COMMITMENT & INTEGRITY
DRIVE RESULTS

1111 Nantasket Ave.
Hull, Massachusetts 02045

T 781.925.0906

WOODARD &CURRAN

June 15, 2020

Ms. Marie J. McDonald
U.S. Environmental Protection Agency
Water Enforcement, OES4-SMR
5 Post Office Square
Boston, MA 02109-3912

Subject: Hull, MA Water Pollution Control Facility (WPCF) – NPDES Permit No. MA0101231
Discharge Monitoring Reports – May 2020 – Discharge 001-A

Dear Ms. McDonald:

Enclosed please find the completed DMR for the month of May 2020. Please note that the facility's effluent was in compliance with NPDES requirements, with the exception of one daily excursion for effluent fecal coliform, that occurred on May 12, 2020.

Max Daily Permit limit:	260 CFU/100mL
Result:	350 CFU/100mL

It is unclear why the high result was seen for the fecal coliform, and not the enterococci, as the chlorine residual at the time of sample collection was well above the daily target, and there had several weeks without any issues. A review of the plant flow, sodium hypochlorite dosage and pumping, sample collection, and lab QA/QC was performed, with nothing found. The enterococci sample result for the sample collected at the same time was very low, <10 CFU/100mL. A follow-up sample was collected for fecal coliform and analyzed on 5/14. The results were compliant, <10 CFU/100mL. A copy of the email notifications sent out on 5/14 & 5/15 are included with this submittal.

As a result of the Covid-19 health emergency, the Hull facility had been operating with a modified staffing schedule to encourage social separation and minimize staff interactions while promoting a safe working environment to protect their health. The staffing schedule for May returned to the regular schedule, with minor revisions. David Burns of the MADEP has been kept informed of the staffing changes. There have not been any issues to date, and the facility has been attending the weekly MassDEP Wastewater COVID-19 calls for updates and any changes.

Should you have questions concerning this submittal, please contact the undersigned at 781-925-0906. Thank you for your assistance.

Sincerely,

Aram Varjabedian – Woodard & Curran
Project Manager

Enc. DMR forms, support documentation

Cc: David Burns, MA DEP (SERO) Lakeville, MA
John J. Struzziery - Director of Wastewater Operations/Assistant Director of Public Works
Ryan Joyce – Division of Marine Fisheries

Aram Varjabedian

From:	Aram Varjabedian
Sent:	Friday, May 15, 2020 6:29 PM
To:	Turin, David (Turin.David@epa.gov); david.burns (david.burns@state.ma.us); Joyce, Ryan (FWE)
Cc:	jstruzziery (jstruzziery@town.hull.ma.us); Robert Scott (rscott@woodardcurran.com); Bill Boornazian; bkiely
Subject:	RE: Hull, MA WPCF - MA0101231 - Permit exceedence - Fecal Coliform [5/12/20]

Tracking:

Recipient	Delivery
Turin, David (Turin.David@epa.gov)	
david.burns (david.burns@state.ma.us)	
Joyce, Ryan (FWE)	
jstruzziery (jstruzziery@town.hull.ma.us)	
Robert Scott (rscott@woodardcurran.com)	Delivered: 5/15/2020 6:29 PM
Bill Boornazian	Delivered: 5/15/2020 6:29 PM
bkiely	

Good evening:

I wanted to provide an update, that the follow up sampling for fecal coliform on 5/14, yielded a compliant result. The result was "<10" cfu/100mL. We will continue to review our sampling procedures, and look for any other sources that could contribute to the recent results. We do feel that the facility effluent is compliant and that disinfection is adequate. We will continue with the current chlorination dose rate that provides a higher residual before dichlorination to ensure adequate disinfection.

Should we find any additional information, I will provide an update at that time. In advance, thank you for the continued support and assistance.

Sincerely,

Aram

Aram Varjabedian - Plant Manager
Hull Wastewater Treatment Facility
1111 Nantasket Avenue
Hull, MA 02045
Phone 781.925.0906, Fax 781.925.3056, Cell 339.214.8334
www.woodardcurran.com

WOODARD &CURRAN
COMMITMENT & INTEGRITY DRIVE RESULTS

From: Aram Varjabedian
Sent: Thursday, May 14, 2020 1:53 PM
To: Turin, David (Turin.David@epa.gov) <turin.david@epa.gov>; david.burns (david.burns@state.ma.us) <david.burns@state.ma.us>; Joyce, Ryan (FWE) <ryan.joyce@state.ma.us>

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Cc:	jstruzziery (jstruzziery@town.hull.ma.us); Robert Scott (rscott@woodardcurran.com); Bill Boornazian; bkiely
Subject:	RE: Hull, MA WPCF - MA0101231 - Permit exceedence - Fecal Coliform [5/12/20]

Tracking:

Recipient	Delivery	Read
Turin, David (Turin.David@epa.gov)		
david.burns (david.burns@state.ma.us)		
Joyce, Ryan (FWE)		
jstruzziery (jstruzziery@town.hull.ma.us)		
Robert Scott (rscott@woodardcurran.com)	Delivered: 5/14/2020 1:53 PM	
Bill Boornazian	Delivered: 5/14/2020 1:53 PM	Read: 5/14/2020 2:02 PM
bkiely		

Good afternoon:

I wanted to inform you that the Hull WPCF had a maximum daily exceedance for an effluent fecal coliform sample that was collected on Tuesday May 12, 2020. We were informed of the results from our contract lab G&L Labs, late in the afternoon on 5/13/20.

Max daily fecal coliform limit – 260 CFU / 100ml

Result for 5/13/20 – 350 CFU / 100ml

The sampling for fecal coliform and enterococci is done at the same time and the sample for fecal coliform and enterococci is collected in separate sterile 120mL specimen containers from the chlorine contact chamber channel. The sampling procedure and location are the same, as has been for prior samples collected. The chlorine residual at the time of sample collection was 1.95 mg/L and was maintaining well prior to sampling for several hours. There were no issues with disinfection or flows prior to sample collection. The effluent flow at the time of collection was 1.2 MGD.

