

MEMO

Date:	May 4, 2018
То:	William J. Hague, P.E., Honeywell
From:	Mark Nielsen, P.E., Ramboll US Corporation Jose Sananes, P.E., Ramboll US Corporation
Subject:	Memo Re: SA-7 Sediment Remedy Long Term Monitoring Program – Year 3 and Year 4 Hydraulic and Hydrodynamic Evaluation

In accordance with the *First Five Year Implementation Plan* ("Implementation Plan"; last revised June 2015) and the *Long Term Monitoring Program, Year 2 Implementation Report* ("Year 2 Implementation Report"; July 2016), monitoring to identify any high energy events that would trigger additional assessment has been performed by Ramboll US Corporation (Ramboll) on a continuous basis. As discussed in the Year 2 Implementation Report, it was proposed that the results of this continuing monitoring be included in the Year 5 monitoring report.

As requested by Plaintiffs in the letter dated April 24, 2018, re: Sediment Consent Order Reporting, the results of the monitoring performed during Years 3 and 4 of the Long Term Monitoring Program (LTMP) are presented below.

YEAR 3 AND YEAR 4 MONITORING RESULTS

Records of river stage elevations and weather events in Year 3 (October 2015 through September 2016) and Year 4 (October 2016 through September 2017) of the LTMP were obtained to identify "high energy events" that would warrant additional inspection of the cap and MNR areas. The Consent Order defines "high energy events" as follows:

- "A 50-year rainfall event defined by the National Weather Service as a 24hour period of rainfall exceeding the maximum 50-year/24-hour accumulation, as recorded at Newark Airport;
- A 10-year storm surge event defined as a hurricane event (not a "nor'easter") resulting in an increase in ocean level of either 0.64 meters above normal tidal cycling at the Battery Park tide gauge or 1.40 meters above mean sea level (MSL); or
- iii. A wind event achieving 34 to 40 knots, coming from the south through the west, averaged over 6 hours, as recorded at Newark Airport."

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Monitoring of hydraulic conditions near SA-7 included review of surface water elevations from the Battery Park gauge and wind and precipitation records from Newark Airport weather station as reported by the following sources:

- Rainfall recorded at Newark Airport: http://www.wunderground.com/history/
- Tide levels at Battery Park: http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750
- Wind conditions as recorded at Newark Airport: http://www.wunderground.com/history/

The monitoring data for both Year 3 and Year 4 of the LTMP indicated that no high energy events meeting the defined criteria occurred during these monitoring periods. Monthly summaries generated from the monitoring data for Year 3 and Year 4 are provided in **Attachments A** and **B**, respectively.

Monitoring is currently being performed on a continuing basis to identify any high energy events that would trigger additional assessment. The results of the monitoring for Year 5 of the LTMP will be included in the Year 5 Implementation Report.

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Attachments

ATTACHMENT A YEAR 3 HYDRAULIC AND HYDRODYNAMIC EVALUATION SUMMARIES

SA-7 Sediment Remedy		
Hydrologic Data Review		
Monitoring Period: Year 3 - October 2015 through Sep	tember 2016	Assessment Required?
<u>Rainfall Event Data:</u> Max Rainfall (in): 1.84 Date: 7/25/2010 50-Year, 24-Hr event? NO	5	NO
<u>Storm Surge Event Data:</u> Max Increase Above Predicted Normal Tidal Cycling (m) Exceeds event trigger criteria	: 1.242 Date: 1/23/2016 Time: 19:00 YES	
Max Tide Gauge Reading (m): 1.631 Date: Exceeds event trigger criteria? YES	2/9/2016 Time: 14:00	
10-year storm surge event defined as a hurricane	? NO - for both events	NO
Wind Event Data: Max Wind (mph): 48 Date Exceeds trigger criteria? YES Wind direction over 6-hr period: WSW OK Note: (1) The averaged wind speed for the 6-hour period during which the max threshold criteria. 0	: 7/18/2016 (See Note 1) kimum wind speed was recorded does not exceed the	
		NO
<u>CRITERIA FROM LTMP:</u>		
"Post-High Energy Event Monitoring Activities" will take place Events. The Consent Order defines "High Energy Events" as fo	promptly following High Energy llows:	
 i. "A 50-year rainfall event defined by the National Weather Se rainfall exceeding the maximum 50-year/24-hour accumulation a 24-hour period), as recorded at Newark Airport; 	ervice as a 24-hour period of n (i.e., 7.2 inches of rainfall over	
 See http://www.wunderground.com/history/ 		
ii. A 10-year storm surge event defined as a hurricane event (r an increase in ocean level of either 0.64 meters above normal tide gauge or 1.40 meters above mean sea level (MSL); or	not a "nor'easter") resulting in tidal cycling at the Battery Park	
• Note: Hurricane events are defined by NOAA.		
 See http://tidesandcurrents.noaa.gov/waterlevels.htm 	nl?id=8518750	
iii. A wind event achieving 34 to 40 knots (39.13 to 46.03 mph through the west, averaged over 6 hours, as recorded at Newa), coming from the south rk Airport."	
 See http://www.wunderground.com/history/ 		
	CHECKED BY: TEA	

October v 1 v 2015	To: Septe	mber 🗸	30 🗸	2016
Get History				
Daily Weekly Monthly Custom				
	Max	Avg	Min	Sum
Temperature				
Max Temperature	99 ° F	67 ° F	18 °F	
Mean Temperature	89 °F	59 °F	9 °F	
Min Temperature	80 °F	49 °F	0 °F	
Degree Days				
Heating Degree Days (base 65)	56	11	0	3919
Cooling Degree Days (base 65)	24	4	0	1545
Growing Degree Days (base 50)	39	12	0	4312
Dew Point				
Dew Point	78 °F	44 °F	- 19 °F	
Precipitation				
Precipitation	1.84 in	0.11 in	0.00 in	35.02 in
Snowdepth	20.0 in	0.3 in	0.0 in	
Wind				
Wind	48 mph	9 mph	0 mph	
Gust Wind	66 mph	23 mph	16 mph	
Sea Level Pressure	- <u></u>	Active states of	5.2.72(4 .2. ³)	
Sea Level Pressure	30 83 in	30.04 in	29 22 in	

https://www.wunderground.com/history/airport/KEWR/2015/10/1/CustomHistory.html?dayend=30&monthend=9&yearen d=2016&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20151001&edate=20160930&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy	
Long-Term Monitoring Program	
Monitoring Period: October 2015	Assessment Required?
Rainfall Event Data:	
50-Year, 24-Hr event? NO	NO
Storm Surge Event Data:	
Max Increase Above Predicted Normal Tidal Cycling (m): 0.706 Date: 10/3/2015 Time: 7:00 Exceeds event trigger criteria? YES	
Max Tide Gauge Reading (m):1.448 Date:10/28/2015 Time:14:00Exceeds event trigger criteria?YES	
10-year storm surge event defined as a hurricane? NO	NO
	NO
Wind Event Data:	
Exceeds trigger criteria? NO	
Wind direction over 6-hr period: WNW OK	
	NO
	NO
CRITERIA FROM LTMP:	
"Post-High Energy Event Monitoring Activities" will take place promptly following High Energy Events. The Consent Order defines "High Energy Events" as follows:	
i. "A 50-year rainfall event defined by the National Weather Service as a 24-hour period of rainfall exceeding the maximum 50-year/24-hour accumulation (i.e., 7.2 inches of rainfall over a 24-hour period), as recorded at Newark Airport;	
See http://www.wunderground.com/history/	
ii. A 10-year storm surge event defined as a hurricane event (not a "nor'easter") resulting in an increase in ocean level of either 0.64 meters above normal tidal cycling at the Battery Park tide gauge or 1.40 meters above mean sea level (MSL); or	
Note: Hurricane events are defined by NOAA.	
 See http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750 	
iii. A wind event achieving 34 to 40 knots (39.13 to 46.03 mph), coming from the south through the west, averaged over 6 hours, as recorded at Newark Airport."	
 See http://www.wunderground.com/history/ 	
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Weather History for KEWR

See history from more local stations

onthly Calendar	Detailed History					
From: October	1	2015	To: Octobe		31	2015
Get History						
Daily Week!	y Monthly	Custom				
			Мах	Avg	Min	Sum
Temperature						
Max Temperati	ure		81 °F	66 ° F	52 °F	
Mean Tempera	ture		71 ° F	57 °F	43 °F	
Min Temperatu	re		60 ° F	48 °F	31 ° F	
Degree Days						
Heating Degree	e Days (base 65)		22	8	0	241
Cooling Degree	Days (base 65)		6	0	0	8
Growing Degre	e Days (base 50)		20	8	0	239
Dew Point						
Dew Point			67 °F	43 °F	17 ° F	
Precipitation						
Precipitation			1.42 in	0.12 in	0.00 in	3.35 in
Snowdepth			0.0 in	0.0 in	0.0 in	-
Wind						
Wind			37 mph	10 mph	0 mph	
Gust Wind			46 mph	23 mph	16 mph	
Sea Level Pressur	e					
Sea Level Press	sure		30.58 in	30.10 in	29.53 in	

http://www.wunderground.com/history/airport/KEWR/2015/10/1/CustomHistory.html?dayend=31&monthend=10&yearen d=2015&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20151001&edate=20151101&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy Long-Term Monitoring Program	
Hydrologic Data Review	
Monitoring Period: November 2015	Assessment Required?
Rainfall Event Data:Max Rainfall (in):0.83Date:11/19/201550-Year, 24-Hr event?NO	NO
Storm Surge Event Data: Max Increase Above Predicted Normal Tidal Cycling (m): 0.614 Date: 11/12/2015 Time: 16:00 Exceeds event trigger criteria? NO	
Max Tide Gauge Reading (m):1.268Date:11/12/2015Time:14:00Exceeds event trigger criteria?NO	
10-year storm surge event defined as a hurricane? NO	NO
Wind Event Data: Max Wind (mph): 32 Date: 11/13/2015 Exceeds trigger criteria? NO Wind direction over 6-hr period: W OK	
 CRITERIA FROM LTMP: "Post-High Energy Event Monitoring Activities" will take place promptly following High Energy Events. The Consent Order defines "High Energy Events" as follows: i. "A 50-year rainfall event defined by the National Weather Service as a 24-hour period of rainfall exceeding the maximum 50-year/24-hour accumulation (i.e., 7.2 inches of rainfall over a 24-hour period), as recorded at Newark Airport; See http://www.wunderground.com/history/ ii. A 10-year storm surge event defined as a hurricane event (not a "nor'easter") resulting in an increase in ocean level of either 0.64 meters above normal tidal cycling at the Battery Park tide gauge or 1.40 meters above mean sea level (MSL); or Note: Hurricane events are defined by NOAA. See http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750 A wind event achieving 34 to 40 knots (39.13 to 46.03 mph), coming from the south through the west, averaged over 6 hours, as recorded at Newark Airport." 	
See http://www.wunderground.com/history/ CHECKED BY: TEA	

Weather History for KEWR

onthly Calendar Detailed History				
From: November V 1 V 2015	To: Novemb	ber 🗸 3	30 🗸 2	2015 🗸
Get History				
Daily Weekly Monthly Custom				
	Max	Avg	Min	Sum
Temperature				
Max Temperature	75 °F	60 ° F	46 ° F	
Mean Temperature	70 °F	52 ° F	38 °F	
Min Temperature	64 °F	44 °F	27 °F	
Degree Days				
Heating Degree Days (base 65)	27	13	0	388
Cooling Degree Days (base 65)	5	0	0	5
Growing Degree Days (base 50)	20	4	0	128
Dew Point				
Dew Point	65 °F	39 °F	10 °F	
Precipitation				
Precipitation	0.83 in	0.05 in	0.00 in	1.30 in
Snowdepth	0.0 in	0.0 in	0.0 in	-
Wind				
Wind	32 mph	8 mph	0 mph	
Gust Wind	43 mph	22 mph	16 mph	
Sea Level Pressure				
Sea Level Pressure	30.83 in	30.19 in	29.53 in	

http://www.wunderground.com/history/airport/KEWR/2015/11/1/CustomHistory.html?dayend=30&monthend=11&yearen d=2015&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20151101&edate=20151201&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy	
Long-Term Monitoring Program	
Hydrologic Data Review	
Monitoring Period: December 2015	Assessment Required?
Rainfall Event Data:	
Max Rainfall (in): 1.44 Date: 12/23/2015	
50-Year, 24-Hr event? NO	NO
<u>Storm Surge Event Data:</u>	
Max Increase Above Predicted Normal Tidal Cycling (m):0.747Date: 12/29/2015Time:11:00Exceeds event trigger criteria?YES	
Max Tide Gauge Reading (m): 1.247 Date: 12/29/2015 Time: 16:00	
Exceeds event trigger criteria? NO	
10 year storm surge event defined as a hurricane?	
to-year storm suige event denned as a numcane?	NO
Wind Event Data: Max Wind (mph): 31 Date: 12/15/2015	
Exceeds trigger criteria? NO	
Wind direction over 6-hr period: WNW OK	
	NO
	NO
CRITERIA FROM LTMP:	
"Post-High Energy Event Monitoring Activities" will take place promptly following High	
Energy Events. The Consent Order defines "High Energy Events" as follows:	
rainfall exceeding the maximum 50-year/24-hour accumulation (i.e., 7.2 inches of rainfall	
over a 24-hour period), as recorded at Newark Airport;	
 See http://www.wunderground.com/history/ 	
ii. A 10-year storm surge event defined as a hurricane event (not a "nor'easter") resulting in	
an increase in ocean level of either 0.64 meters above normal tidal cycling at the Battery Park tide gauge or 1.40 meters above mean sea level (MSL); or	
Note: Hurricane events are defined by NOAA.	
 See http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750 	
iii. A wind event achieving 34 to 40 knots (39.13 to 46.03 mph), coming from the south through the west, averaged over 6 hours, as recorded at Newark Airport."	
 See http://www.wunderground.com/history/ 	
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Weather History for KEWR - Dece	mber, 2015 ™			
December 🗸 1 🔽 2015	Decemb	oer 🗸 3	31 🗸 2	015 🗸
Get History				
Daily Weekly Monthly Custom				
	Мах	Avg	Min	Sum
Temperature				
Max Temperature	71 °F	57 °F	41 °F	
Mean Temperature	65 °F	50 °F	38 °F	
Min Temperature	59 °F	43 °F	33 °F	
Degree Days				
Heating Degree Days (base 65)	27	15	0	465
Cooling Degree Days (base 65)	O	0	0	0
Growing Degree Days (base 50)	14	3	0	85
Dew Point				
Dew Point	66 °F	41 °F	15 ° F	
Precipitation				
Precipitation	1.44 in	0.17 in	0.00 in	4.41 in
Snowdepth	0.0 in	0.0 in	0.0 in	-
Wind				
Wind	31 mph	7 mph	0 mph	
Gust Wind	41 mph	22 mph	16 mph	
Sea Level Pressure				
Sea Level Pressure	30.70 in	30.10 in	29.36 in	

