# **NYCO** Environmental & Dewatering Corp.

November 30, 2018

Mr. Hasan Ahmed Project Manager New York State Department of Environmental Conservation Division of Environmental Remediation – Superfund and Brownfield Cleanup Section 47-40 21<sup>st</sup> Street Long Island City, New York, 11101

## Re: NYSDEC Long Island Well Permit Application – Comment Response Letter 5200 Kings Highway Brooklyn, New York 10021 Block 7969, Lot 9

Mr. Ahmed:

NYCO has compiled this letter on behalf of the owner, PTMA 5200 Kings Highway LLC, in response to the Department's comments received via email on November 28, 2018. Comments are provided below in italics, with NYCO's responses below each comment. Revised documents have been included at the end of this letter.

NYSDEC Division of Water Comments:

1. On "Region 2 LIW Dewatering System Detail Sheet" (attachment 5), the value of maximum daily pumpage is 993,600 gpd. As per NYC DEP letter dated October 10, 2018, amount of groundwater allowed to discharge is 432,000 gpd. The maximum daily pumpage must be qual or lower than the DEP allowed discharge rate.

**NYCO Response** – Attachment 5 has been revised accordingly, and included at the end of this letter for your review.

2. Show some calculation on determining the radius of influence.

NYCO Response – Calculations for the radius of influence have been provided below:

Variable	Symbol	Value	Unit
Hydraulic Conductivity	K	300	gpd/ft2
Drawdown Time	t	8640	min.
Equivalent Radius of well system	۲ <sub>s</sub>	95	ft
Initial Head (Thickness of saturated acquifer)	н	90	ft
	C4	4790	
Storage Coefficient	Cs	0.20	
Transmissivity	Т	27000	gpd/ft
Radius of Influence	Ro	588.96	ft

\*The radius of influence was derived from the modified Jacob formula:

$$Ro = r_s + \sqrt{\frac{T \times t}{4790 \times Cs}}$$

200 Blydenburg Road, Suite 19, Islandia, NY 11749 Tel: 631.630.6700 eFax: 631.415.1181 Certified WBE/DBE 5200 Kings Highway, Brooklyn NY LIWP Application – Comment Response Letter November 30, 2018 Page 2 of 2



Please contact me at 914-643-1057 with any questions or comments.

Sincerely, NYCO Environmental and Dewatering Corp.

Sam McTavey Senior Project Manager

cc: Matt Durcan - NYCO

## **Region 2 Long Island Well Dewatering System Detail Sheet**

1. <u>PROJECT DESCRIPTION</u> - Dewatering in support of remedial excavation work onsite.

## 2. **PROPOSED DEWATERING SYSTEM** (Complete all items)

a.	Number of wellpoints	10 wells	
b.	Diameter of wellpoints	12"	
c.	Spacing of wellpoints	40 - 60 feet	
d.	Length of screen	20 feet	
e.	Depth to bottom of screen	30 feet	
	-	10	
f.	Number of pumps		
g.	Capacity of pumps	69 gallons per minute	
h.	Static water level	9-11 feet bgs	
i.	Drawdown required	~12 feet max	
j.	Duration of dewatering	~3 months	
k.	Radius of Influence	600 feet	
к.		432,000 GPD	
1.	Maximum daily pumpage		
m.	Estimated daily pumpage	200,000 GPD	
PROPOSED POINT OF DISCHARGE (Show on site plan and check one of the following)			

## 3.

Surface Water; if checked, provide name of b	body of water
Combined or Sanitary Sewer $\underline{X}$ ; if checked, prov	vide WPCP drainage area
Storm Sewer; if checked, provide name of bo NYCDEP Outfall num	ody of water and and
Other; explain	
Matt Durcan (Sig	gnature) $(Date)^{11/30/18}$ $(Oate)^{11/30/18}$ $(Oate)^{11/30/18}$