As noted in March, for an earlier permit exceedence, [fecal was low, enterococci was high], the effluent pumps pump from the effluent wet well up to the chlorine contact tanks [CCT] and the pumping rate is based upon flows into the plant and the wet well level. Sodium hypochlorite is added into the effluent wet well before the effluent is pumped up to the CCT's. Both CCT's are currently on line. These tanks were pumped out and cleaned in April. It is possible that something microscopic may have become dislodged due to the variable flows just prior to the sampling time, as the effluent pump had cycled on and off several times, due to lower flows. All of the prior samples collected for the past several weeks for both fecal coliform and enterococci, yielded compliant results - </= to10 CFU/100ml. The ~~fecal coliform~~ enterococci result for 5/12 was <10 CFU/100 mL.

I reached out to the contract lab to obtain additional information, to see if all of their QA/QC requirements were met, and if there may have been a reason why the fecal coliform result was high and the enterococci result was very low. Their return reply indicated that all QA/QC was met with the duplicates being consistent and same technician performing the analysis. It is possible that something unforeseen was picked up during the sampling, or something occurred in transport or at the lab. We are also looking for other possible causes for the inconsistent results.

We collected another effluent sample today and will have the lab analyze for fecal coliform. I will provide an update tomorrow. We do not feel at this time that there is an issue with our disinfection system.

Should you have any questions or need additional information, please let me know.

Sincerely,

Aram

Aram Varjabedian - Plant Manager
Hull Wastewater Treatment Facility
1111 Nantasket Avenue
Hull, MA 02045
Phone 781.925.0906, Fax 781.925.3056, Cell 339.214.8334
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HULL, MA WATER POLLUTION CONTROL FACILITY
NPDES NO. MA0101231

Hull Water Pollution Control Facility – Staffing – May 2020

Project Manager/Chief Operator – Aram Varjabedian	MA Grade 7C
Asst. Project Manager/Asst. Chief Operator – William Boornazian	MA Grade 7C
Lead Operator – Joseph Basler	MA Grade 5C
Operations/Maintenance Tech 2 – Eric Sutton	MA Grade 3M
Operations/Maintenance Tech 2 – David Wilson	MA Grade 4M
Operations/Maintenance Tech 1 – Ryan Holman	MA Grade 4M

Supplemental O&M Personnel supporting/assisting the Hull facility

Roger Boltrushek – Part-time Operator	MA Grade 7C
Jody St. George - Sr. Operations Specialist	MA Grade 7C
Richard Gould – Part-time Operator	MA Grade 5C
Robert Scott – Area Manager	MA Grade 6C

Hull Water Pollution Control Facility – Schedule – May 2020

Schedule for 8 Hour/Day coverage:

	License	Sun	Mon	Tue	Wed	Thur	Fri	Sat
Project Manager	7C	***	X	X	X	X	X	
Asst. Project Manager	7C	***	X	X	X	X	X	
Lead Operator	5C			X	X	X	X	X
O&M Tech 1				X	X	X	X	X
O&M Tech 2	3M		X	X	X	X	X	
O&M Tech 2	4M	X	X	X	X	X		
Part-Time Operator	7C or 5C	*						*
Sr. O&M Specialist	7C	**						

- Part-time operator schedule is usually one day every two weeks and the day can vary, but usually on a Sunday and can vary week-to-week. An asterisk [*] denotes those days that the part-time operator could be scheduled.
- [**] Sr. O&M Specialists coverage is occasionally part of the Sunday rotation, and also if licensed operations coverage is needed during the week.
- [***] If Sunday coverage is by Sr. O&M, Lead Operator, or PT operator, then PM and APM schedule is Monday through Friday. PM and APM available and part of the Sunday coverage rotation as needed, and for Saturday coverage if needed.
- PM & APM schedule is Monday through Friday

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)

Name HULL W P C F

Address 1111 NANTASKET AVE

HULL MA 02045

Facility HULL W P C F

Location HULL MA 02045

Attn: John Struzziery, Director of WW Ops

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

OMB No. 2040-0004

PERMIT NUMBER	DISCHARGE NUMBER
MA0101231	001 A

MAJOR
(SUBR E)
F- FINAL
TREATED SANITARY WASTEWATE

*** NO DISCHARGE [ ] ***

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	20	05	01	TO	20	05	31

NOTE: Read instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
BOD, 5-DAY (20 DEG. C) 00310 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	32	61	LBS/DY	3	3	3	mg/L	0	1/7	24
	PERMIT REQUIREMENT	768 MO AVG	WKLY AVG	LBS/DY	30 MO AVG	45 WKLY AVG	50 DAILY MX	mg/L		WEEKLY	COMP 24
BOD, 5-DAY (20 DEG. C) 00310 G 0 0 RAW SEW/INFLUENT	SAMPLE MEASUREMENT	1,375	******	LBS/DY	130	******	******	mg/L	0	1/7	24
	PERMIT REQUIREMENT	REPORT MO AVG	******	LBS/DY	REPORT MO AVG	******	******	mg/L		WEEKLY	COMP 24
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******	****	6.80	******	7.40	SU	0	01/01	GR
	PERMIT REQUIREMENT	******	******	****	6.5 MINIMUM	******	8.5 MAXIMUM	SU		WEEKLY	GRAB
SOLIDS, TOTAL SUSPENDED 00530 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	92	171	LBS/DY	9	12	12	mg/L	0	1/7	24
	PERMIT REQUIREMENT	768 MO AVG	1152 WKLY AVG	LBS/DY	30 MO AVG	45 WKLY AVG	50 DAILY MX	mg/L		WEEKLY	COMP 24
SOLIDS, TOTAL SUSPENDED 00530 G 0 0 RAW SEW/INFLUENT	SAMPLE MEASUREMENT	2,064	******	LBS/DY	197	******	******	mg/L	0	1/7	24
	PERMIT REQUIREMENT	REPORT MO AVG	******	LBS/DY	REPORT MO AVG	******	******	mg/L		WEEKLY	COMP 24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	1.62	2.56	MGD	******	******	******	****	0	99/99	RC
	PERMIT REQUIREMENT	3.04 12 MO AVG	DAILY MX	MGD	******	******	******	****		CONTINUOUS	RCORDR
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 0 0 See Comments	SAMPLE MEASUREMENT	******	******	****	1.37	******	******	MGD	0	99/99	RC
	PERMIT REQUIREMENT	******	******	****	REQ MO AVG	******	******	MGD		CONTIN	RCORDR