http://www.wunderground.com/history/airport/KEWR/2015/12/1/CustomHistory.html?dayend=31&monthend=12&yeare nd=2015&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20151201&edate=20160101&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy	
Hydrologic Data Review	
<u>Monitoring Period:</u> January 2016	Assessment Required?
Rainfall Event Data:Max Rainfall (in):1.81Date:1/23/201650-Year, 24-Hr event?NO	NO
Storm Surge Event Data: Max Increase Above Predicted Normal Tidal Cycling (m): 1.241 Date: 1/23/2016 Time: 19:00 Exceeds event trigger criteria?	
Max Tide Gauge Reading (m): 1.573 Date: 1/10/2016 Time: 13:00 Exceeds event trigger criteria? YES	
10-year storm surge event defined as a hurricane? NO	10
Wind Event Data: Max Wind (mph): 36 Date: 1/10/2016 Exceeds trigger criteria? NO Wind direction over 6-hr period: W OK	
	NO
CRITERIA FROM LTMP: "Post-High Energy Event Monitoring Activities" will take place promptly following High Energy Events. The Consent Order defines "High Energy Events" as follows: i. "A 50-year rainfall event defined by the National Weather Service as a 24-hour period of rainfall exceeding the maximum 50-year/24-hour accumulation (i.e., 7.2 inches of rainfall over	
a 24-hour period), as recorded at Newark Airport;	
 See http://www.wunderground.com/history/ ii. A 10-year storm surge event defined as a hurricane event (not a "nor'easter") resulting in an increase in ocean level of either 0.64 meters above normal tidal cycling at the Battery Park tide gauge or 1.40 meters above mean sea level (MSL); or 	
Note: Hurricane events are defined by NOAA.	
 See http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750 	
iii. A wind event achieving 34 to 40 knots (39.13 to 46.03 mph), coming from the south through the west, averaged over 6 hours, as recorded at Newark Airport."	
See http://www.wunderground.com/history/	
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From: January 1 2016	ry, 2016 To: Januar	y 🔽	31 🗸	2016
Get History				
Daily Weekly Monthly Custom				
	Max	Avg	Min	Sum
Temperature				
Max Temperature	65 °F	41 ° F	27 ° F	
Mean Temperature	52 °F	34 °F	21 °F	
Min Temperature	42 °F	25 °F	10 °F	
Degree Days				
Heating Degree Days [base 65]	44	31	13	976
Cooling Degree Days [base 65]	0	0	0	0
Growing Degree Days [base 50]	2	0	0	2
Dew Point				
Dew Point	59 °F	19 °F	- 7 °F	
Precipitation				
Precipitation	1.81 in	0.15 in	0.00 in	4.02 in
Snowdepth	20.0 in	3.9 in	0.0 in	4
Wind				
Wind	36 mph	10 mph	0 mph	
Gust Wind	45 mph	25 mph	16 mph	
Sea Level Pressure				
Sea Level Pressure	30.63 in	30.00 in	29.27 in	

http://www.wunderground.com/history/airport/KEWR/2016/1/1/CustomHistory.html?dayend=31&monthend=1&yearend=2 city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20160101&edate=20160201&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy	
I ong-Term Monitoring Program	
Hvdrologic Data Review	
Monitoring Period: February 2016	Assessment Required?
Prinfall Event Data:	
Max Rainfall (in): 1.02 Date: 2/24/2016	
50-Year, 24-Hr event? NO	
	NO
Storm Surae Event Data:	
Max Increase Above Predicted Normal Tidal Cycling (m): 0.806 Date: 2/9/2016 Time: 2:00	
Exceeds event trigger criteria? YES	
May Tide Cauge Beading (m): 1621 Date: 2/0/2016 Time: 14:00	
Exceeds event trigger criteria? YES	
10-year storm surge event defined as a hurricane? NO	
	NO
Wind Event Data:	
Max Wind (mph): 37 Date: 2/13/2016	
Exceeds trigger criteria? NO	
Wind direction over 6-hr period: WNW OK	
	NO
CRITERIA FROM LTMP:	
"Post-High Energy Event Monitoring Activities" will take place promptly following High Energy Events. The Consent Order defines "High Energy Events" as follows:	
 "A 50-year rainfall event defined by the National Weather Service as a 24-hour period of rainfall exceeding the maximum 50-year/24-hour accumulation (i.e., 7.2 inches of rainfall over a 24-hour period), as recorded at Newark Airport; 	
 See http://www.wunderground.com/history/ 	
ii. A 10-year storm surge event defined as a hurricane event (not a "nor'easter") resulting in an increase in ocean level of either 0.64 meters above normal tidal cycling at the Battery Park tide gauge or 1.40 meters above mean sea level (MSL); or	
Note: Hurricane events are defined by NOAA.	
 See http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750 	
iii. A wind event achieving 34 to 40 knots (39.13 to 46.03 mph), coming from the south	
through the west, averaged over 6 hours, as recorded at Newark Airport."	
See http://www.wunderground.com/history/	
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Weather History for KEWR - Febr From: February 1 2016	ruary, 2016 To: Februar	y 🔽	29 🗸	2016
Get History				
Daily Weekly Monthly Custom				
	Max	Avg	Min	Sum
Temperature				
Max Temperature	64 °F	46 °F	18 °F	
Mean Temperature	52 °F	37 °F	9 ° F	
Min Temperature	42 ° F	29 °F	0 °F	
Degree Days				
Heating Degree Days (base 65)	56	28	13	800
Cooling Degree Days (base 65)	0	0	0	0
Growing Degree Days (base 50)	2	0	0	2
Dew Point				
Dew Point	59 °F	24 °F	-19 °F	
Precipitation				
Precipitation	1.02 in	0.17 in	0.00 in	4.02 in
Snowdepth	4.0 in	0.3 in	0.0 in	
Wind				
Wind	37 mph	11 mph	0 mph	
Gust Wind	46 mph	23 mph	16 mph	
Sea Level Pressure				
Sea Level Pressure	30.62 in	30.01 in	29.22 in	

http://www.wunderground.com/history/airport/KEWR/2016/2/1/CustomHistory.html?dayend=29&monthend=2&yearend=2 city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20160201&edate=20160301&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy							
Long-Term Monitoring Program							
Monitoring Period: March	2016						Assessment
							Required?
Max Rainfall (in): 0.52	Date: 3/14/2016	i					
50-Year, 24-Hr event? NO	20101 0/11/2010						
							NO
Storm Surge Event Data							
Max Increase Above Predicted I	Normal Tidal Cycling (m):	0.576	Date:	3/15/2016	Time:	2:00	
Excee	ds event trigger criteria?	NO					
	4 207 5 4	2/45/2046	 -	C 00			
Max Lide Gauge Reading (m): Exceeds event trigger criteria?	1.207 Date:	3/15/2016	Time:	6:00			
	NO						
10-year storm surge even	t defined as a hurricane?	NO					
							NO
Wind Event Data:							
Max Wind (mph):	40 Date:	3/28/2016					
Exceeds trigger criteria?	YES						
Wind direction over 6-hr period:	W OK	(See Note 1)					
Note:							
(1) The averaged wind speed for the 6-hour pe	eriod during which the maxi	imum wind spee	ed was recorde	ed does not exc	eed the		
threshold criteria.							NO
CRITERIA FROM LTMP:							
"Post-High Energy Event Monitoring A	rtivities" will take place r	vrometly follo	ving High Eng	arav			
Events. The Consent Order defines "H	igh Energy Events" as fol	lows:		ыgy			
				_			
i. "A 50-year rainfall event defined by rainfall exceeding the maximum 50-ye	the National Weather Se ar/24-hour accumulation	rvice as a 24-h 1 (i.e., 7.2 inche	our period of es of rainfall o	f over			
a 24-hour period), as recorded at News	ark Airport;						
See http://www.wundergroun	d.com/history/	-+ - (()+		•			
an increase in ocean level of either 0.6	4 meters above normal t	idal cycling at	the Battery P	Park			
Note: Hurricane events are de	fined by NOAA.						
 See http://tidesandcurrents.nd/line 	paa.gov/waterlevels.htm	l?id=8518750					
iii. A wind event achieving 34 to 40 km	ots (39,13 to 46,03 mph)	. coming from	the south				
through the west, averaged over 6 hou	irs, as recorded at Newai	rk Airport."					
 See http://www.wundergroun 	d.com/history/						
				CH	ECKED BY:	TEA	

Weather History for KEWR - Marc	ch, 2016 ^{To:}			
March 🗸 1 🗸 2016	March	✓ 3	31 🗸 2	2016 ~
Get History				
Daily weekly Monthly Custom	Max	Avg	Min	Sum
Temperature				
Max Temperature	82 °F	59 °F	38 °F	
Mean Temperature	70 °F	49 °F	32 °F	
Min Temperature	59 °F	39 °F	26 °F	
Degree Days				
Heating Degree Days (base 65)	33	16	0	495
Cooling Degree Days [base 65]	5	0	0	5
Growing Degree Days (base 50)	20	3	0	95
Dew Point				
Dew Point	61 °F	31 °F	4 °F	
Precipitation				
Precipitation	0.52 in	0.06 in	0.00 in	1.38 in
Snowdepth	1.0 in	0.0 in	0.0 in	-
Wind				
Wind	40 mph	10 mph	0 mph	
Gust Wind	58 mph	24 mph	16 mph	
Sea Level Pressure				
Sea Level Pressure	30.41 in	30.03 in	29.46 in	

https://www.wunderground.com/history/airport/KEWR/2016/3/1/CustomHistory.html?dayend=31&monthend=3&yearend=2 city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=

Hourly Weather History & Observations

Time (EDT)	Temp.	Windchill	Dew Point	Humidity	Pressure	Visibility	Wind Dir	Wind Speed	Gust Speed	Precip	Events	Conditions
:46 PM	55.4 °F	-	50.0 °F	82%	29.56 in	9.0 mi	WSW	11.5 mph	16.1 mph	N/A		Mostly Cloudy
	SPECI KE	WR 281846Z 250	10G14KT 9SM SC	T007 BKN013 B	KN022 13/10 A29	56 RMK AO2 CI	G 011V015 \$					
51 PM	55.9 °F	-	50.0 °F	80%	29.56 in	9.0 mi	WSW	12.7 mph	18.4 mph	N/A		Mostly Cloudy
	METAR KE	EWR 281851Z 25	011G16KT 9SM S	CT007 BKN015 E	KN022 13/10 A2	958 RMK AO2 S	LP009 T0133010	00 S				
04 PM	59.0 °F	-	50.0 °F	72%	29.55 in	10.0 mi	West	15.0 mph	18.4 mph	N/A		Scattered Clouds
	METAR KE	EWR 281904Z 27	013G16KT 10SM	FEW010 SCT015	SCT024 15/10 A	2955 RMK AO2	SCT024 V BKN	5				
51 PM	62.1 °F	-	46.9 °F	58%	29.53 in	10.0 mi	WSW	18.4 mph	28.8 mph	N/A		Scattered Clouds
	METAR KE	EWR 281951Z 25	016G25KT 10SM I	FEW010 SCT015	SCT024 17/08 A	2953 RMK AO2	SLP998 T01670	DI 3 S				
51 PM	64.9 °F	-	39.9 °F	40%	29.50 in	10.0 mi	WSW	31.1 mph	47.2 mph	N/A		Scattered Clouds
	METAR KE	EWR 282051Z 24	027G41KT 10SM I	FEW040 SCT055	18/04 A2950 RM	IK AO2 PK WND	25041/2051 SLF	PI90 T01830044 560	31 S			
51 PM	60.1 °F	-	35.1 °F	39%	29.54 in	10.0 mi	West	24.2 mph	43.7 mph	N/A		Scattered Clouds
	METAR KE	EWR 282151Z 27	021G38KT 10SM (FEW050 SCT075	16/02 A2954 RM	IK AO2 PK WND	27050/2120 SLF	PIO1 T01580017 S				
51 PM	57.9 °F	-	35.1 °F	42%	29.54 in	10.0 mi	West	29.9 mph	48.3 mph	N/A		Scattered Clouds
	METAR KE	EWR 282251Z 26	026G42KT 10SM	FEW045 SCT065	14/02 A2954 RM	IK AO2 PK WND	27046/2224 SLF	PI02 T01440017 6				
51 PM	57.0 °F	-	35.1 °F	44%	29.56 in	10.0 mi	West	29.9 mph	44.9 mph	N/A		Mostly Cloudy
	METAR KE	EWR 282351Z 27	026G39KT 10SM	FEW050 BKN065	14/02 A2956 RM	IK AO2 PK WND	27042/2322 SL	P009 T01390017 101	83 20100 51019 \$			
51 PM	55.9 °F	-	35.1 °F	45%	29.60 in	10.0 mi	West	26.5 mph	36.8 mph	N/A		Mostly Cloudy
	METAR KE	EWR 290051Z 27	023G32KT 10SM	BKN055 13/02 A2	960 RMK AO2 P	K WND 28043/0	015 SLP021 T01	330017 S				

Averaged wind speed over the 6-hour period =

24 mph

https://www.wunderground.com/history/airport/KEWR/2016/3/28/DailyHistory.html?MR=1



http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20160301&edate=20160401&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy		
Long-Term Monitoring Program Hydrologic Data Review		
		1
Monitoring Period: April	2016	Assessment Required?
Rainfall Event Data:		
Max Rainfall (in): 0.44	Date: 4/4/2016	
50-Year, 24-Hr event? NO		NO
Storm Surge Event Data:		
Max Increase Above Predicted Excee	Iormal Tidal Cycling (m): 0.432 Date: 4/7/2016 Time: 21:00 ds event trigger criteria? NO	
Max Tide Gauge Reading (m): Exceeds event trigger criteria?	1.345 Date: 4/8/2016 Time: 1:00	
10-year storm surge even	defined as a hurricane? NO	
		NO
Wind Event Data:		
Max Wind (mph):	41 Date: 4/3/2016	
Wind direction over 6-hr period:	WNW OK (See Note 1)	
<u>Note:</u> (1) The averaged wind speed for the 6-hour p threshold criteria.	riod during which the maximum wind speed was recorded does not exceed the	
		NO
CRITERIA FROM LTMP:		
"Post-High Energy Event Monitoring A Events. The Consent Order defines "H	tivities" will take place promptly following High Energy gh Energy Events" as follows:	
 i. "A 50-year rainfall event defined by rainfall exceeding the maximum 50-ye a 24-hour period), as recorded at New 	the National Weather Service as a 24-hour period of ar/24-hour accumulation (i.e., 7.2 inches of rainfall over ark Airport;	
 See http://www.wundergrour 	d.com/history/	
ii. A 10-year storm surge event define an increase in ocean level of either 0.6 tide gauge or 1.40 meters above mear	l as a hurricane event (not a "nor'easter") resulting in 4 meters above normal tidal cycling at the Battery Park sea level (MSL); or	
Note: Hurricane events are de	ined by NOAA.	
 See http://tidesandcurrents.n 	baa.gov/waterlevels.html?id=8518750	
iii. A wind event achieving 34 to 40 kn through the west, averaged over 6 ho	ots (39.13 to 46.03 mph), coming from the south rs. as recorded at Newark Airport."	
 See http://www.wundergrour 	d.com/history/	
	CHECKED BY: TEA	_

