**	**390**	**420**	< 9.6 U	< 9.5 U	NS	NS	< 10 U	< 10	< 10 U	< 10 U	< 10	< 10
Pyrene	50	< 20 U	< 22 U	< 50	**1.2 J**	< 9.5 U	NS	NS	< 10 U	< 10	< 10 U	< 10 U	< 10	< 10
Total PAHs	NL	**363.3**	**394.2**	**420**	**2.3**	< 9.5 U	NS	NS	< 10	< 10	< 10	< 10	< 10	< 10
SVOCs (ug/L)														
Phenol	1	**8.0 J**	**13 J**	**25**	< 9.6 U	< 9.5 U	NS	NS	< 10 U	< 10	< 10 U	< 10 U	< 10	< 10
Total SVOCs	*NL*	***371.3***	***407.2***	***445***	*2.3*	*ND*	*NS*	*NS*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*
Metals (ug/L)														
Aluminum	NL	NS	NS	**133**	**4620 J**	NS	NS	NS	NS	**302**	NS	NS	**504**	**554**
Arsenic	25	< 5.0 U	< 5.0 U	< 5.0	< 3.2 UJ	NS	NS	NS	**5.1**	< 5.0	< 5.0 U	< 5.0 U	< 5.0	< 5.0
Barium	1000	**237**	**236**	**253**	**92.8 J**	NS	NS	NS	**529**	**41.2**	**144 J**	**42.6 J**	**149**	**152**
Calcium	NL	NS	NS	**66400**	**73100 J**	NS	NS	NS	NS	**57400**	NS	NS	**71100**	**74100**
Chromium	50	< 10.0 U	< 10.0 U	< 10.0	**9.2 J**	NS	NS	NS	**108**	< 10.0	< 10.0 U	< 10.0 U	< 10.0	< 10.0
Copper	200	NS	NS	< 25.0	**3.3 J**	NS	NS	NS	NS	< 25.0	NS	NS	< 25.0	< 25.0
Iron	300	NS	NS	**2070**	**1840 J**	**5390**	NS	NS	NS	**209**	NS	NS	**515**	**570**
Lead	25	< 5.0 U	< 5.0 U	< 5.0	< 1.2 UJ	< 3.7 U	NS	NS	**47.8**	< 5.0	< 5.0 U	< 5.0 U	< 5.0	< 5.0
Magnesium	35000	NS	NS	**22000**	**15700 J**	NS	NS	NS	NS	**11300**	NS	NS	**9910**	**10400**
Manganese	300	NS	NS	**392**	**18.0 J**	NS	NS	NS	NS	< 15.0	NS	NS	**459**	**479**
Nickel	100	NS	NS	**6.1**	**6.0 J**	NS	NS	NS	NS	< 40.0	NS	NS	< 40.0	< 40.0
Potassium	NL	NS	NS	**6980**	**61800 J**	NS	NS	NS	NS	**10100**	NS	NS	**2600**	**2660**
Sodium	20000	NS	NS	**52100**	**185000 E**	NS	NS	NS	NS	**189000**	NS	NS	**147000**	**148000**
Vanadium	NL	NS	NS	< 50.0	**55.3 J**	NS	NS	NS	NS	**11.1**	NS	NS	< 50.0	< 50.0
Zinc	2000	NS	NS	< 30.0	**5.0 J**	NS	NS	NS	NS	< 30.0	NS	NS	< 30.0	< 30.0
Cyanide (ug/L)														
Physiologically available Cyanide	NL	NS	NS	NS	**6 J**	**18**	NS	NS	NS	NS	NS	NS	NS	NS
Total Cyanide	200	**330 J-**	**330 J-**	**470**	**12.4**	**31.5**	NS	NS	**110 J-**	**340**	**13 J-**	**27 J-**	**22**	**24**
PCBs (ug/L)														
Total PCB	0.09	< 0.40	< 0.42	NS	< 2.0 U	< 1.9 U	< 0.065 U	< 0.065 U	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	NS

Notes:
ug/L = micrograms per liter
Bold value = detected above reporting limit
Gray Highlighted values exceed NYSDEC Groundwater Guidance or Standard Value
NL = Not listed
ND = Not detected
U = Nondetected result. The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyt
J- = (Inorganics) The result is an estimated quantity, but the result may be biased low.