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		TELEPHONE		DATE		
Aram Varjabedian - Project Manager John Struzziery, Director of WW Ops	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	781	925-1207	20	06	10
TYPED OR PRINTED	SIGNATURE OF PRICIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENT AND EXPANATION OF ANY VIOLATIONS (Reference all attachments here)

REPORT MAXIMUM AND MINIMUM DAILY FLOW RATES AND TOTAL FLOW FOR EACH OPERATING DAY WITH DMR EACH MONTH

WET DATA ON DMR 001B

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)

Name HULL W P C F
Address 1111 NANTASKET AVE
HULL MA 02045

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

OMB No. 2040-0004

MAJOR
(SUBR E)
F- FINAL
TREATED SANITARY WASTEWATER

PERMIT NUMBER	DISCHARGE NUMBER
MA0101231	001 A

Facility HULL W P C F
Location HULL MA 02045
Attn: John Struzziery, Director of WW Ops

	MONITORING PERIOD						
	YEAR	MO	DAY		YEAR	MO	DAY
FROM	20	05	01	TO	20	05	31

*** NO DISCHARGE [ ] ***

NOTE: Read instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Chlorine, Total Residual	SAMPLE MEASUREMENT	******	******	******	0.28	******	0.71	mg/L	0	03/01	GR
50060 1 0 EFFLUENT GROSS	PERMIT REQUIREMENT	******	******	******	0.7 MO AVG	******	1 DAILY MAX	mg/L		THREE PER DAY	GRAB
ENTEROCOCCI	SAMPLE MEASUREMENT	******	******	******	10	******	<10	CFU/100 ml	0	1/7	GR
61211 1 0 EFFLUENT GROSS	PERMIT REQUIREMENT	******	******	******	35 MO GEO	******	276 DAILY MAX	CFU/100 ml		WEEKLY	GRAB
COLIFORM, FECAL GENERAL	SAMPLE MEASUREMENT	******	******	******	20	******	350	#/100 ml	1	1/7	GR
74055 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	******	******	******	88 MO GEO	******	260 DAILY MX	#/100 ml		WEEKLY	GRAB
BOD, 5-DAY PERCENT REMOVAL	SAMPLE MEASUREMENT	******	******	******	98	******	******	%	0	1/30	CA
81010 K 0 0 PERCENTREMOVAL	PERMIT REQUIREMENT	******	******	******	85 MO AVG	******	******	PER-CEN T		ONCE/ MONTH	CALCTD
SOLIDS, SUSPENDED PERCENT REMOVA	SAMPLE MEASUREMENT	******	******	******	95	******	******	%	0	1/30	CA
81011 K 0 0 PERCENTREMOVAL	PERMIT REQUIREMENT	******	******	******	85 MO AVG	******	******	PER-CEN T		ONCE/ MONTH	CALCTD
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
Aram Varjabedian - Project Manager John Struzziery, Director of WW Ops	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Aram Varjabedian	781	925-1207	20	06	10
TYPED OR PRINTED		SIGNATURE OF PRICIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENT AND EXPANATION OF ANY VIOLATIONS (Reference all attachments here)

REPORT MAXIMUM AND MINIMUM DAILY FLOW RATES AND TOTAL FLOW FOR EACH OPERATING DAY WITH DMR EACH MO

WET DATA ON DMR 001B

Date

Effluent

Effluent TSS		
Week Start	Week End	Avg
04/26/20	05/02/20	9
05/03/20	05/09/20	6
05/10/20	05/16/20	7
05/17/20	05/23/20	11
05/24/20	05/30/20	12
	MAX	**12**

Effluent BOD		
Week Start	Week End	Avg
04/26/20	05/02/20	3
05/03/20	05/09/20	3
05/10/20	05/16/20	3
05/17/20	05/23/20	3
05/24/20	05/30/20	3
	MAX	**3**

Data for dates in current month

Date	TSS mg/l	TSS Lbs	BOD mg/l	BOD LBS
05/01/20				
05/02/20				
05/03/20				
05/04/20				
05/05/20	6	87	3	43
05/06/20				
05/07/20				
05/08/20				
05/09/20				
05/10/20				
05/11/20				
05/12/20	7	78	3	33
05/13/20				
05/14/20				
05/15/20				
05/16/20				
05/17/20				
05/18/20				
05/19/20	11	100	3	27
05/20/20				
05/21/20				
05/22/20				
05/23/20				
05/24/20				
05/25/20				
05/26/20	12	102	3	26
05/27/20				
05/28/20				
05/29/20				
05/30/20				
05/31/20				
MAX	**12**	**102**	**3**	**43**
AVG	**9**	**92**	**3**	**32**

Sunday Thru Saturday (avg placed on Saturday date)