Weather History for KEWR - April, 20 From:	016 то:			
April 🗸 1 💙 2016	April	- 30	20	16 🗸
Get History				
Daily Weekly Monthly Custom				
	Max	Avg	Min	Sum
Temperature				
Max Temperature	83 ° F	63 º F	44 °F	
Mean Temperature	72 °F	53 °F	35 ° F	
Min Temperature	62 °F	43 °F	26 °F	
Degree Days				
Heating Degree Days [base 65]	30	12	0	362
Cooling Degree Days [base 65]	7	0	O	13
Growing Degree Days [base 50]	22	6	0	174
Dew Point				
Dew Point	64 ° F	34 ° F	-2 °F	
Precipitation				
Precipitation	0.44 in	0.04 in	0.00 in	1.11 in
Snowdepth	0.0 in	0.0 in	0.0 in	÷
Wind				
Wind	41 mph	10 mph	0 mph	
Gust Wind	55 mph	23 mph	16 mph	
Sea Level Pressure				
Sea Level Pressure	30.48 in	30.02 in	29.26 in	

https://www.wunderground.com/history/airport/KEWR/2016/4/1/CustomHistory.html?dayend=30&monthend=4&yearend=2 city=&req_state=&req_state=areq_state=areqdb.zip=&reqdb.magic=&reqdb.wmo=

Hourly Weather History & Observations

Time (EDT)	Temp.	Windchill	Dew Point	Humidity	Pressure	Visibility	Wind Dir	Wind Speed	Gust Speed	Precip	Events	Conditions
5:29 AM	37.4 °F	25.0 °F	30.2 °F	75%	29.37 in	10.0 mi	WNW	29.9 mph	48.3 mph	0.00 in	Rain	Light Rain
	SPECI KI	EWR 030929Z :	30026G42KT 10	ISM -RA FEW01	19 BKN024 OV	C030 03/M01	A2937 RMK AC	2 PK WND 28043	0910 RAB00 PRE	SRR P0000	3	
5:51 AM	37.9 °F	24.9 °F	28.0 °F	68%	29.41 in	10.0 mi	WNW	34.5 mph	48.3 mph	0.00 in		Overcast
	METAR H	EWR 030951Z	29030G42KT 1	OSM FEW019 E	KN024 OVC03	30 03/M02 A29	41 RMK AO2 P	K WND 28043/0	10 RAB00E33 PRE	SRR SLP95	8 P0000 T00331022	\$
8:32 AM	37.4 °F	24.8 °F	24.8 °F	60%	29.49 in	10.0 mi	WNW	31.1 mph	51.8 mph	N/A		Mostly Cloudy
	SPECI KI	EWR 031032Z :	29027G45KT 10	ISM SCT024 BH	(N042 BKN110	03/M04 A294	9 RMK AO2 PK	WND 29047/1013	PRESRR S			
ð:51 AM	36.0 °F	23.2 °F	23.0 °F	59%	29.53 in	10.0 mi	WNW	28.8 mph	55.2 mph	N/A		Mostly Cloudy
	METAR H	EWR 031051Z	29025G48KT 1	OSM SCT024 B	KN044 BKN11	0 02/M05 A298	53 RMK AO2 PF	WND 20048/104	3 PRESRR SLP00	0 T00221050	IS	
7:51 AM	36.0 °F	23.7 °F	16.0 °F	44%	29.62 in	10.0 mi	WNW	26.5 mph	44.9 mph	N/A		Scattered Clouds
	METAR H	EWR 031151Z	30023G39KT 1	OSM FEW024 S	CT042 SCT10	0 02/M09 A29	62 RMK AO2 PI	WND 31041/11	0 SLP030 60000 7	0019 T00221	089 10067 20022 5	1105 S
3:51 AM	35.1 °F	20.8 °F	10.0 °F	35%	29.68 in	10.0 mi	West	35.7 mph	52.9 mph	N/A		Scattered Clouds
	METAR H	EWR 031251Z	28031G46KT 1	OSM FEW042 S	SCT100 02/M12	2 A2989 RMK	AO2 PK WND 2	046/1244 SLP05	61 T00171122 S			
9:51 AM	37.0 °F	24.1 °F	7.0 °F	29%	29.73 in	10.0 mi	WNW	32.2 mph	48.3 mph	N/A		Partly Cloudy
	METAR H	EWR 031351Z	30028G42KT 1	OSM FEW042 0	13/M14 A2973 F	RMK AO2 PK 1	WND 31048/132	2 SLP067 T0020	1139 \$			
10:51 AM	37.9 °F	25.5 °F	7.0 °F	28%	29.78 in	10.0 mi	NW	31.1 mph	47.2 mph	N/A		Scattered Clouds
	METAR H	EWR 031451Z	31027G41KT 1	0SM SCT050 0	3/M14 A2978 F	RMK AO2 PK V	VND 31043/135	SLP083 T00331	139 51053 \$			
11:51 AM	39.0 °F	27.6 °F	6.1 °F	26%	29.81 in	10.0 mi	NW	27.6 mph	43.7 mph	N/A		Scattered Clouds

Averaged wind speed over the 6-hour period = 32 mph

https://www.wunderground.com/history/airport/KEWR/2016/4/3/DailyHistory.html



http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20160401&edate=20160501&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy Long-Term Monitoring Program Hydrologic Data Review	
Monitoring Period: May 2016	Assessment Required?
Rainfall Event Data: Max Rainfall (in): 1.57 Date: 5/30/2016 50-Year, 24-Hr event? NO	NO
<u>Storm Surge Event Data:</u> Max Increase Above Predicted Normal Tidal Cycling (m): 0.595 Date: 5/6/2016 Time: 20:00 Exceeds event trigger criteria? NO	
Max Tide Gauge Reading (m): 1.476 Date: 5/7/2016 Time: 1:00 Exceeds event trigger criteria? YES 1:00	
10-year storm surge event defined as a hurricane? NO	NO
Wind Event Data: Max Wind (mph): 38 Date: 5/15/2016 Exceeds trigger criteria? NO NO Wind direction over 6-hr period: W OK	
CRITERIA FROM LTMP: "Post-High Energy Event Monitoring Activities" will take place promptly following High Energy Events. The Consent Order defines "High Energy Events" as follows: i. "A 50-year rainfall event defined by the National Weather Service as a 24-hour period of	
rainfall exceeding the maximum 50-year/24-hour accumulation (i.e., 7.2 inches of rainfall over a 24-hour period), as recorded at Newark Airport;	
 See http://www.wunderground.com/history/ ii. A 10-year storm surge event defined as a hurricane event (not a "nor'easter") resulting in an increase in ocean level of either 0.64 meters above normal tidal cycling at the Battery Park tide gauge or 1.40 meters above mean sea level (MSL); or 	
Note: Hurricane events are defined by NOAA.	
 See http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750 iii. A wind event achieving 34 to 40 knots (39.13 to 46.03 mph), coming from the south through the west, averaged over 6 hours, as recorded at Newark Airport." 	
 See http://www.wunderground.com/history/ 	
CHECKED BY: TEA	

From: May 1 2016	2016 To: May		31 🗸 3	2016
Get History				
Daily Weekly Monthly Custom				
	Max	Avg	Min	Sum
Temperature				
Max Temperature	96 °F	71 °F	51 ° F	
Mean Temperature	84 °F	63 °F	47 °F	
Min Temperature	71 ° F	53 °F	40 °F	
Degree Days				
Heating Degree Days [base 65]	18	5	0	170
Cooling Degree Days [base 65]	19	3	0	100
Growing Degree Days (base 50)	34	13	0	390
Dew Point				
Dew Point	72 °F	48 °F	24 °F	
Precipitation				
Precipitation	1.57 in	0.15 in	0.00 in	3.85 in
Snowdepth	0.0 in	0.0 in	0.0 in	-
Wind				
Wind	38 mph	8 mph	0 mph	
Gust Wind	48 mph	22 mph	16 mph	
Sea Level Pressure	10.004.00	a support to	in the second	
Sea Level Pressure	30.27 in	29.97 in	29.60 in	

https://www.wunderground.com/history/airport/KEWR/2016/5/1/CustomHistory.html?dayend=31&monthend=5&yearend =2016&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20160501&edate=20160601&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy		
Long-Term Monitoring Program		
Hydrologic Data Review		
Monitoring Period: June	2016	Assessment Required?
Rainfall Event Data:		
Max Rainfall (in): 0.9	04 Date: 6/5/2016	
50-Year, 24-Hr event? N	0	NO
		NU
<u>Storm Surge Event Data:</u>		
Max Increase Above Predicted Exce	Normal Tidal Cycling (m): 0.294 Date: 6/5/2016 Time: 22:00 eeds event trigger criteria? NO	
Max Tide Gauge Reading (m): 1.287 Date: 6/6/2016 Time: 2:00	
Exceeds event trigger criteria	? NO	
10-year storm surge eve	nt defined as a hurricane? NO	
10-year storm surge eve		NO
Wind Front Data		
<u>Wind Event Data:</u> Max Wind (mph): 32 Date: 6/5/2016	
Exceeds trigger criteria	NO	
Wind direction over 6-hr perio	d: W OK	
		NO
		NO
CRITERIA FROM LTMP:		
"Post-High Energy Event Monitoring	Activities" will take place promptly following High	
Energy Events. The Consent Order	defines "High Energy Events" as follows:	
i. "A 50-year rainfall event defined rainfall exceeding the maximum 50-	by the National Weather Service as a 24-hour period of vear/24-hour accumulation (i.e., 7.2 inches of rainfall	
over a 24-hour period), as recorded	at Newark Airport;	
 See http://www.wundergro 	ound.com/history/	
ii. A 10-year storm surge event defi an increase in ocean level of either Bark tide gauge or 1 40 meters about	ned as a hurricane event (not a "nor'easter") resulting in 0.64 meters above normal tidal cycling at the Battery	
Note: Hurricane events are		
• See http://tidesandcurrent	s noss gov/waterlevels.html?id=8518750	
• See http://tidesandcurrent	k_{10} knots (39.13 to 46.03 mph) coming from the south	
through the west, averaged over 6 l	nours, as recorded at Newark Airport."	
 See http://www.wundergro 	ound.com/history/	

Weather History for KEWR - June, 2016

From:	_		-		_	To:	_		_		_
June	\sim	1	~	2016	~	June	~	30	~	2016	~
Get History											

Daily	Weekly	Monthly	Custom				
				Мах	Avg	Min	Sum
Tempera	ature						
Max	Temperature			91 °F	83 °F	69 °F	
Mean	Temperature	2		82 °F	73 °F	62 ° F	
Min T	emperature			73 °F	63 °F	52 °F	
Degree I	Days						
Heati	ng Degree Da	ays (base 65)		3	0	0	6
Cooli	ng Degree Da	ys (base 65)		17	8	0	245
Grow	ing Degree Da	ays (base 50)		33	23	11	688
Dew Poi	nt						
Dew	Point			70 °F	55 °F	30 °F	
Precipita	ation						
Preci	pitation			0.94 in	0.09 in	0.00 in	2.40 in
Snow	depth			0.0 in	0.0 in	0.0 in	1-1
Wind							
Wind				32 mph	9 mph	o mph	
Gust	Wind			45 mph	23 mph	16 mph	
Sea Leve	el Pressure						
Sea L	evel Pressure	e		30.30 in	29.93 in	29.46 in	

https://www.wunderground.com/history/airport/KEWR/2016/6/1/CustomHistory.html?dayend=30&monthend=6&yearen d=2016&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20160601&edate=20160701&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy								
Long-Term Monitoring Program								
Hydrologic Data Review								
								Accessment
Monitoring Period: July	2016							Required?
<u>Rainfall Event Data:</u>	Data	7/25/2016						
50-Year, 24-Hr event? NO	Date.	//23/2010						
								NO
<u>Storm Surge Event Data:</u>								
Max Increase Above Predicted	Normal Tidal C	ycling (m):	0.371	Date:	7/10/2016	Time:	2:00	
Excee	ds event trigge	er criteria?	NO					
Max Tide Gauge Reading (m):	1.117 Da	ite:	7/31/2016	Time:	23:00			
Exceeds event trigger criteria?	NO							
10-year storm surge even	t defined as a f	lumcaner	NO					NO
Wind Event Data								
Max Wind (mph):	48	Date:	7/18/2016					
Exceeds trigger criteria?	YES		.,,					
Wind direction over 6-hr period:	WSW	OK	(See Note 1)					
Note:								
(1) The averaged wind speed for the 6-hour period during which the maximum wind speed was recorded does not exceed the								
threshold criteria.								NO
CRITERIA FROM LTMP:								
"Post-High Energy Event Monitoring A Events. The Consent Order defines "H	ctivities" will ta igh Energy Eve	ike place pi nts" as follo	romptly follov ows:	wing High En	ergy			
i. "A 50-year rainfall event defined by	the National W	/eather Ser	vice as a 24-h	iour period o	over			
a 24-hour period), as recorded at Newark Airport;								
 See http://www.wundergrour 	nd.com/history	/						
ii. A 10-year storm surge event define	d as a hurrican	e event (no	ot a "nor'easte	er") resulting	g in			
an increase in ocean level of either 0.6 tide gauge or 1.40 meters above mean	4 meters abov sea level (MSL	e normal ti _); or	dal cycling at	the Battery	Park			
Note: Hurricane events are defined by NOAA.								
 See http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750 								
iii. A wind event achieving 34 to 40 kn	ots (39.13 to 4	6.03 mph),	coming from	the south				
• See http://www.wundergrour	nd com/history	/ at newari	k Airport.					
	ia.com/mstory	1						
CHECKED BY:TEA								
Weather History for KEWR - July	, 2016 To:							
---------------------------------	---------------	--------------	--------------	---------				
july 🔽 1 🔽 2016	5 V July	~	31 🗸 :	2016				
Get History								
Daily Weekly Monthly Custon	n							
	Max	Avg	Min	Sum				
Temperature								
Max Temperature	99 °F	89 °F	71 ° F					
Mean Temperature	89 °F	80 °F	69 °F					
Min Temperature	80 °F	71 °F	62 °F					
Degree Days								
Heating Degree Days (base 65)	0	0	O	0				
Cooling Degree Days [base 65]	24	15	4	470				
Growing Degree Days [base 50]	39	30	18	923				
Dew Point								
Dew Point	75 ° F	65 ° F	45 °F					
Precipitation								
Precipitation	1.84 in	0.21 in	0.00 in	6.08 in				
Snowdepth	0.0 in	0.0 in	0.0 in	-				
Wind								
Wind	48 mph	9 mph	0 mph					
Gust Wind	66 mph	22 mph	16 mph					
Sea Level Pressure								
Sea Level Pressure	30.23 in	29.95 in	29.72 in					

https://www.wunderground.com/history/airport/KEWR/2016/7/1/CustomHistory.html?dayend=31&monthend=7&yearend =2016&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=

Hourly Weather History & Observations

Time (EDT)	Temp.	Heat Index	Dew Point	Humidity	Pressure	Visibility	Wind Dir	Wind Speed	Gust Speed	Precip	Events	Conditions
1:51 PM	93.0 °F	96.4 °F	66.9 °F	42%	30.02 in	10.0 mi	SW	11.5 mph	23.0 mph	N/A		Mostly Cloudy
	METAR P	EWR 181751Z	22010G20KT 10	SM SCT060 B	KN250 34/19 A	3002 RMK AC	2 SLP165 T03	390194 10344 20	261 58020			
2:51 PM	93.9 °F	96.1 °F	64.9 °F	38%	29.99 in	10.0 mi	SW	16.1 mph	23.0 mph	N/A		Mostly Cloudy
	METAR P	EWR 181851Z	22014G20KT 10	SM SCT060 B	KN250 34/18 A	2999 RMK AC	2 SLP156 T03	440183				
3:51 PM	91.9 °F	94.1 °F	64.9 °F	41%	29.99 in	10.0 mi	SW	16.1 mph	23.0 mph	N/A		Overcast
	METAR H MOV E T	(EWR 181951Z) 03330183	22014G20KT 10	SM SCT060 S	CT210 OVC250	0 33/18 A2999	RMK AO2 PK	WND 24026/192	I SLP153 FRQ LTO	GIC DSNT N	AND DSNT SW-DSNT W	CB DSNT N AND DSNT SW-DSNT W
4:16 PM	91.0 °F	92.6 °F	64.0 °F	41%	29.98 in	10.0 mi	WSW	17.3 mph	-	N/A	Thunderstorm	Thunderstorm
	SPECI K	EWR 182016Z 2	4015KT 10SM T	S BKN060CB	BKN210 OVC2	50 33/18 A299	8 RMK AO2 T	SB18 OCNL LTG	CCG VC SW-VC V	VTS VC SW	VC W MOV E VCSH T032	80178
4:31 PM	91.0 °F	93.0 °F	64.9 °F	42%	29.99 in	8.0 mi	WSW	17.3 mph	-	0.00 in	Rain , Thunderstorm	Light Thunderstorms and Rain
	SPECI K	EWR 182031Z 2	4015KT 8SM -T	SRA BKN060C	B BKN090 OV	C180 33/18 A	2999 RMK AO2	RAB30 TSB16 F	RQ LTGICCG OHE	D-VC SW TS	OHD VC SW MOV E P000	0 T03280183
4:40 PM	86.0 °F	90.1 °F	69.1 °F	57%	30.02 in	1.0 mi	WSW	48.3 mph	65.6 mph	0.00 in	Rain , Thunderstorm	Heavy Thunderstorms and Rain
	SPECI KI T030002	EWR 182040Z 2 06	4042G57KT 1SM	W R04R/P6000	FT +TSRA SQ	BKN055CB B	KN090 OVC15	0 30/21 A3002 RI	VIK AO2 PK WND 2	24057/2039 F	RAB30 TSB16 PRESRR FF	LTGICCG OHD TS OHD MOV E P0000
4:42 PM	82.0 °F	85.5 °F	69.1 °F	65%	30.02 in	0.5 mi	WSW	41.4 mph	65.6 mph	0.00 in	Rain , Thunderstorm	Heavy Thunderstorms and Rain
	SPECI KI E P0000	EWR 182042Z 2 T02780206	5038G57KT 1/2	SM R04R/5000	VP8000FT +T:	SRA SQ BKNO	55CB BKN090	DVC150 28/21 A	3002 RMK AO2 PI	K WND 2405	7/2039 RAB30 TSB16 PR8	SRR FRQ LTGICCG OHD TS OHD MOV
4:51 PM	73.0 °F	-	69.1 °F	87%	30.05 in	1.0 mi	SW	28.8 mph	51.8 mph	0.13 in	Rain , Thunderstorm	Heavy Thunderstorms and Rain
	METAR # 60013 T0	EWR 182051Z: 2280206 53010	22025G45KT 1S	M R04R/4500	VP6000FT +TS	RA FEW022 (OVC055CB 23/	21 A3005 RMK A	D2 PK WND 24057	//2039 RAB3	0 TSB16 SLP175 FRQ LTC	SICCG OHD TS OHD MOV E P0013
5:03 PM	73.0 °F	-	66.9 °F	81%	30.03 in	3.0 mi	SSW	19.6 mph	38.0 mph	0.06 in	Rain , Thunderstorm	Thunderstorms and Rain
	SPECI K	EWR 182103Z 2	1017G33KT 3SM	V R04R/5500V	P6000FT TSR/	A FEW022 OV	C055CB 23/19	A3003 RMK AO	PK WND 21034/2	053 OCNL L	TGICCG VC E-VC SE TS V	/C E-VC SE MOV E P0006 T02280194 \$
5:24 PM	75.9 °F	-	68.0 °F	76%	30.01 in	10.0 mi	SSW	5.8 mph	-	0.10 in	Rain	Light Rain
	SPECI KI T024402	EWR 182124Z 2 00 \$	0005KT 10SM -	RA FEW024 BI	KN065 BKN110	BKN150 24/2	0 A3001 RMK.	402 PK WND 21	034/2053 TSE23 O	CNL LTGIC	CG DSNT E-DSNT SE CB	DSNT E-DSNT SE MOV E P0010
5:51 PM	77.0 °F	-	70.0 °F	79%	30.00 in	10.0 mi	West	8.1 mph	-	0.10 in		Mostly Cloudy
	METAR P	EWR 182151Z	27007KT 10SM	FEW024 SCT0	165 SCT110 BK	N140 25/21 A	3000 RMK AO2	2 PK WND 21034	2053 RAE45 TSE	23 SLP159 V	CSH P0010 T02500211 \$	
6:51 PM	78.1 °F	-	69.1 °F	74%	30.00 in	10.0 mi	WSW	9.2 mph	-	0.00 in	Rain	Light Rain
	METAR H	EWR 182251Z	25008KT 10SM	-RA FEW030 S	CT047 BKN11	0 BKN190 26/	21 A3000 RMK	AO2 RAB40 SLF	157 P0000 T0258	0206 \$		
7:51 PM	78.1 °F	-	71.1 °F	79%	30.00 in	10.0 mi	SW	8.1 mph	-	0.00 in		Mostly Cloudy
	METAR H	EWR 182351Z	23007KT 10SM	FEW055 SCT1	10 BKN150 BK	N260 26/22 A	3000 RMK AO	2 RAE2258 SLP1	59 P0000 60023 T0	02560217 10	350 20222 55016 \$	

Averaged wind speed over the 6-hour period = 19 mph

https://www.wunderground.com/history/airport/KEWR/2016/7/18/DailyHistory.html



http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20160701&edate=20160801&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy	
Long-Term Monitoring Program	
Hydrologic Data Review	
Monitoring Period: August 2016	Assessment
<u>Montoling Period.</u> August 2010	Required?
Rainfall Event Data	
Max Rainfall (in): 0.2 Date: 8/17/2016	
50-Year, 24-Hr event? NO	
	NO
Storm Surge Event Data:	
Max Increase Above Predicted Normal Tidal Cycling (m): 0.271 Date: 8/21/2016 Time: 20:	00
Exceeds event trigger criteria? NO	
Max Tide Gauge Reading (m): 1.176 Date: 8/2/2016 Time: 0:00	
Exceeds event trigger criteria? NO	
10-year storm surge event defined as a hurricane? NO	NO
Wind Event Data:	
Max Wind (mph): 36 Date: 8/1//2016	
Wind direction over 6-br period: W OK	
	NO
"Post-High Energy Event Monitoring Activities" will take place promptly following High Energy	
Events. The Consent Order defines "High Energy Events" as follows:	
i. "A 50-year rainfall event defined by the National Weather Service as a 24-hour period of	
rainfall exceeding the maximum 50-year/24-hour accumulation (i.e., 7.2 inches of rainfall over	
a 24-hour period), as recorded at Newark Airport;	
See http://www.wunderground.com/history/	
ii. A 10-year storm surge event defined as a hurricane event (not a "nor"easter") resulting in an increase in ocean level of either 0.64 meters above normal tidal cycling at the Battery Park	
tide gauge or 1.40 meters above mean sea level (MSL); or	
Note: Hurricane events are defined by NOAA.	
 See http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750 	
iii. A wind event achieving 34 to 40 knots (39.13 to 46.03 mph), coming from the south	
through the west, averaged over 6 hours, as recorded at Newark Airport."	
See http://www.wunderground.com/history/	
CHECKED BY: TEA	

Weather History for KEWR - Augu From:	1st, 2016 To:	_		
August 💙 1 💙 2016	August	~	31 🗸	2016 🗸
Get History				
Daily Weekly Monthly Custom				
	Max	Avg	Min	Sum
Temperature				
Max Temperature	98 °F	89 °F	79 °F	
Mean Temperature	89 °F	80 °F	72 ° F	
Min Temperature	80 °F	71 °F	59 ° F	
Degree Days				
Heating Degree Days (base 65)	0	0	0	0
Cooling Degree Days (base 65)	24	15	7	472
Growing Degree Days (base 50)	38	30	22	929
Dew Point				
Dew Point	78 °F	65 °F	46 °F	
Precipitation				
Precipitation	0.20 in	0.03 in	0.00 in	0.93 in
Snowdepth	0.0 in	0.0 in	0.0 in	2
Wind				
Wind	36 mph	9 mph	o mph	
Gust Wind	46 mph	21 mph	16 mph	
Sea Level Pressure				
Sea Level Pressure	30.32 in	30.04 in	29.69 in	

https://www.wunderground.com/history/airport/KEWR/2016/8/1/CustomHistory.html?dayend=31&monthend=8&yearend =2016®_city=®_state=®_statename=®db.zip=®db.magic=®db.wmo=



http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20160801&edate=20160901&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy		
Long-Term Monitoring Program		
Hydrologic Data Review		
Monitoring Period: September 2016	Assessn Requir	nent ed?
<u>Rainfall Event Data:</u> Max Rainfall (in): 1.03 Date: 9/19 50-Year, 24-Hr event? NO	9/2016	NO
<u>Storm Surge Event Data:</u> Max Increase Above Predicted Normal Tidal Cyclin Exceeds event trigger cr	ng (m): 0.686 Date: 9/30/2016 Time: 6:00 riteria? YES	
Max Tide Gauge Reading (m): 1.305 Date: Exceeds event trigger criteria? NO	9/30/2016 Time: 0:00	
10-year storm surge event defined as a hurr	ricane? NO	
		NO
Wind Event Data: Max Wind (mph): 36 Exceeds trigger criteria? NO Wind direction over 6-hr period: NW C	Date: 9/14/2016 DK	
CRITERIA FROM LTMP:		NO
"Post-High Energy Event Monitoring Activities" will take Events. The Consent Order defines "High Energy Events"	place promptly following High Energy ' as follows:	
 i. "A 50-year rainfall event defined by the National Weat rainfall exceeding the maximum 50-year/24-hour accum a 24-hour period), as recorded at Newark Airport; 	ther Service as a 24-hour period of ulation (i.e., 7.2 inches of rainfall over	
 See http://www.wunderground.com/history/ 		
ii. A 10-year storm surge event defined as a hurricane ev an increase in ocean level of either 0.64 meters above no tide gauge or 1.40 meters above mean sea level (MSL); o	vent (not a "nor'easter") resulting in ormal tidal cycling at the Battery Park or	
Note: Hurricane events are defined by NOAA.		
See http://tidesandcurrents.noaa.gov/waterleve	els.html?id=8518750	
iii. A wind event achieving 34 to 40 knots (39.13 to 46.03 through the west, averaged over 6 hours, as recorded at	3 mph), coming from the south Newark Airport."	
See http://www.wunderground.com/history/		
	CHECKED BY: TEA	

Weather History for KEWR	- Septemi	oer, 2016 To:			
Get History	2016	Septem	iber 3	30 20	016
Daily Weekly Monthly	Custom				
		Max	Avg	Min	Sum
Temperature					
Max Temperature		94 °F	81 ° F	60 ° F	
Mean Temperature		86 ° F	72 ° F	58 °F	
Min Temperature		78 °F	63 °F	51 °F	
Degree Days					
Heating Degree Days (base 65)		7	1	0	16
Cooling Degree Days (base 65)		21	8	0	227
Growing Degree Days (base 50)		36	22	8	657
Dew Point					
Dew Point		75 °F	58 °F	31 °F	
Precipitation					
Precipitation		1.03 in	0.09 in	0.00 in	2.17 in
Snowdepth		0.0 in	0.0 in	0.0 in	- Q
Wind					
Wind		36 mph	9 mph	0 mph	
Gust Wind		50 mph	22 mph	16 mph	
Sea Level Pressure					
Sea Level Pressure		30.37 in	30.09 in	29.80 in	

https://www.wunderground.com/history/airport/KEWR/2016/9/1/CustomHistory.html?dayend=30&monthend=9&yearend =2016&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20160901&edate=20161001&timezone=GMT&datum=MSL&interval=h&action=

ATTACHMENT B YEAR 4 HYDRAULIC AND HYDRODYNAMIC EVALUATION SUMMARIES

SA-7 Sediment Remedy	
Long-Term Monitoring Program Hydrologic Data Review	
Monitoring Period: Year 4 - October 2016 through September 2017	Assessment Required?
Rainfall Event Data: Max Rainfall (in): 3.05 Date: 5/5/2017 50-Year, 24-Hr event? NO	NO
Storm Surge Event Data: Max Increase Above Predicted Normal Tidal Cycling (m): L249 Date: 1/24/2017 Time: 0:00 Exceeds event trigger criteria? YES	
Max Tide Gauge Reading (m):1.498 Date:3/14/2017 Time:15:00Exceeds event trigger criteria?YES	
10-year storm surge event defined as a hurricane? NO - for both events	NO
Wind Event Data: Max Wind (mph): 44 Date: 6/19/2017 Exceeds trigger criteria? YES Wind direction over 6-hr period: WSW OK Note: Note:	
(1) The averaged wind speed for the 6-hour period during which the maximum wind speed was recorded does not exceed the threshold criteria.	NO
CRITERIA FROM LTMP:	
"Post-High Energy Event Monitoring Activities" will take place promptly following High Energy Events. The Consent Order defines "High Energy Events" as follows:	
i. "A 50-year rainfall event defined by the National Weather Service as a 24-hour period of rainfall exceeding the maximum 50-year/24-hour accumulation (i.e., 7.2 inches of rainfall over a 24-hour period), as recorded at Newark Airport;	
See http://www.wunderground.com/history/	
ii. A 10-year storm surge event defined as a hurricane event (not a "nor'easter") resulting in an increase in ocean level of either 0.64 meters above normal tidal cycling at the Battery Park tide gauge or 1.40 meters above mean sea level (MSL); or	
Note: Hurricane events are defined by NOAA.	
 See http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750 	
iii. A wind event achieving 34 to 40 knots (39.13 to 46.03 mph), coming from the south through the west, averaged over 6 hours, as recorded at Newark Airport."	
See http://www.wunderground.com/history/	
CHECKED BY: TEA	