Date	TSS mg/l	TSS LBS	BOD mg/l	BOD LBS
05/01/20				
05/02/20	9	171	3	61
05/03/20				
05/04/20				
05/05/20				
05/06/20				
05/07/20				
05/08/20				
05/09/20	6	87	3	43
05/10/20				
05/11/20				
05/12/20				
05/13/20				
05/14/20				
05/15/20				
05/16/20	7	78	3	33
05/17/20				
05/18/20				
05/19/20				
05/20/20				
05/21/20				
05/22/20				
05/23/20	11	100	3	27
05/24/20				
05/25/20				
05/26/20				
05/27/20				
05/28/20				
05/29/20				
05/30/20	12	102	3	26
05/31/20				
MAX	**12**	**171**	**3**	**61**
Avg	**9**	**108**	**3**	**38**

Influent TSS		
Week Start	**Week End**	**Avg**
04/26/20	05/02/20	89
05/03/20	05/09/20	126
05/10/20	05/16/20	281
05/17/20	05/23/20	169
05/24/20	05/30/20	210
	Max	**281**

Influent BOD		
Week Start	**Week End**	**Avg**
04/26/20	05/02/20	89
05/03/20	05/09/20	110
05/10/20	05/16/20	130
05/17/20	05/23/20	150
05/24/20	05/30/20	130
	Max	150

TSS and BOD Loadings Check Sheet

Influent

Data for dates in current month

Date	TSS mg/l	TSS Lbs	BOD mg/l	BOD LBS
05/01/20				
05/02/20				
05/03/20				
05/04/20				
05/05/20	126	1,818	110	1,587
05/06/20				
05/07/20				
05/08/20				
05/09/20				
05/10/20				
05/11/20				
05/12/20	281	3,117	130	1,442
05/13/20				
05/14/20				
05/15/20				
05/16/20				
05/17/20				
05/18/20				
05/19/20	169	1,536	150	1,364
05/20/20				
05/21/20				
05/22/20				
05/23/20				
05/24/20				
05/25/20				
05/26/20	210	1,786	130	1,106
05/27/20				
05/28/20				
05/29/20				
05/30/20				
05/31/20				
MAX	**281**	**3,117**	**150**	**1,587**
AVG	**197**	**2,064**	**130**	**1,375**

Sunday Thru Saturday (avg placed on Saturday date)

Date	TSS mg/l	TSS Lbs	BOD mg/l	BOD LBS
05/01/20				
05/02/20	89.00		89.00	
05/03/20				
05/04/20				
05/05/20				
05/06/20				
05/07/20				
05/08/20				
05/09/20	126.00		110.00	
05/10/20				
05/11/20				
05/12/20				
05/13/20				
05/14/20				
05/15/20				
05/16/20	281.00		130.00	
05/17/20				
05/18/20				
05/19/20				
05/20/20				
05/21/20				
05/22/20				
05/23/20	169.00		150.00	
05/24/20				
05/25/20				
05/26/20				
05/27/20				
05/28/20				
05/29/20				
05/30/20	210.00		130.00	
05/31/20				
MAX	**281**		**150**	
AVG	**175**		**122**	

Hull WWTF
Monthly Rain, Temperature and Flow
May, 2020

Date	Rainfall	Minimum Air Temp	Maximum Air Temp	Effluent Flow
	Inches	F	F	MGD
05/01/20	0.77	49	60	2.560
05/02/20	0.06	46	66	2.330
05/03/20	0.00	57	69	2.030
05/04/20	0.00	49	65	1.860
05/05/20	0.00	46	56	1.730
05/06/20	0.10	42	52	1.650
05/07/20	0.03	42	61	1.700
05/08/20	0.59	43	55	1.740
05/09/20	0.31	37	43	1.860
05/10/20	0.00	36	59	1.460
05/11/20	0.22	45	60	1.360
05/12/20	0.00	42	53	1.330
05/13/20	0.00	39	57	1.160
05/14/20	0.00	44	67	1.080
05/15/20	1.00	52	72	1.170
05/16/20	0.00	49	63	1.520
05/17/20	0.00	50	67	1.390
05/18/20	0.03	48	55	1.290
05/19/20	0.00	48	53	1.090
05/20/20	0.00	47	54	1.190
05/21/20	0.00	45	73	1.020
05/22/20	0.00	52	78	1.000
05/23/20	0.01	40	65	1.020
05/24/20	0.00	48	53	1.070
05/25/20	0.00	49	53	1.020
05/26/20	0.00	50	69	1.020
05/27/20	0.00	59	79	0.980
05/28/20	0.00	63	75	0.920
05/29/20	0.02	66	74	0.920
05/30/20	0.11	64	76	0.920
05/31/20	0.00	60	79	0.990
Min	0.00	36	43	0.92
Max	1.00	66	79	2.56
Avg	0.10	49	63	1.37
Sum	3.25			42.38

Hull Wastewater Treatment Plant Operations Data

May, 2020

Date		Manual Screen Used	Mechanical Screen	GRIT CHAMBER	GRIT CLASSIFIER	PRI CLAR #1	PRI CLAR #2	AT #1	AT #2	AT #3	AT #4	SEC CLAR #1	SEC CLAR #2	CL2 BASIN #1	CL2 BASIN #2	GRAVITY THICK #1
		Yes/No	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF
Fri	01	No	On	On	Yes	Off	On	On	Off	On	Off	On	On	On	On	On
Sat	02	No	On	On	Yes	Off	On	On	Off	On	Off	On	On	On	On	On
Sun	03	No	On	On	Yes	Off	On	On	Off	On	Off	On	On	On	On	On
Mon	04	No	On	On	Yes	Off	On	On	Off	On	Off	On	On	On	On	On
Tue	05	No	On	On	Yes	Off	On	On	Off	On	Off	On	On	On	On	On
Wed	06	No	On	On	Yes	Off	On	On	Off	On	Off	On	On	On	On	On
Thu	07	No	On	On	Yes	Off	On	On	Off	On	Off	On	On	On	On	On
Fri	08	No	On	On	Yes	Off	On	On	Off	On	Off	On	On	On	On	On
Sat	09	No	On	On	Yes	Off	On	On	Off	On	Off	On	On	On	On	On
Sun	10	No	On	On	Yes	Off	On	On	Off	On	Off	On	On	On	On	On
Mon	11	No	On	On	Yes	Off	On	On	Off	On	Off	On	On	On	On	On
Tue	12	No	On	On	Yes	Off	On	On	Off	On	Off	On	On	On	On	On
Wed	13	No	On	On	Yes	Off	On	On	Off	On	Off	On	On	On	On	On
Thu	14	No	On	On	Yes	Off	On	On	Off	On	Off	On	On	On	On	On
Fri	15	No	On	On	Yes	Off	On	On	Off	On	Off	On	On	On	On	On
Sat	16	No	On	On	Yes	Off	On	On	Off	On	Off	On	On	On	On	On
Sun	17	No	On	On	Yes	Off	On	On	Off	On	Off	On	Off	On	On	On
Mon	18	No	On	On	Yes	Off	On	On	Off	On	Off	On	Off	On	On	On
Tue	19	No	On	On	Yes	Off	On	On	Off	On	Off	On	Off	On	On	On
Wed	20	No	On	On	Yes	Off	Off	On	Off	On	Off	On	Off	On	On	On
Thu	21	No	On	On	Yes	Off	Off	On	Off	On	Off	On	Off	On	On	On
Fri	22	No	On	On	Yes	Off	Off	On	Off	On	Off	On	Off	On	On	On
Sat	23	No	On	On	Yes	Off	Off	On	Off	On	Off	On	Off	On	On	On
Sun	24	No	On	On	Yes	Off	Off	On	Off	On	Off	On	Off	On	On	On
Mon	25	No	On	On	Yes	Off	Off	On	Off	On	Off	On	Off	On	On	On
Tue	26	No	On	On	Yes	Off	Off	On	Off	On	Off	On	Off	On	On	Off
Wed	27	No	On	On	Yes	Off	Off	On	Off	On	Off	On	Off	On	On	Off
Thu	28	No	On	On	Yes	Off	Off	On	Off	On	Off	On	Off	On	On	Off
Fri	29	No	On	On	Yes	Off	Off	On	Off	On	Off	On	Off	On	On	Off
Sat	30	No	On	On	Yes	Off	Off	On	Off	On	Off	On	Off	On	On	Off
Sun	31	No	On	On	Yes	Off	Off	On	Off	On	Off	On	Off	On	On	Off
MIN		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAX		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AVG		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUM		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Hull Wastewater Treatment Plant Operations Data

Date		GRAVITY THICK #2	SLUDGE TANK #1	SLUDGE TANK #2	RST	Rainfall	MIN AIR TEMP	MAX AIR TEMP	GRIT REMOVED	SCREENINGS	INF TSS (Report)	INF BOD (Report)	INF FLOW	INFLUENT Q MINIMUM	INFLUENT Q MAXIMUM	PRI TSS
		ON/OFF	ON/OFF	ON/OFF	ON/OFF	Inches	Deg F	Deg F	LBS	CU FT	MG/L	MG/L	MGD	MGD	MGD	MG/L
Fri	01	Off	Off	Off	Off	0.77	49	60	35	0.7			2.82	1.48	3.83	
Sat	02	Off	Off	Off	Off	0.06	46	66	40	0.7			2.69	2.23	3.13	
Sun	03	Off	Off	Off	Off	0.00	57	69	60	0.7			2.03	0.00	2.88	
Mon	04	Off	Off	On	Off	0.00	49	65	100	0.7			2.22	1.22	2.92	
Tue	05	Off	Off	On	Off	0.00	46	56	80	0.7	126	110	2.06	1.38	2.66	
Wed	06	Off	Off	On	Off	0.10	42	52	40	0.7			1.97	1.18	2.60	
Thu	07	Off	Off	On	Off	0.03	42	61	35	0.7			1.83	0.00	2.99	
Fri	08	Off	Off	On	On	0.59	43	55	50	0.7			2.00	1.34	2.34	
Sat	09	Off	Off	On	Off	0.31	37	43	50	0.7			2.02	1.34	2.32	
Sun	10	Off	Off	On	On	0.00	36	59	100	0.7			1.74	1.30	2.36	
Mon	11	Off	Off	On	Off	0.22	45	60	60	0.7			1.64	1.26	2.29	
Tue	12	Off	Off	On	On	0.00	42	53	25	0.7	281	130	1.60	0.67	2.46	
Wed	13	Off	Off	On	On	0.00	39	57	70	0.7			1.31	0.29	2.37	
Thu	14	Off	Off	On	Off	0.00	44	67	35	0.7			1.21	0.68	2.29	
Fri	15	Off	Off	On	On	1.00	52	72	35	0.7			1.27	0.60	3.00	
Sat	16	Off	Off	On	Off	0.00	49	63	35	0.7			1.72	1.32	2.76	
Sun	17	Off	Off	On	Off	0.00	50	67	40	0.7			1.46	0.39	2.51	
Mon	18	Off	Off	On	Off	0.03	48	55	60	0.7			1.33	0.09	2.98	
Tue	19	Off	Off	On	Off	0.00	48	53	30	0.7	169	150	1.26	0.98	3.25	
Wed	20	Off	Off	On	Off	0.00	47	54	90	0.7			1.26	0.88	2.22	
Thu	21	Off	Off	On	On	0.00	45	73	30	0.7			1.20	0.69	1.66	
Fri	22	Off	Off	On	Off	0.00	52	78	30	0.7			1.16	0.56	1.66	
Sat	23	Off	Off	On	Off	0.01	40	65	20	0.7			1.18	0.63	1.65	
Sun	24	Off	Off	On	On	0.00	48	53	50	0.7			1.25	0.75	2.21	
Mon	25	Off	Off	On	Off	0.00	49	53	30	0.7			1.17	0.73	1.67	
Tue	26	Off	Off	On	Off	0.00	50	69	35	0.7	210	130	1.18	0.80	2.21	
Wed	27	Off	Off	On	On	0.00	59	79	40	0.7			1.11	0.65	1.64	
Thu	28	Off	Off	On	Off	0.00	63	75	35	0.7			1.05	0.59	1.61	
Fri	29	Off	Off	On	On	0.02	66	74	30	0.7			1.05	0.52	1.64	
Sat	30	Off	Off	On	Off	0.11	64	76	35	0.7			1.05	0.53	1.63	
Sun	31	Off	Off	On	On	0.00	60	79	40	0.70			1.11	0.50	2.19	
MIN		-	-	-	-	0.00	36	43	20	1	126	110	1.05	0.00		
MAX		-	-	-	-	1.00	66	79	100	1	281	150	2.82		3.83	
AVG		-	-	-	-	0.10	49	63	47	1	197	130	1.55			
SUM		-	-	-	-	3.25	-	-	1,445	22			-	-	-	-