Weather History for KEWR - October, 201	6			
From:	To:			
October V 1 V 2016 V	Septembe	er 🗸 30	2	017
Get History				
Daily Weekly Monthly Custom				
	Max	Avg	Min	Sum
Temperature				
Max Temperature	99 °F	65 °F	23 °F	
Mean Temperature	87 °F	57 °F	18 °F	
Min Temperature	78 °F	48 °F	12 °F	
Degree Days				
Heating Degree Days (base 65)	47	12	0	4234
Cooling Degree Days (base 65)	22	3	0	1268
Growing Degree Days (base 50)	38	11	0	3880
Dew Point				
Dew Point	77 °F	43 °F	-14 °F	
Precipitation				
Precipitation	3.05 in	0.17 in	0.00 in	51.16 i
Snowdepth	6.0 in	0.2 in	0.0 in	-
Wind				
Wind	44 mph	10 mph	0 mph	
Gust Wind	63 mph	24 mph	16 mph	
Sea Level Pressure				
Sea Level Pressure	30.77 in	30.02 in	29.16 in	

https://www.wunderground.com/history/airport/KEWR/2016/10/1/CustomHistory.html?dayend=30&monthend=9&yearen d=2017&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



https://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20161001&edate=20170930&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy	
Long-Term Monitoring Program	
Hydrologic Data Review	
Monitoring Period: October 2016	Assessment Required?
Rainfall Event Datas	
Max Rainfall (in): 0.92 Date: 10/30/2016	
50-Year, 24-Hr event? NO	
	NO
Storm Surae Event Data:	
Max Increase Above Predicted Normal Tidal Cycling (m): 0.552 Date: 10/1/2016 Time: 6:00	
Exceeds event trigger criteria? NO	
May Tide Gauge Reading (m): 1 21 Date: 10/18/2016 Time: 15:00	
Exceeds event trigger criteria? NO	
10-year storm surge event defined as a hurricane? NO	NO
	NU
Wind Event Data:	
Max Wind (mph): 38 Date: 10/30/2016	
Exceeds trigger criteria? NO	
Wind direction over 6-nr period: N OK	
	NO
CRITERIA FROM LTMP:	
"Post-High Energy Event Monitoring Activities" will take place promptly following High Energy	
Events. The Consent Order defines "High Energy Events" as follows:	
i "A 50-year rainfall event defined by the National Weather Service as a 24-bour period of	
rainfall exceeding the maximum 50-year/24-hour accumulation (i.e., 7.2 inches of rainfall over	
a 24-hour period), as recorded at Newark Airport;	
 See http://www.wunderground.com/history/ 	
ii. A 10-year storm surge event defined as a hurricane event (not a "nor'easter") resulting in	
tide gauge or 1.40 meters above mean sea level (MSL); or	
Note: Hurricane events are defined by NOAA.	
 See http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750 	
iii A wind event achieving 34 to 40 knots (39.13 to 46.03 mnh) coming from the south	
through the west, averaged over 6 hours, as recorded at Newark Airport."	
See http://www.wunderground.com/history/	
CHECKED BY: TEA	

From:			To:			
October	1	2016	October		31	2016
Get History						
Daily Weekly	Monthly	Custom				
			Мах	Avg	Min	Sum
Temperature						
Max Temperature	e		87 ° F	67 ° F	51 °F	
Mean Temperatu	re		76 °F	59 °F	45 °F	
Min Temperature	é.		64 °F	50 ° F	37 °F	
Degree Days						
Heating Degree [Days (base 65)		20	7	0	214
Cooling Degree D	Cooling Degree Days [base 65]		11	1	0	32
Growing Degree	Days (base 50)		26	9	0	283
Dew Point						
Dew Point			67 ° F	47 ° F	22 °F	
Precipitation						
Precipitation			0.92 in	0.12 in	0.00 in	3.00 in
Snowdepth			0.0 in	0.0 in	0.0 in	-
Wind						
Wind			38 mph	9 mph	0 mph	
Gust Wind			53 mph	23 mph	16 mph	
Sea Level Pressure						
Sea Level Pressu	ire		30.48 in	30.11 in	29.41 in	

Weather History for KEWR - October, 2016

https://www.wunderground.com/history/airport/KEWR/2016/10/1/CustomHistory.html?dayend=31&monthend=10&yeare nd=2016&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



https://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20161001&edate=20161101&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy	
Long-Term Monitoring Program	
Hydrologic Data Review	
Monitoring Period: November 2016	Assessment Required?
Rainfall Event Data:Max Rainfall (in):2.79Date:11/15/201650-Year, 24-Hr event?NO	NO
Storm Surge Event Data: Max Increase Above Predicted Normal Tidal Cycling (m): 0.451 Date: 11/20/2016 Time: 1:00 Exceeds event trigger criteria? NO	
Max Tide Gauge Reading (m):1.229 Date:11/15/2016 Time:13:00Exceeds event trigger criteria?NO	
10-year storm surge event defined as a hurricane? NO	NO
Wind Event Data:	NO
Max Wind (mph): 37 Date: 11/20/2016 Exceeds trigger criteria? NO	
Wind direction over 6-hr period: W OK	
	NO
<u>CRITERIA FROM LTMP:</u> "Post-High Energy Event Monitoring Activities" will take place promptly following High Energy Events. The Consent Order defines "High Energy Events" as follows:	
i. "A 50-year rainfall event defined by the National Weather Service as a 24-hour period of rainfall exceeding the maximum 50-year/24-hour accumulation (i.e., 7.2 inches of rainfall over a 24-hour period), as recorded at Newark Airport;	
 See http://www.wunderground.com/history/ 	
ii. A 10-year storm surge event defined as a hurricane event (not a "nor'easter") resulting in an increase in ocean level of either 0.64 meters above normal tidal cycling at the Battery Park tide gauge or 1.40 meters above mean sea level (MSL); or	
Note: Hurricane events are defined by NOAA.	
 See http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750 	
iii. A wind event achieving 34 to 40 knots (39.13 to 46.03 mph), coming from the south through the west, averaged over 6 hours, as recorded at Newark Airport."	
See http://www.wunderground.com/history/	
CHECKED BY: TEA	

November	1	2016	Novem	ber	30	2016
Get History						
Daily Week	ly Monthly	Custom				
			Max	Avg	Min	Sum
Temperature						
Max Temperat	ure		74 °F	58 °F	42 ° F	
Mean Tempera	ature		66 ° F	50 ° F	39 °F	
Min Temperatu	ure		57 ° F	41 ° F	32 °F	
Degree Days						
Heating Degre	e Days (base 65)		26	15	0	452
Cooling Degree	e Days (base 65)		1	0	0	1
Growing Degre	ee Days (base 50)		15	3	0	56
Dew Point						
Dew Point			57 ° F	36 ° F	18 °F	
Precipitation						
Precipitation			2.79 in	0.25 in	0.00 in	6.51 in
Snowdepth			0.0 in	0.0 in	0.0 in	1.0
Wind						
Wind			37 mph	10 mph	0 mph	
Gust Wind			46 mph	24 mph	17 mph	
Sea Level Pressu	re					
Sea Level Pres	sure		30.49 in	30.07 in	29.66 in	

To:

Weather History for KEWR - November, 2016

From:

https://www.wunderground.com/history/airport/KEWR/2016/11/1/CustomHistory.html?dayend=30&monthend=11&yeare nd=2016&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



https://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20161101&edate=20161201&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy	
Long-Term Monitoring Program	
Hydrologic Data Review	
Monitoring Period: December 2016	Assessment Required?
Painfall Event Data:	
Max Rainfall (in): 0.71 Date: 12/17/2016	
50-Year, 24-Hr event? NO	
	NO
Storm Surge Event Data:	
Max Increase Above Predicted Normal Tidal Cycling (m): 0.639 Date: 12/7/2016 Time: 7:00	
Exceeds event trigger criteria? NO	
Max Tide Gauge Reading (m): 1,216 Date: 12/14/2016 Time: 13:00	
Exceeds event trigger criteria? NO	
10-year storm surge event defined as a hurricane? NO	NO
Wind Event Data:	
Max Wind (mph): 37 Date: 12/18/2016	
Exceeds trigger criteria? NU Wind direction over 6-br period: NW OK	
	NO
"Post-High Energy Event Monitoring Activities" will take place promptly following High Energy	
Events. The Consent Order defines "High Energy Events" as follows:	
i. "A 50-year rainfall event defined by the National Weather Service as a 24-hour period of	
rainfall exceeding the maximum 50-year/24-hour accumulation (i.e., 7.2 inches of rainfall over	
a 24-nour period), as recorded at Newark Airport;	
• See http://www.wunderground.com/instory/	
an increase in ocean level of either 0.64 meters above normal tidal cycling at the Battery Park	
tide gauge or 1.40 meters above mean sea level (MSL); or	
Note: Hurricane events are defined by NOAA.	
 See http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750 	
iii. A wind event achieving 34 to 40 knots (39.13 to 46.03 mph), coming from the south through the west, averaged over 6 hours, as recorded at Newark Airport."	
 See http://www.wunderground.com/history/ 	
CHECKED BY:TEA	

From:			To:			
December	1	2016	Decemb	ber	31	2016
Get History						
Daily Weekly	Monthly	Custom				
			Мах	Avg	Min	Sum
Temperature						
Max Temperature			62 ° F	45 °F	28 °F	
Mean Temperature			51 °F	38 °F	22 °F	
Min Temperature			41 ° F	31 ° F	16 °F	
Degree Days						
Heating Degree Day	s (base 65)		43	27	14	840
Cooling Degree Days	s (base 65)		0	0	0	0
Growing Degree Day	rs (base 50)		2	0	0	2
Dew Point						
Dew Point			55 ° F	25 °F	-11 °E	
Precipitation						
Precipitation			0.71 in	0.12 in	0.00 in	2.91 in
Snowdepth			2.0 in	0.1 in	0.0 in	-
Wind						
Wind			37 mph	10 mph	0 mph	
Gust Wind			46 mph	25 mph	17 mph	
Sea Level Pressure						
Sea Level Pressure			30.75 in	30.11 in	29.46 in	

Weather History for KEWR - December, 2016

https://www.wunderground.com/history/airport/KEWR/2016/12/1/CustomHistory.html?dayend=31&monthend=12&yeare nd=2016&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



https://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20161201&edate=20170101&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy	
Long-Term Monitoring Program	
Hydrologic Data Review	
Monitoring Period: January 2017	Assessment Required?
Rainfall Event Data: Max Rainfall (in): 1.24 Date: 1/23/2017 50-Year, 24-Hr event? NO	NO
Storm Surge Event Data: Max Increase Above Predicted Normal Tidal Cycling (m): 1.249 Date: 1/24/2017 Time: 0:00 Exceeds event trigger criteria? YES	
Max Tide Gauge Reading (m):1.489Date:1/24/2017Time:11:00Exceeds event trigger criteria?YES	
10-year storm surge event defined as a hurricane? NO	
	NO
Wind Event Data:	
Max Wind (mph): 36 Date: 1/26/2017 Exceeds trigger criteria? NO	
Wind direction over 6-hr period: W OK	
	NO
CRITERIA FROM LTMP:	
"Post-High Energy Event Monitoring Activities" will take place promptly following High Energy Events. The Consent Order defines "High Energy Events" as follows:	
i. "A 50-year rainfall event defined by the National Weather Service as a 24-hour period of rainfall exceeding the maximum 50-year/24-hour accumulation (i.e., 7.2 inches of rainfall over a 24-hour period), as recorded at Newark Airport;	
 See http://www.wunderground.com/history/ 	
ii. A 10-year storm surge event defined as a hurricane event (not a "nor'easter") resulting in an increase in ocean level of either 0.64 meters above normal tidal cycling at the Battery Park tide gauge or 1.40 meters above mean sea level (MSL); or	
Note: Hurricane events are defined by NOAA.	
 See http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750 	
iii. A wind event achieving 34 to 40 knots (39.13 to 46.03 mph), coming from the south through the west, averaged over 6 hours, as recorded at Newark Airport."	
 See http://www.wunderground.com/history/ 	
CHECKED BY: TFA	
	-

Weather History for KEWR - Jan	uary, 2017			
January 🗸 1 🗸 2017	7 🗸 Jan	uary 🖌	31 🗸	2017 🗸
Get History				
Daily Weekly Monthly Custor	n			
	Max	Avg	Min	Sum
Temperature				
Max Temperature	67 ° F	44 ° F	23 °F	
Mean Temperature	57 °F	38 °F	18 °F	
Min Temperature	46 °F	32 °F	12 °F	
Degree Days				
Heating Degree Days (base 65)	47	27	8	833
Cooling Degree Days [base 65]	0	0	0	0
Growing Degree Days (base 50)	6	0	0	6
Dew Point				
Dew Point	53 °F	27 ° F	-1°F	
Precipitation				
Precipitation	1.24 in	0.18 in	0.00 in	4.29 in
Snowdepth	5.0 in	0.5 in	0.0 in	1.1
Wind				
Wind	36 mph	11 mph	0 mph	
Gust Wind	52 mph	25 mph	16 mph	
Sea Level Pressure				
Sea Level Pressure	30.77 in	30.01 in	29.33 in	

https://www.wunderground.com/history/airport/KEWR/2017/1/1/CustomHistory.html?dayend=31&monthend=1&yearend =2017&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



https://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20170101&edate=20170201&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy					
Long-Term Monitoring Program					
Hydrologic Data Review					
Monitoring Period: February	2017				Assessment Required?
<u>Rainfall Event Data:</u> Max Rainfall (in): 0.81 50-Year, 24-Hr event? NO	Date: 2/9/2017				NO
<u>Storm Surge Event Data:</u> Max Increase Above Predicted Excee	Normal Tidal Cycling (m): eds event trigger criteria?	0.553 Date	2/12/2017	Time: 22:00	
Max Tide Gauge Reading (m): Exceeds event trigger criteria?	1.124 Date: NO	2/9/2017 Time:	12:00		
10-year storm surge even	t defined as a hurricane?	NO			
					NO
Wind Event Data:					
Max Wind (mph):	37 Date:	2/13/2017			
Exceeds trigger criteria? Wind direction over 6-br period:	NU NW OK				
wind direction over o-in period.					
	_				NO
"Post-High Energy Event Monitoring A Events. The Consent Order defines "H	ctivities" will take place pr ligh Energy Events" as follo	romptly following High I ows:	Energy		
 i. "A 50-year rainfall event defined by rainfall exceeding the maximum 50-ye a 24-hour period), as recorded at New 	the National Weather Ser ar/24-hour accumulation vark Airport;	vice as a 24-hour period (i.e., 7.2 inches of rainfa	l of Ill over		
 See http://www.wunderground 	nd.com/history/				
ii. A 10-year storm surge event define an increase in ocean level of either 0.6 tide gauge or 1.40 meters above mear	d as a hurricane event (no 54 meters above normal ti 1 sea level (MSL); or	ot a "nor'easter") resulti dal cycling at the Batter	ng in y Park		
Note: Hurricane events are de	fined by NOAA.				
See http://tidesandcurrents.n	oaa.gov/waterlevels.html	l?id=8518750			
iii. A wind event achieving 34 to 40 kn through the west, averaged over 6 hour	ots (39.13 to 46.03 mph), urs, as recorded at Newar	coming from the south k Airport."			
See http://www.wundergroun	nd.com/history/				
			CHE	CKED BY: TEA	_