Hull Wastewater Treatment Plant Operations Data

May, 2020

Date		PRI BOD MG/L	PRI #1 BLANKET FT	PRI #2 BLANKET FT	MLS SVI MG/L	MLSS 5 MIN SET MIN	MLSS 30 MIN SET	MLSS 60 MIN SET	MLSS	RAS TSS	RAS FLOW	SEC #1 BLANKET	SEC #2 BLANKET	WAS TSS THCK	WAS FLOW GALLONS THCK	EFF TSS (Report)
		MG/L	FT	FT	MG/L	MG/L	ML	ML	MG/L	MG/L	MGD	FT	FT	MG/L	GAL	MG/L
Fri	01			0.8	125	290	270	260	2,148		1.03	2.5	2.5		9,540	
Sat	02			0.5							1.01	3.0	3.5		8,920	
Sun	03			1.0	80	300	180	170	2,119		0.97	2.5	2.0		15,680	
Mon	04			0.8							0.97	2.0	2.5		9,540	
Tue	05			1.0							1.00	1.5	2.3		11,570	6.0
Wed	06			0.8	79	380	240	220	3,001	10,982	1.00	1.3	1.8		11,080	
Thu	07			1.3							0.92	2.5	2.5		10,520	
Fri	08			1.3	70	350	190	180	2,712		1.00	2.5	2.3		11,610	
Sat	09			1.3							1.00	3.0	1.5		11,640	
Sun	10			0.3	78	280	180	150	2,290		1.00	2.0	1.8		11,290	
Mon	11			1.0							1.00	1.3	2.3		10,620	
Tue	12			0.8							0.98	1.5	2.0		10,640	7.0
Wed	13			1.0	110	350	290	280	2,634		0.98	1.5	2.0		10,750	
Thu	14			1.3							0.98	2.0	1.5		10,750	
Fri	15			0.5	67	370	200	190	2,963	6,202	0.98	1.5	2.0		10,690	
Sat	16			0.8							0.98	2.0	2.3		10,540	
Sun	17			0.5	75	300	170	160	2,253		0.91	2.0	1.5		9,510	
Mon	18			0.5							0.95	1.5			8,100	
Tue	19			0.5							0.87	2.0			7,670	11.0
Wed	20				69	390	220	200	3,166	11,400	0.83	3.3			8,280	
Thu	21										0.83	2.0			8,690	
Fri	22				68	450	250	230	3,630	9,640	0.85	2.3			8,590	
Sat	23										0.85	3.5			8,720	
Sun	24				67	420	230	230	3,453		0.85	4.0			8,720	
Mon	25										0.83	3.0			9,780	
Tue	26										0.83	3.0			9,980	12.0
Wed	27				66	450	250	240	3,773	12,898	0.80	3.0			11,320	
Thu	28										0.80	2.5			11,710	
Fri	29				63	400	250	240	3,949		0.80	2.5			13,420	
Sat	30										0.80	3.8			14,800	
Sun	31				60	320	200	200	3,340		0.82	3.5			15,050	
MIN				0.3	60	280	170	150	2,119	6,202	0.80	1.3	1.5		7,670	6.0
MAX				1.3	125	450	290	280	3,949	12,898	1.03	4.0	3.5		15,680	12.0
AVG				0.8	77	361	223	211	2,959	10,224	0.92	2.4	2.1		10,636	9.0
SUM		-	-	-	-	-	-	-	-	-	-	-	-	-	329,720	-

Hull Wastewater Treatment Plant Operations Data

May, 2020

Date		EFF BOD (Report)	EFF FECAL #/100	EFF MAX DAILY FLOW MGD	EFF MIN DAILY FLOW MGD	EFF FLOW MGD	EFF #1pH	CL2 RES #1	CL2 RES #2	CL2 RES #3	CL2 RES Daily Avg	THICKENED SLUDGE TS	THICKENER #1 BLANKET	THICKENER #2 BLANKET	LEACHATE TSS	LEACHATE BOD	LEACHATE COD
		MG/L	ML	MGD	MGD	MGD	SU	MG/L	MG/L	MG/L	MG/L	%	FT	FT	MG/L	MG/L	MG/L
Fri	01			4.19	1.17	2.56	6.90	0.85	0.72	0.56	0.71	5.1	8.5				
Sat	02			3.09	1.60	2.33	7.00	0.40	0.38	0.52	0.43		9.5				
Sun	03			4.31	0.65	2.03	6.90	0.22	0.19	0.11	0.17		10.0				
Mon	04			4.01	1.22	1.86	6.80	0.14	0.12	0.06	0.11	5.3	10.0				
Tue	05	3.0	10	2.50	1.20	1.73	6.90	0.04	0.32	0.13	0.16		9.8				
Wed	06			2.35	1.14	1.65	7.10	0.00	0.29	0.69	0.33	5.6	8.5				
Thu	07			4.22	0.00	1.70	7.10	0.02	0.36	0.37	0.25		7.0				
Fri	08			2.38	1.15	1.74	7.10	0.42	0.05	0.01	0.16	6.0	6.5				
Sat	09			3.47	0.01	1.86	7.10	0.08	0.05	0.02	0.05		6.0				
Sun	10			2.03	1.06	1.46	7.10	0.18	0.09	0.27	0.18		7.0				
Mon	11			2.12	0.01	1.36	6.90	0.16	0.08	0.00	0.08	7.3	7.5				
Tue	12	3.0	350	1.82	0.01	1.33	7.00	0.21	0.18	0.03	0.14	5.8	6.5				
Wed	13			1.69	0.01	1.16	7.00	0.47	0.52	0.04	0.34	7.1	5.0				
Thu	14		10	1.67	0.01	1.08	7.00	0.50	0.62	0.75	0.62		4.5				
Fri	15			4.15	0.01	1.17	7.10	0.71	0.27	0.00	0.33	7.1	4.5				
Sat	16			2.31	1.13	1.52	6.90	0.52	0.60	0.78	0.63		4.0				
Sun	17			2.31	0.02	1.39	7.00	0.81	0.26	0.14	0.40		4.3				
Mon	18			4.11	0.01	1.29	6.90	0.17	0.85	0.46	0.49	6.7	4.0				
Tue	19	3.0	10	4.24	0.81	1.09	7.00	0.59	0.80	0.15	0.51		4.0				
Wed	20			4.33	0.80	1.19	6.90	0.24	0.02	0.24	0.17	6.2	5.0				
Thu	21			1.45	0.01	1.02	6.90	0.01	0.03	0.05	0.03	7.1	3.5				
Fri	22			1.34	0.01	1.00	7.00	0.02	0.03	0.00	0.02	6.3	1.0				
Sat	23			1.49	0.01	1.02	7.10	0.05	0.11	0.07	0.08	4.1	1.0				
Sun	24			1.63	0.01	1.07	7.40	0.08	0.12	0.08	0.09		1.0				
Mon	25			1.46	0.01	1.02	7.00	0.02	0.08	0.19	0.10		1.0				
Tue	26	3.0		1.81	0.01	1.02	7.10	0.42	0.10	0.01	0.18	1.3					
Wed	27		10	1.38	0.01	0.98	7.00	0.09	0.26	0.03	0.13						
Thu	28			1.35	0.01	0.92	7.00	0.79	0.63	0.02	0.48						
Fri	29			1.31	0.01	0.92	7.10	1.01	0.87	0.05	0.64						
Sat	30			1.37	0.01	0.92	7.00	0.48	0.52	0.18	0.39	6.7					
Sun	31			1.57	0.01	0.99	7.10	0.03	0.58	0.30	0.30						
MIN		3.0	10		0.00	0.92	6.80	0.00	0.02	0.00	0.02	1.28	1.00	-	-	-	-
MAX		3.0	350	4.33		2.56	7.40	1.01	0.87	0.78	0.71	7.30	10.00	-	-	-	-
AVG		3.0	78			1.37	7.01	0.31	0.33	0.20	0.28	5.85	5.58	-	-	-	-
SUM		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Hull Wastewater Treatment Plant Operations Data

Date		LEACHATE	Groundwater Underdrain	Potable H2O Calc.	Thickened Feed Sludge Gallons to truck	THICKENED SLDG	Sludge Holding Tank Level	Thickened Sludge Holding Tank Level	EFF TEMP	Enterococci	Toxicity	GALS HEATING OIL	NaOCl	NaOH	Hingham Flow
		GAL	GAL	GAL	GAL	LBS/DAY	FT	FT	DEG C	No/100ml	%	Inches	Gallons	Gallons	MGD
Fri	01			33	9,000	3,790	0.0	0.3	13.3			1,865	57	1.0	
Sat	02			76	0		0.0	0.3	13.2			1,865	86	2.0	
Sun	03			111	0		0.0	2.2	14.6			1,865	58	1.0	
Mon	04			103	9,000	3,968	0.0	3.1	15.1			1,865	51	1.0	
Tue	05			127	0		0.0	5.2	13.8	<10		1,865	56	1.0	
Wed	06			60	8,500	3,994	0.0	7.2	13.4			1,865	53	2.0	
Thu	07			138	0		0.0	9.5	13.0			1,865	59	1.0	
Fri	08			96	8,500	4,256	0.0	8.9	13.0			1,865	52	2.0	
Sat	09			115	0		0.0	8.6	11.8			1,865	62	2.0	
Sun	10			63	0		0.0	8.4	12.0			1,865	48	2.0	
Mon	11			49	9,000	5,479	0.0	9.3	13.0			1,865	57	2.0	
Tue	12			80	8,500	4,139	0.0	7.2	12.6	<10		1,865	61	1.0	
Wed	13			94	9,000	5,346	0.0	6.9	13.2			1,865	61	2.8	
Thu	14			71	0		0.0	3.8	13.8			1,865	62	1.2	
Fri	15			109	9,000	5,315	0.0	4.6	14.7			1,865	69	1.0	
Sat	16			97	0		0.0	4.2	15.4			1,865	95	2.0	
Sun	17			61	0		0.0	4.6	15.2			1,865	63	2.0	
Mon	18			131	9,000	5,056	0.0	3.5	15.1			1,865	73	1.0	
Tue	19			29	0		0.0	4.8	15.0	<10		1,865	55	2.0	
Wed	20			90	9,000	4,683	0.0	6.4	15.2			1,865	75	1.0	
Thu	21			41	9,000	5,358	0.0	6.3	15.1			1,865	49	2.0	
Fri	22			234	9,000	4,740	0.0	5.0	16.7			1,865	52	1.0	
Sat	23			92	9,000	3,077	0.0	6.8	17.5			1,865	64	2.0	
Sun	24			20	0		0.0	8.0	21.3			1,865	44	2.0	
Mon	25			35	0		0.0	4.3	15.5			1,865	52	1.0	
Tue	26			32	9,000	964	0.0	6.2	16.0			1,865	64	2.0	
Wed	27			97	0		0.0	6.4	17.5	<10		1,865	61	2.0	
Thu	28			169	0		0.0	5.2	18.1			1,865	67	1.0	
Fri	29			138	0		0.0	6.4	18.7			1,865	79	3.0	
Sat	30			170	9,000	5,059	0.0	6.5	17.8			1,865	83	1.0	
Sun	31			54	0		0.0	6.1	17.4			1,865	58	3.0	
MIN		-	-	20	0	964	0	0	12	<10	-	1,865	44	1.0	
MAX		-	-	234	9,000	5,479	0	10	21	<10	-	1,865	95	3.0	
AVG		-	-	91	4,306	4,348	0	6	15	<10	-	1,865	62	1.6	
SUM		-	-	2,814	133,500	65,224	-	-	-		-	-	-	-	