Weather History	for	KEWR	- February,	2017
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From:	То:			
February V 1 V 2017 V	February	✓ 28	✓ 201	7
Get History				
Daily Weekly Monthly Custom				
	Max	Avg	Min	Sum
Temperature				
Max Temperature	74 °F	50 °F	32 °F	
Mean Temperature	64 °F	42 °F	25 °F	
Min Temperature	53 °F	33 °F	18 °F	
Degree Days				
Heating Degree Days (base 65)	40	23	1	653
Cooling Degree Days (base 65)	0	0	0	0
Growing Degree Days (base 50)	13	1	0	34
Dew Point				
Dew Point	57 °F	27 °F	0 °F	
Precipitation				
Precipitation	0.81 in	0.10 in	0.00 in	2.09 ir
Snowdepth	6.0 in	0.8 in	0.0 in	-
Wind				
Wind	37 mph	10 mph	0 mph	
Gust Wind	49 mph	24 mph	16 mph	
Sea Level Pressure				
Sea Level Pressure	30.43 in	29.95 in	29.31 in	

https://www.wunderground.com/history/airport/KEWR/2017/2/1/CustomHistory.html?dayend=28&monthend=2&yearend =2017&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



https://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20170201&edate=20170301&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy								
Hydrologic Data Review								
								Assessment
Monitoring Period: March	2017							Required?
<u>Rainfall Event Data:</u>								
Max Rainfall (in): 2.06	Date:	3/31/2017						
50-Year, 24-Hr event? NO								
								NO
<u>Storm Surge Event Data:</u>								
Max Increase Above Predicted N	Normal Tidal C	Cycling (m):	0.953	Date:	3/14/2017	Time:	16:00	
Excee	ds event trigg	er criteria?	YES					
May Tido Caugo Poading (m):	1 /09 D	ato	2/14/2017	Time	15.00			
Exceeds event trigger criteria?	YES	ale.	5/14/2017	nine.	15.00			
	-							
10-year storm surge event	t defined as a	hurricane?	NO					
								NO
Wind Event Data:								
Max Wind (mph):	43	Date:	3/2/2017					
Exceeds trigger criteria?	YES							
Wind direction over 6-hr period:	W	OK	(See Note 1)					
Note:								
(1) The averaged wind speed for the 6-hour pe	eriod during wh	ich the maxii	mum wind spee	ed was record	ed does not exc	eed the		
threshold criteria.								NO
								NU
CRITERIA FROM LTMP:								
<i>"</i>								
"Post-High Energy Event Monitoring Ac Events The Consent Order defines "Hi	ctivities" will t igh Energy Eve	ake place pl nts" as follo	romptly follov	ving High En	ergy			
Events. The consent order defines th	BIT LITE BY LVC		J W 3.					
i. "A 50-year rainfall event defined by	the National V	Veather Ser	vice as a 24-h	our period o	of			
rainfall exceeding the maximum 50-yea	ar/24-hour ac	cumulation	(i.e., 7.2 inche	es of rainfall	over			
a 24-nour period), as recorded at Newa	ark Airport;	,						
See http://www.wundergroun	d.com/history	¥/ .,		")				
II. A 10-year storm surge event defined an increase in ocean level of either 0.6	as a nurricar 4 meters abov	ie event (no ve normal ti	ot a "nor easte dal cycling at	er") resulting	g in Park			
tide gauge or 1.40 meters above mean	sea level (MS	L); or	aar cyching at	the Buttery				
 Note: Hurricane events are detail 	fined by NOA	۹.						
 See http://tidesandcurrents.nd 	baa.gov/wate	rlevels.html	?id=8518750					
iii. A wind event achieving 34 to 40 kno	ots (39.13 to 4	16.03 mph).	coming from	the south				
through the west, averaged over 6 hou	irs, as recorde	d at Newar	k Airport."					
 See http://www.wundergroun 	d.com/histor	y/						
					CH	ECKED BY:	TEA	
						_		

From:	n, 2017	То:			
March 🖌 1 🖌 2017	~	March	~	31 🖌	2017
Get History					
Daily Weekly Monthly Custom					
		Max	Avg	Min	Sum
Temperature					
Max Temperature		73 *F	48 °F	27 °F	
Mean Temperature		63 °F	40 °F	24 °F	
Min Temperature		52 °F	31 °F	14 °F	
Degree Days					
Heating Degree Days (base 65)		41	25	2	773
Cooling Degree Days (base 65)		0	0	0	0
Growing Degree Days (base 50)		12	1	0	30
Dew Point					
Dew Point		61 °F	21 °F	-14 °F	
Precipitation					
Precipitation		2,06 in	0.21 in	0.00 in	5.09 in
Snowdepth		5.0 in	0.9 in	0.0 in	-
Wind					
Wind		43 mph	13 mph	0 mph	
Gust Wind		57 mph	26 mph	17 mph	
Sea Level Pressure					
Sea Level Pressure		30.69 in	30.13 in	29.16 in	

https://www.wunderground.com/history/airport/KEWR/2017/3/1/CustomHistory.html?dayend=31&monthend=3&yearend =2017&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=

Hourly Weather History & Observations

Time (EST)	Temp.	Windchill	Dew Point	Humidity	Pressure	Visibility	Wind Dir	Wind Speed	Gust Speed	Precip	Events	Conditions
4:51 AM	52.0 °F	-	27.0 °F	38%	29.52 in	10.0 mi	West	28.8 mph	38.0 mph	N/A		Scattered Clouds
	METAR K	EWR 020951Z 27	7025G33KT 10SM	FEW065 SCT110	0 11/M03 A2951 F	RMK AO2 PK W	ND 27044/0909 S	L 9994 T01111028				
5:51 AM	50.0 °F	-	23.0 °F	35%	29.53 in	10.0 mi	West	17.3 mph	34.5 mph	N/A		Partly Cloudy
	METAR K	EWR 021051Z 26	015G30KT 10SM	FEW065 FEW11	0 10/M05 A2953	RMK AO2 PK W	ND 26045/1005 3	SUP000 T01001050				
6:51 AM	48.0 °F	-	28.0 °F	48%	29.57 in	10.0 mi	West	33.4 mph	43.7 mph	N/A		Partly Cloudy
	METAR K	EWR 021151Z 26	029G38KT 10SM	FEW070 FEW15	0 09/M02 A2957	RMK AO2 PK W	ND 27046/1129 8	SLP013 60000 700 16	T00891022 10183 2	0089 53028		
7:51 AM	46.0 °F	35.8 °F	23.0 °F	40%	29.63 in	10.0 mi	West	36.8 mph	56.4 mph	N/A		Partly Cloudy
	METAR K	EWR 021251Z 27	7032G49KT 10SM	FEW070 FEW25	0 08/M05 A2963	RMK AO2 PK W	ND 27049/1246 :	SLP033 T00781050				
8:41 AM	46.0 °F	36.9 °F	19.9 °F	35%	29.66 in	10.0 mi	West	28.8 mph	42.6 mph	N/A		Partly Cloudy
	SPECI KE	WR 021341Z 27	025G37KT 10SM F	EW070 FEW250	08/M07 A2966 F	RMK AO2 PK W	ID 29047/1257 T	01781067				
8:51 AM	46.0 °F	36.4 °F	19.9 °F	35%	29.67 in	10.0 mi	West	32.2 mph	47.2 mph	N/A		Partly Cloudy
	METAR K	EWR 021351Z 27	7028G41KT 10SM	FEW070 FEW25	0 08/M07 A2967	RMK AO2 PK W	ND 29047/1257 :	SLP045 T00781067				
9:51 AM	46.0 °F	36.1 °F	19.0 °F	34%	29.71 in	10.0 mi	West	34.5 mph	46.0 mph	N/A		Partly Cloudy
	METAR K	EWR 021451Z 27	7030G40KT 10SM	FEW050 08/M07	A2971 RMK A02	2 PK WND 2704	3/1431 SLP059 T	00781072 51048				
10:51 AM	48.0 °F	-	18.0 °F	30%	29.74 in	10.0 mi	West	24.2 mph	39.1 mph	N/A		Partly Cloudy

METAR KEWR 021551Z 27021G34KT 10SM FEW055 09/M08 A2974 RMK AO2 PK WND 27041/1502 SLP071 T008910

Averaged wind speed over the 6-hour period = 31 mph

https://www.wunderground.com/history/airport/KEWR/2017/3/2/DailyHistory.html



https://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20170301&edate=20170401&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy							
Long-Term Monitoring Program							
Hydrologic Data Review							
							A
Monitoring Period: April	2017						Required?
Rainfall Event Data:							
Max Rainfall (in): 1.22 50-Year, 24-Hr event? NO	Date: 4/4/201	/					
							NO
Storm Surae Event Data:							
Max Increase Above Predicted I	Normal Tidal Cycling (m)	: 0.747	Date:	4/6/2017	Time:	15:00	
Excee	ds event trigger criteria	? YES					
Max Tide Gauge Reading (m):	1.414 Date:	4/1/2017	Time:	4:00			
Exceeds event trigger criteria?	YES						
10 year storm surge even	t defined as a hurricane						
10-year storm surge even	t defined as a numcane	r NU					NO
Wind Fuent Data:							
Max Wind (mph):	40 Date	: 4/16/2017					
Exceeds trigger criteria?	YES	, -, -					
Wind direction over 6-hr period:	W OK	(See Note 1)					
Note:							
(1) The averaged wind speed for the 6-hour pe	eriod during which the max	kimum wind spe	ed was record	ed does not exc	eed the		
							NO
<u>CRITERIA FROM LTMP:</u>							
"Post-High Energy Event Monitoring A Events. The Consent Order defines "H	ctivities" will take place igh Energy Events" as fo	promptly follov llows:	wing High En	ergy			
				c			
 "A 50-year rainfall event defined by rainfall exceeding the maximum 50-year a 24-hour period), as recorded at News 	the National Weather Se ar/24-hour accumulation ark Airport:	ervice as a 24-r n (i.e., 7.2 inch	es of rainfall	over			
 See http://www.wundergroun 	id.com/history/						
ii. A 10-year storm surge event defined	d as a hurricane event (r	not a "nor'east	er") resulting	g in			
an increase in ocean level of either 0.6 tide gauge or 1.40 meters above mean	4 meters above normal sea level (MSL); or	tidal cycling at	the Battery I	Park			
Note: Hurricane events are de	fined by NOAA.						
See http://tidesandcurrents.ne	oaa.gov/waterlevels.htn	nl?id=8518750					
iii. A wind event achieving 34 to 40 km through the west, averaged over 6 hou	ots (39.13 to 46.03 mph Irs, as recorded at Newa), coming from Irk Airport."	the south				
 See http://www.wundergroun 	ıd.com/history/						
				CHI		TEA	
				CH		TEA	

From:		To:				
April 🗸 1 🖌 2017	~	April	~	30 🖌 2	2017 💊	
Get History						
Daily Weekly Monthly Custom						
		Max	Avg	Min	Sum	
Temperature						
Max Temperature		87 °F	66 °F	50 °F		
Mean Temperature		76 °F	57 °F	43 °F		
Min Temperature		65 °F	49 °F	36 °F		
Degree Days						
Heating Degree Days (base 65)		22	9	D	265	
Cooling Degree Days (base 65)		11	1	0	36	
Growing Degree Days (base 50)		25	8	0	226	
Dew Point						
Dew Point		66 °F	42 °F	16 °F		
Precipitation						
Precipitation		1.22 in	0.16 in	0.00 in	3.44 in	
Snowdepth		0.0 in	0.0 in	0.0 in	-	
Wind						
Wind		40 mph	10 mph	0 mph		
Gust Wind		51 mph	24 mph	16 mph		
Sea Level Pressure						
Sea Level Pressure		30.53 in	30.01 in	29.20 in		

https://www.wunderground.com/history/airport/KEWR/2017/4/1/CustomHistory.html?dayend=30&monthend=4&yearend =2017&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=

Hourly Weather History & Observations

Time (EDT)	Temp.	Heat Index	Dew Point	Humidity	Pressure	Visibility	Wind Dir	Wind Speed	Gust Speed	Precip	Events	Conditions
3:51 PM	84.0 °F	-	51.1 °F	32%	29.81 in	10.0 mi	WSW	24.2 mph	32.2 mph	0.00 in		Mostly Cloudy
	METAR K	EWR 181951Z 240	21G28KT 10SM FE	EW050 BKN080 I	3KN120 BKN250	29/11 A2981 RM	IK AO2 PK WN	24029/1935 RAB10	DE18 SLP093 VCSH I	NE P0000 T028	390106 \$	
4:51 PM	77.0 °F	-	62.1 °F	60%	29.80 in	10.0 mi	WNW	11.5 mph	-	0.05 in		Mostly Cloudy
	METAR KEWR 182051Z 29010KT 10SM FEW040 SCT080 BKN120 25/17 A2980 RMK AO2 PK WND 28044/2027 RAB21E37 SLP090 VCSH E P0005 80005 T02500187 58018 \$											
5:51 PM	82.0 °F	81.7 °F	57.0 °F	42%	29.79 in	10.0 mi	WSW	15.0 mph	-	N/A		Scattered Clouds
	METAR K	EWR 162151Z 250	13KT 10SM FEWO	80 FEW120 SCT	250 28/14 A2979	RMK AO2 SLP	086 T02780139	s				
8:51 PM	82.9 °F	-	51.1 °F	33%	29.76 in	10.0 mi	WSW	29.9 mph	43.7 mph	N/A		Scattered Clouds
	METAR KEWR 182251Z 24028G38KT 10SM FEW070 FEW130 SCT250 28/11 A2978 RMK AO2 PK WND 23038/2243 SLP078 T0 830108 \$											
7:51 PM	82.0 °F	-	50.0 °F	33%	29.78 in	10.0 mi	WSW	20.7 mph	27.6 mph	N/A		Scattered Clouds
	METAR K	EWR 182351Z 240	18G24KT 10SM S	CT100 SCT250 2	8/10 A2978 RMK	AO2 PK WND 2	24033/2254 SLP	084 60005 T0278 010	00 10306 20233 5500	6 S		
8:51 PM	81.0 °F	-	50.0 °F	34%	29.81 in	10.0 mi	WSW	18.4 mph	31.1 mph	N/A		Mostly Cloudy
	METAR K	EWR 170051Z 240	18G27KT 10SM FE	EW050 SCT080 8	3KN120 BKN250	27/10 A2981 RM	IK AO2 PK WN	24029/0029 SLP09	4 T02720100 \$			
9:17 PM	73.9 °F	-	57.9 °F	57%	29.87 in	10.0 mi	NW	27.6 mph	44.9 mph	N/A		Mostly Cloudy
	SPECI KE	WR 170117Z 3102	4G39KT 10SM FE	W050 SCT080 B	KN120 BKN250 2	23/14 A2987 RM	K AO2 PK WND	32039/0110 WSHFT	0057 T02330144 \$			
9:51 PM	72.0 °F	-	55.9 °F	57%	29.86 in	10.0 mi	NW	20.7 mph	27.6 mph	N/A		Mostly Cloudy
	METAR KEWR 170151Z 31018G24KT 10SM SCT070 BKN090 BKN120 BKN250 22/13 A2988 RMK AC2 PK WND 32039/0110 WSHFT 0057 SLP112 T02220133 \$											

Averaged wind speed over the 6-hour period =

23 mph

https://www.wunderground.com/history/airport/KEWR/2017/4/16/DailyHistory.html



https://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20170401&edate=20170501&timezone=GMT&datum=MSL&interval=h&action=
SA-7 Sediment Remedy							
Long-Term Monitoring Program Hydrologic Data Review							
Monitoring Period: May	2017						Assessment Required?
Rainfall Event Data:							
50-Year, 24-Hr event?	Date: 5/5/2017						NO
Storm Surge Event Data:				_ /_ /			
Max Increase Above Predicted Exce	Normal Tidal Cycling (m) eds event trigger criteria?	2 0.599 P NO	Date:	5/5/2017	Time:	17:00	
Max Tide Gauge Reading (m) Exceeds event trigger criteria	1.457 Date: YES	5/26/2017	Time:	1:00			
10-year storm surge ever	nt defined as a hurricane?	P NO					NO
Wind Event Data:							
Max Wind (mph)	43 Date	5/2/2017					
Exceeds trigger criteria: Wind direction over 6-hr period	WSW OK	(See Note 1)					
<u>Note:</u> (1) The averaged wind speed for the 6-hour p threshold criteria.	period during which the max	imum wind spee	ed was record	ed does not exce	eed the		
							NO
<u>CRITERIA FROM LTMP:</u>							
"Post-High Energy Event Monitoring A Events. The Consent Order defines "H	activities" will take place p ligh Energy Events" as fol	promptly follow lows:	ving High En	ergy			
i. "A 50-year rainfall event defined by rainfall exceeding the maximum 50-ye a 24-hour period), as recorded at New	the National Weather Se ear/24-hour accumulatior vark Airport;	ervice as a 24-h n (i.e., 7.2 inch	our period o es of rainfall	of over			
 See http://www.wundergrou 	nd.com/history/						
ii. A 10-year storm surge event define an increase in ocean level of either 0. tide gauge or 1.40 meters above mea	ed as a hurricane event (n 54 meters above normal t n sea level (MSL); or	ot a "nor'east idal cycling at	er") resulting the Battery I	g in Park			
Note: Hurricane events are de	efined by NOAA.						
 See http://tidesandcurrents.r 	noaa.gov/waterlevels.htm	nl?id=8518750					
iii. A wind event achieving 34 to 40 kr through the west, averaged over 6 ho	nots (39.13 to 46.03 mph) urs, as recorded at Newa	, coming from rk Airport."	the south				
 See http://www.wundergrou 	nd.com/history/						
				CHE	CKED BY:	TEA	

Weather History for KEWR - May, 2	017			
May ~ 1 ~ 2017	Mav	~	31 🗸	2017 🗸
Get History				
Daily Weekly Monthly Custom				
	Max	Avg	Min	Sum
Temperature				
Max Temperature	94 °F	69 °F	53 °F	
Mean Temperature	84 °F	61 °F	48 °F	
Min Temperature	74 °F	53 °F	43 °F	
Degree Days				
Heating Degree Days (base 65)	17	5	D	169
Cooling Degree Days (base 65)	19	2	0	59
Growing Degree Days (base 50)	34	11	0	346
Dew Point				
Dew Point	67 °F	48 °F	26 °F	
Precipitation				
Precipitation	3.05 in	0.28 in	0.00 in	7.24 in
Snowdepth	0.0 in	0.0 in	0.0 in	2
Mind				
Wind	43 mph	10 mph	0 mph	
Gust Wind	54 mph	22 mph	16 mph	
sea Level Pressure				
Sea Level Pressure	30.39 in	29.89 in	29.36 in	

https://www.wunderground.com/history/airport/KEWR/2017/5/1/CustomHistory.html?dayend=31&monthend=5&yearend =2017&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=

Hourly Weather History & Observations

Time (EDT)	Temp.	Dew Point	Humidity	Pressure	Visibility	Wind Dir	Wind Speed	Gust Speed	Precip	Events	Conditions
12:51 PM	73.0 °F	51.1 °F	48%	29.58 in	10.0 mi	West	20.7 mph	-	N/A		Mostly Cloudy
	METAR KE	WR 021651Z 28018	KT 10SM SCT050	BKN070 BKN250 2	23/11 A2958 RMK	AO2 PK WND 2702	8/1602 SLP015 1022	80106 \$			
1:51 PM	73.9 °F	48.9 °F	41%	29.58 in	10.0 mi	WSW	23.0 mph	31.1 mph	N/A		Mostly Cloudy
	METAR KE	WR 021751Z 25020	G27KT 10SM SCT	055 BKN070 23/09	A2958 RMK AO2	PK WND 24030/17	36 SLP017 T023300	94 10244 20206 53002	s		
2:51 PM	73.9 °F	48.0 °F	40%	29.58 in	10.0 mi	West	23.0 mph	31.1 mph	N/A		Mostly Cloudy
	METAR KE	WR 021851Z 27020	G27KT 10SM SCT	060 BKN070 23/09	A2958 RMK AO2	PK WND 24033/18	17 SLP017 T023300	39 S			
3:51 PM	75.0 °F	39.9 °F	28%	29.58 in	10.0 mi	WSW	29.9 mph	43.7 mph	N/A		Scattered Clouds
	METAR KE	WR 021951Z 24026	G38KT 10SM SCT	070 24/04 A2958 F	MK AO2 PK WNE	24038/1950 SLP0	17 T02390044 \$				
4:51 PM	73.9 °F	37.9 °F	27%	29.61 in	10.0 mi	WSW	26.5 mph	42.6 mph	N/A		Scattered Clouds
	METAR KE	WR 022051Z 25023	G37KT 10SM SCT	080 23/03 A2961 F	MK AO2 PK WNE	26043/2031 SLP0	28 T02330033 53009	S			
5:51 PM	71.1 °F	33.1 °F	25%	29.65 in	10.0 mi	West	29.9 mph	41.4 mph	N/A		Scattered Clouds
	METAR KE	WR 022151Z 26026	G38KT 10SM SCT	080 22/01 A2965 F	MK AO2 PK WNE	25047/2101 SLP0	39 T02170008 \$				
6:51 PM	70.0 °F	35.1 °F	28%	29.66 in	10.0 mi	West	26.5 mph	35.7 mph	N/A		Scattered Clouds
	METAR KE	WR 022251Z 27023	G31KT 10SM SCT	090 21/02 A2966 F	MK AO2 PK WNE	27035/2157 SLP0	43 T02110017 \$				

Averaged wind speed over the 6-hour period = 28 mph

https://www.wunderground.com/history/airport/KEWR/2017/5/2/DailyHistory.html



https://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20170501&edate=20170601&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy								
Long-Term Monitoring Program								
Hydrologic Data Review								
Monitoring Period: June	2017							Assessment Required?
<u>Rainfall Event Data:</u> Max Rainfall (in): 156	Date	6/24/2017						
50-Year, 24-Hr event? NO	Dute.	0,21,201,						
								NO
<u>Storm Surge Event Data:</u>								
Max Increase Above Predicted	Normal Tida	I Cycling (m):	0.382	Date:	6/7/2017	Time:	2:00	
Excee	eds event tri	gger criteria?	NO					
Max Tide Gauge Reading (m):	1.244	Date:	6/24/2017	Time:	0:00			
Exceeds event trigger criteria?	NO							
10-vear storm surge even	t defined as	a hurricane?	NO					
	it defined as	u numeune :	No					NO
Wind Fuent Data								
Max Wind (mph):	44	Date:	6/19/2017					
Exceeds trigger criteria?	YES		-, -, -					
Wind direction over 6-hr period:	WSW	ОК	(See Note 1)					
Note:								
(1) The averaged wind speed for the 6-hour p	eriod during v	which the maxi	mum wind spee	ed was record	ed does not exc	eed the		
								NO
CRITERIA FROM LTMP:								
"Post-High Energy Event Monitoring A Events. The Consent Order defines "H	ctivities" wil ligh Energy E	l take place p vents" as follo	romptly follov ows:	ving High En	ergy			
 i. "A 50-year rainfall event defined by rainfall exceeding the maximum 50-ye a 24-hour period), as recorded at New 	the Nationa ar/24-hour a ark Airport;	l Weather Ser accumulation	vice as a 24-h (i.e., 7.2 inche	our period o es of rainfall	of over			
 See http://www.wundergrour 	nd.com/histo	ory/						
ii. A 10-year storm surge event define	d as a hurric	ane event (no	ot a "nor'easte	er") resulting	g in			
an increase in ocean level of either 0.6 tide gauge or 1.40 meters above mear	54 meters ab n sea level (N	ove normal ti /ISL); or	dal cycling at	the Battery	Park			
Note: Hurricane events are de	efined by NO	AA.						
 See http://tidesandcurrents.n 	oaa.gov/wa	terlevels.html	?id=8518750					
iii. A wind event achieving 34 to 40 kn	iots (39.13 to	o 46.03 mph),	coming from	the south				
See http://www.wundergroup	nd com/histo	nrv/	K All port.					
		1/						
					CHI	ECKED BY:	TEA	

From:		To:			
June 💉 1	v 2017	🧹 June	× 3	30 🗸	2017 🗸 🗸
Get History					
Daily Weekly Monthl	ly Custom				
		Max	Avg	Min	Sum
emperature .					
Max Temperature		99 °F	82 °F	60 °F	
Mean Temperature		86 °F	73 °F	57 °F	
Min Temperature		77 °F	63 °F	52 °F	
Degree Days					
Heating Degree Days (base (65)	8	1	0	18
Cooling Degree Days (base 6	65)	21	9	0	257
Growing Degree Days (base	50)	36	23	6	676
Dew Point					
Dew Point		75 °F	57 °F	32 °F	
Precipitation					
Precipitation		1.56 in	0.20 in	0.00 in	5.29 in
Snowdepth		0.0 in	0.0 in	0.0 in	0.0
Wind					
Wind		44 mph	10 mph	0 mph	
Gust Wind		63 mph	23 mph	16 mph	
ea Level Pressure					
Sea Level Pressure		30.16 in	29.92 in	29.57 in	

Weather History for KEWR - June, 2017

https://www.wunderground.com/history/airport/KEWR/2017/6/1/CustomHistory.html?dayend=30&monthend=6&yearend =2017&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=

Hourly Weather History & Observations

Time (EDT)	Temp.	Heat Index	Dew Point	Humidity	Pressure	Visibility	Wind Dir	Wind Speed	Gust Speed	Precip	Events	Conditions
1:51 PM	89.1 °F	94.1 °F	70.0 °F	53%	29.78 in	10.0 mi	SSW	23.0 mph	32.2 mph	N/A		Mostly Cloudy
	METAR K	EWR 191751Z 2	20020G28KT 10	SM FEW038 S	CT043 BKN05	5 BKN130 BKI	N250 32/21 A29	77 RMK AO2 P	WND 21029/1715	SLP082 TO:	3170211 10317 20272 58015	
2:51 PM	91.0 °F	95.6 °F	69.1 °F	48%	29.74 in	10.0 mi	SSW	29.9 mph	38.0 mph	N/A		Mostly Cloudy
	METAR K	EWR 191851Z 2	20026G33KT 10	SM SCT045 S	CT060 BKN160	0 BKN250 33/2	21 A2974 RMK	AO2 PK WND 2	033/1851 SLP071 C	B DSNT N-	NE MOV NE T03280206	
3:51 PM	87.1 °F	92.8 °F	71.1 °F	59%	29.74 in	9.0 mi	SSW	19.6 mph	31.1 mph	0.00 in	Rain	Light Rain
	METAR K	EWR 191951Z 2	20017G27KT 9S	M -RA FEW04	5 BKN055CB E	3KN075 BKN1	60 BKN250 31/	22 A2974 RMK	O2 PK WND 19035	/1924 RAB4	3 SLP071 CB OHD MOV NE	P0000 T03060217
4:01 PM	88.0 °F	92.9 °F	70.0 °F	55%	29.74 in	10.0 mi	South	21.9 mph	31.1 mph	0.00 in	Thunderstorm	Thunderstorm
	SPECI KE	EWR 192001Z 18 W MOV NE VCS	8019G27KT 105 H SW AND W F	SM TS SCT048 20000 T031102	CB SCT080 BI	KN090 BKN25	0 31/21 A2974	RMK AO2 PK W	ND 19027/2000 LTG	DSNT SW	AND W RAE1953 TSB01 OC	NL LTGIC VC SW AND VC W TS VC SW
4:33 PM	82.0 °F	85.9 °F	70.0 °F	67%	29.78 in	0.8 mi	WSW	43.7 mph	57.5 mph	0.00 in	Rain , Thunderstorm	Light Thunderstorms and Rain
	SPECI KE PRESRR	EWR 192033Z 2 OCNL LTGIC O	5038G50KT 3/4: HD TS OHD MC	SM R04R/1600 OV NE P0000 T	VP6000FT -TS 02780211	SRA SCT015 E	KN035CB BKN	065 BKN250 28	21 A2978 RMK AO	PK WND 2	4050/2033 LTG DSNT NE AM	ND SW AND W RAE1953B30 TSB01
4:35 PM	77.0 °F	-	69.8 °F	78%	29.78 in	1.2 mi	WSW	35.7 mph	63.3 mph	N/A	Rain , Thunderstorm	Heavy Thunderstorms and Rain
	SPECI KE W RAE 19	EWR 192035Z C 53B30 TSB01 P	OR 24031G55K RESRR OCNL I	T 200V270 1 1 LTGICCG OHD	/4SM R04R/12 TS OHD MOV	00VP8000FT / N	+TSRA BKN01	BKN035CB BK	N065 BKN250 25/21	A2978 RM	K AO2 PK WND 24055/2034	TWR VIS 2 LTG DSNT NE AND SW AND
4:42 PM	73.0 °F	-	69.1 °F	87%	29.77 in	2.0 mi	SW	18.4 mph	63.3 mph	0.56 in	Rain , Thunderstorm	Heavy Thunderstorms and Rain
	SPECI KE	EWR 192042Z 2 DHD MOV NE P	2016G55KT 2SM 0056 T0228020	VI R04R/1200V 8 S	P6000FT +TSF	RA BR SCTOD	8 BKN010 BKN	035CB OVC250	23/21 A2977 RMK A	O2 PK WN	0 24055/2034 LTG DSNT SW	IN RAE1953B30 TSB01 FRQ LTGICCG
4:51 PM	77.0 °F	-	72.0 °F	84%	29.76 in	6.0 mi	SSW	11.5 mph	-	0.57 in	Rain , Thunderstorm	Light Thunderstorms and Rain
	METAR K TS VC NE	EWR 192051Z 2 E-VC SE-VC S N	21010KT 6SM -1 IOV NE P0057 6	TSRA FEW008 30057 T025002	SCT015 BKN0 22 55005 \$	40CB OVC13	0 25/22 A2976	RMK AO2 PK W	ND 24055/2034 LTG	DSNT ALC	DS RAE1953B30 TSB01 SLF	P077 FRQ LTGICCG VC NE-VC SE-VC S
5:19 PM	78.1 °F	-	73.9 °F	87%	29.79 in	1.0 mi	WSW	39.1 mph	49.5 mph	0.00 in	Thunderstorm	Overcast
	SPECI KE	EWR 192119Z 20 V NE P0000 T02	5034G43KT 1SM 560233 \$	M R04R/3000V	P6000FT TS B	R SCT008 SC	T025 BKN0400	B OVC130 26/2	8 A2979 RMK AO2 F	K WND 25	043/2119 LTG DSNT ALQDS	RAE13 PRESRR OCNL LTGIC OHD TS
5:21 PM	75.9 °F	-	72.0 °F	87%	29.80 in	1.0 mi	West	28.8 mph	49.5 mph	0.03 in	Rain , Thunderstorm	Heavy Thunderstorms and Rain
	SPECI KE NE P0003	EWR 192121Z 20 3 T02440222 \$	8025G43KT 1SM	M R04R/2600V	P6000FT +TSF	RA BKN008 OV	VC025CB 24/2	A2980 RMK A0	2 PK WND 25043/2	119 LTG DS	NT ALQDS RAE13B20 PRES	SRR FRQ LTGICCG OHD TS OHD MOV
5:33 PM	72.0 °F	-	70.0 °F	93%	29.79 in	5.0 mi	West	17.3 mph	26.5 mph	0.41 in	Rain , Thunderstorm	Heavy Thunderstorms and Rain
	SPECI KE	EWR 192133Z 20 V NE P0041 T02	8015G23KT 5SM 220211	VI R04R/3000V	P6000FT +TSF	RA BKN008 BH	KN020CB OVC	40 22/21 A2979	RMK AO2 PK WNE	25043/211	9 WSHFT 2115 LTG DSNT AL	.QDS RAE13B20 FRQ LTGICCG OHD TS
5:51 PM	72.0 °F	-	70.0 °F	93%	29.81 in	7.0 mi	West	20.7 mph	25.3 mph	0.41 in	Rain , Thunderstorm	Light Thunderstorms and Rain
	METAR K TS VC SV	EWR 192151Z 2 V-VC NW MOV 1	20018G22KT 7S NE P0041 T022	M -TSRA FEW 20211	/006 BKN020C	B OVC043 22	21 A2981 RMk	AO2 PK WND :	5043/2119 WSHFT	2115 LTG D	SNT ALQDS RAE13B20 SLP	094 OCNL LTGIC VC SW-VC NW AND
5:58 PM	72.0 °F	-	69.1 °F	91%	29.80 in	5.0 mi	West	17.3 mph	27.6 mph	0.02 in	Rain , Thunderstorm	Light Thunderstorms and Rain
	SPECI KE	EWR 192158Z 2	7015G24KT 5SM	M -TSRA BR FI	EW008 SCT02	OCB OVC041	22/21 A2980 R	MK AO2 LTG DS	NT ALQDS OCNL L	TGIC VC SI	V TS VC SW MOV NE P0002	T02220206
6:11 PM	70.0 °F	-	68.0 °F	93%	29.79 in	3.0 mi	West	15.0 mph	-	0.16 in	Rain , Thunderstorm	Heavy Thunderstorms and Rain
	SPECI KE	EWR 192211Z 21	7013KT 3SM R0	4R/4500VP60	00FT +TSRA B	R SCT006 BK	N028CB OVC0	45 21/20 A2979	RMK AO2 LTG DSN	T ALQDS C	CNL LTGICCG OHD TS OHE	MOV NE P0016 T02110200
6:22 PM	70.0 °F	-	68.0 °F	93%	29.81 in	3.0 mi	WSW	16.1 mph	23.0 mph	0.19 in	Rain , Thunderstorm	Light Thunderstorms and Rain
	SPECI KE T0211020	EWR 192222Z 2: IO	5014G20KT 3SM	M R04R/5500V	P6000FT -TSR	A BR FEW00	8 SCT032CB O	/C045 21/20 A2	981 RMK AO2 SFC	VIS 5 LTG E	SNT ALQDS OCNL LTGICO	G OHD TS OHD MOV NE P0019
6:51 PM	70.0 °F	-	68.0 °F	93%	29.81 in	7.0 mi	SSW	9.2 mph	-	0.37 in	Rain , Thunderstorm	Light Thunderstorms and Rain
	METAR K	EWR 192251Z 2	21008KT 7SM -1	rsra fewoo6	SCT030CB B	(N065 OVC13	0 21/20 A2981	RMK AO2 LTG (SNT ALQDS SLP09	5 OCNL LT	GICCG VC NE-VC E TS VC I	NE-VC E MOV NE P0037 T02110200 \$
6:59 PM	70.0 °F	-	68.0 °F	93%	29.83 in	7.0 mi	SSW	12.7 mph	-	0.01 in	Rain	Rain

Averaged wind speed over the 6-hour period = 22 mph

https://www.wunderground.com/history/airport/KEWR/2017/6/19/DailyHistory.html?MR=1



https://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20170601&edate=20170701&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy					
Hydrologic Data Review					
Monitoring Period: July	2017				Assessment Required?
Rainfall Event Data:					
Max Rainfall (in): 2.15 50-Year, 24-Hr event? NO	Date: 7/7/2017				NO
Storm Surge Event Data:					
Max Increase Above Predicted N Excee	Normal Tidal Cycling (m): ds event trigger criteria?	0.427 Date: NO	7/24/2017	Time: 10:00	
Max Tide Gauge Reading (m): Exceeds event trigger criteria?	1.361 Date:	7/25/2017 Time:	2:00		
10-year storm surge event	defined as a hurricane?	NO			
					NO
Wind Event Data: Max Wind (mph):	20 Date:	7/20/2017			
Exceeds trigger criteria?	NO	//23/2017			
Wind direction over 6-hr period:	NNE OK				
					NO
CRITERIA FROM LTMP:					
"Post-High Energy Event Monitoring Ac Events. The Consent Order defines "Hi	ctivities" will take place p gh Energy Events" as foll	romptly following High Er ows:	nergy		
 i. "A 50-year rainfall event defined by t rainfall exceeding the maximum 50-yea a 24-hour period), as recorded at Newa 	the National Weather Sei ar/24-hour accumulation ark Airport;	rvice as a 24-hour period (i.e., 7.2 inches of rainfal	of l over		
See http://www.wundergroun	d.com/history/				
ii. A 10-year storm surge event defined an increase in ocean level of either 0.64 tide gauge or 1.40 meters above mean	d as a hurricane event (no 4 meters above normal ti sea level (MSL); or	ot a "nor'easter") resultin idal cycling at the Battery	g in Park		
Note: Hurricane events are def	fined by NOAA.				
See http://tidesandcurrents.nc	baa.gov/waterlevels.htm	l?id=8518750			
iii. A wind event achieving 34 to 40 kno through the west, averaged over 6 hou	ots (39.13 to 46.03 mph), irs, as recorded at Newar	, coming from the south k Airport."			
 See http://www.wundergroun 	d.com/history/				
			CULC		
			CHEC	NEUDI. ILA	

Weather History for KEWR - July, 2017

From:	To:			
July 🗸 1 🗸 2017 🗸	July	✓ 31	✓ 201	7 💊
Get History				
Daily Weekly Monthly Custom				
	Max	Avg	Min	Sum
Temperature				
Max Temperature	98 °F	86 °F	73 °F	
Mean Temperature	87 °F	78 °F	68 °F	
Min Temperature	78 °F	69 °F	60 °F	
Degree Days				
Heating Degree Days (base 65)	0	0	0	0
Cooling Degree Days (base 65)	22	13	3	394
Growing Degree Days (base 50)	38	27	18	845
Dew Point				
Dew Point	76 °F	64 °F	46 °F	
Precipitation				
Precipitation	2.15 in	0.19 in	0.00 in	4.33 in
Snowdepth	0.0 in	0.0 in	0.0 in	-
Wind				
Wind	29 mph	9 mph	0 mph	
Gust Wind	34 mph	21 mph	16 mph	
Sea Level Pressure				
Sea Level Pressure	30.25 in	29.96 in	29.72 in	

https://www.wunderground.com/history/airport/KEWR/2017/7/1/CustomHistory.html?dayend=31&monthend=7&yearend =2017&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



https://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20170701&edate=20170801&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy	
I ong-Term Monitoring Program	
Hvdrologic Data Review	
Monitoring Period: August 2017	Assessment Required?
Reinfall Event Data:	
Max Rainfall (in): 0.99 Date: $8/2/2017$	
50-Year, 24-Hr event? NO	
	NO
Storm Surge Event Data	
Max Increase Above Predicted Normal Tidal Cycling (m): 0.456 Date: 8/30/2017 Time: 6:00	
Exceeds event trigger criteria? NO	
Fxceeds event trigger criteria?	
10-year storm surge event defined as a hurricane? NO	
	NO
Wind Event Data:	
Max Wind (mph): 31 Date: 8/22/2017	
Exceeds trigger criteria? NO	
Wind direction over 6-hr period: SSW OK	
	NO
	NO
CRITERIA FROM LTMP:	
Events. The Consent Order defines "High Energy Events" as follows:	
i. "A 50-year rainfall event defined by the National Weather Service as a 24-hour period of	
a 24-hour period), as recorded at Newark Airport;	
See http://www.wunderground.com/history/	
ii. A 10-year storm surge event defined as a hurricane event (not a "nor'easter") resulting in	
an increase in ocean level of either 0.64 meters above normal tidal cycling at the Battery Park	
tide gauge or 1.40 meters above mean sea level (MSL); or	
Note: Hurricane events are defined by NOAA.	
 See http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750 	
iii. A wind event achieving 34 to 40 knots (39.13 to 46.03 mph), coming from the south through the west, averaged over 6 hours, as recorded at Newark Airport."	
 See http://www.wunderground.com/history/ 	
CHECKED BY: TEA	<u>-</u>

Weather History for KEWR - August, 2017

From:	To:			
August 🗸 1 🗸 2017 🗸	August	~ 31	✓ 20	17
Get History				
Daily Weekly Monthly Custom				
	Max	Avg	Min	Sum
Temperature				
Max Temperature	93 °F	82 °F	69 °F	
Mean Temperature	82 °F	74 °F	67 °F	
Min Temperature	73 °F	66 °F	59 °F	
Degree Days				
Heating Degree Days (base 65)	0	0	0	0
Cooling Degree Days (base 65)	17	9	2	287
Growing Degree Days (base 50)	32	24	16	740
Dew Point				
Dew Point	77 °F	61 °F	42 °F	
Precipitation				
Precipitation	0.99 in	0.19 in	0.00 in	5.30
Snowdepth	0.0 in	0.0 in	0.0 in	-
Wind				
Wind	31 mph	8 mph	0 mph	
Gust Wind	40 mph	21 mph	16 mph	
Sea Level Pressure				
Sea Level Pressure	30.31 in	30.02 in	29.75 in	

https://www.wunderground.com/history/airport/KEWR/2017/8/1/CustomHistory.html?dayend=31&monthend=8&yearend =2017&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



https://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20170801&edate=20170901&timezone=GMT&datum=MSL&interval=h&action=

SA-7 Sediment Remedy Long-Term Monitoring Program Hydrologic Data Review	
Monitoring Period: Sentember 2017	Assessment
<u>Montoling Period.</u> September 2017	Required?
Rainfall Event Data: Max Rainfall (in): 0.60 Date: 9/2/2017	
50-Year, 24-Hr event? NO	NO
Storm Surge Event Data: Max Increase Above Predicted Normal Tidal Cycling (m): 0.565 Date: 9/20/2017 Time: 6:00 Exceeds event trigger criteria? NO	
Max Tide Gauge Reading (m):1.335Date:9/20/2017Time:1:00Exceeds event trigger criteria?NO	
10-year storm surge event defined as a hurricane? NO	
	NO
Wind Event Data: Max Wind (mph): 31 Date: 9/5/2017 Exceeds trigger criteria? NO Wind direction over 6-hr period: WNW OK	
	NO
CRITERIA FROM LTMP: "Post-High Energy Event Monitoring Activities" will take place promptly following High Energy Events. The Consent Order defines "High Energy Events" as follows:	
i. "A 50-year rainfall event defined by the National Weather Service as a 24-hour period of rainfall exceeding the maximum 50-year/24-hour accumulation (i.e., 7.2 inches of rainfall over a 24-hour period), as recorded at Newark Airport;	
See http://www.wunderground.com/history/	
ii. A 10-year storm surge event defined as a hurricane event (not a "nor'easter") resulting in an increase in ocean level of either 0.64 meters above normal tidal cycling at the Battery Park tide gauge or 1.40 meters above mean sea level (MSL); or	
Note: Hurricane events are defined by NOAA.	
 See http://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750 	
iii. A wind event achieving 34 to 40 knots (39.13 to 46.03 mph), coming from the south through the west, averaged over 6 hours, as recorded at Newark Airport."	
 See http://www.wunderground.com/history/ 	
CHECKED BY: TEA	

Weather History	for KEWR	- September,	2017
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From:	To:			
September 🗸 1 🗸 2017 🗸	September	🗸 30	✓ 201	7
Get History				
Daily Weekly Monthly Custom				
	Max	Avg	Min	Sum
Temperature				
Max Temperature	92 °F	80 °F	68 °F	
Mean Temperature	80 °F	71 °F	59 °F	
Min Temperature	71 °F	62 °F	49 °F	
Degree Days				
Heating Degree Days (base 65)	6	1	0	17
Cooling Degree Days (base 65)	15	7	0	202
Growing Degree Days (base 50)	30	21	8	624
Dew Point				
Dew Point	73 °F	58 °F	34 °F	
Precipitation				
Precipitation	0.60 in	0.06 in	0.00 in	1.67 ir
Snowdepth	0.0 in	0.0 in	0.0 in	-
Wind				
Wind	31 mph	9 mph	0 mph	
Gust Wind	39 mph	23 mph	16 mph	
Sea Level Pressure				
Sea Level Pressure	30.37 in	30.02 in	29.71 in	

https://www.wunderground.com/history/airport/KEWR/2017/9/1/CustomHistory.html?dayend=30&monthend=9&yearend =2017&req_city=&req_state=&req_statename=&reqdb.zip=&reqdb.magic=&reqdb.wmo=



https://tidesandcurrents.noaa.gov/waterlevels.html?id=8518750&units=metric&bdate=20170901&edate=20171001&timezone=GMT&datum=MSL&interval=h&action=