Woodard and Curran
May, 2020
In Plant Sulfide Readings

Date		Wind Direction	Outside Temp	Outside Condition	Front Door	Head Works	Primary Tank No. 1	Primary Tank No. 2	Gravity Thickener	Aeration Tanks	Rotory Sludge Thickener Room	Scrubber In	Roof Exhaust Scrubber Out	% Removal
		Direction	Deg F	Condition	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Fri	01	SE-12	55	Rain								0.510	0.000	100.0
Sat	02	NW-14	47	Sunny								0.590	0.000	100.0
Sun	03	SSW-11	54	Sunny		0.100						0.820	0.000	100.0
Mon	04	NE-0	70	Sunny		0.070						0.470	0.000	100.0
Tue	05	WNW-12	47	Sunny		0.100						0.530	0.000	100.0
Wed	06	N-3	43	Sunny								0.630	0.000	100.0
Thu	07	W-4	43	Partly cloudy								0.550	0.000	100.0
Fri	08	W-14	48	Sunny								0.730	0.000	100.0
Sat	09	WNW-21	39	Showers								0.480	0.000	100.0
Sun	10	WSW-15	40	Partly cloudy		3.170						0.730	0.000	100.0
Mon	11	SSE-3	52	Sunny		0.130						0.910	0.000	100.0
Tue	12	WNW-18	41	Sunny								0.590	0.000	100.0
Wed	13	WNW 12	40	Sunny								0.750	0.000	100.0
Thu	14	W-7	45	Sunny										
Fri	15	SSW-5	53	Cloudy								0.700	0.200	71.4
Sat	16	NW-11	55	Partly cloudy								0.750	0.110	85.3
Sun	17	S-4	52	Partly cloudy		0.130						1.300	0.200	84.6
Mon	18	NE-3	52	cloudy		0.100						1.180	0.200	83.1
Tue	19	NE-18	51	Sunny								1.300	0.260	80.0
Wed	20	NE-18	51	Sunny		0.100						1.200	0.300	75.0
Thu	21	S-6	50	Sunny								1.200	0.170	85.8
Fri	22	SW-10	57	Sunny								1.040	0.170	83.7
Sat	23	WNW-5	65	Showers	0.000	0.430			0.980	0.000		0.240	0.008	96.7
Sun	24	NE-12	50	Sunny		0.100						0.440		
Mon	25	ENE-8	47	Cloudy								0.102	0.004	96.1
Tue	26	SSE-3	51	Fog								2.600	0.011	99.6
Wed	27	SW-8	59	Sunny								0.340	0.011	96.8
Thu	28	SW-10	66	Mostly cloudy								0.120	0.004	96.7
Fri	29	SSW-12	67	Cloudy								0.069	0.010	85.5
Sat	30	SW-10	65	Cloudy	0.000	0.100				0.000		0.300	0.008	97.3
Sun	31	NW-16	59	Sunny		0.100						0.160	0.007	95.6
Min.			39		0.000	0.070			0.980	0.000		0.069	0.000	71.4
Max.			70		0.000	3.170			0.980	0.000		2.600	0.300	100.0
Ave.			52		0.000	0.386			0.980	0.000		0.711	0.058	93.6
Target					<.01	<10.0	<10.0	<10.0	<10.0	.050	.050	<10.0	<1.0	95%

Woodard and Curran

May, 2020

Outside Plant Sulfide Readings

Date		Wind Direction	Outside Temp	Outside Condition	Cemetery Flag Pole	Garage At Cemetery	Duck Lane	Duck Lane And Nantasket Ave	Seawall Across From Plant	Fire Hydrant Across Inland Bay Side	Front Of Aeration Bayside
		Direction	Deg F	Condition	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Fri	01	SE-12	55	Rain							
Sat	02	NW-14	47	Sunny							
Sun	03	SSW-11	54	Sunny							
Mon	04	NE-0	70	Sunny							
Tue	05	WNW-12	47	Sunny							
Wed	06	N-3	43	Sunny							
Thu	07	W-4	43	Partly cloudy							
Fri	08	W-14	48	Sunny							
Sat	09	WNW-21	39	Showers							
Sun	10	WSW-15	40	Partly cloudy							
Mon	11	SSE-3	52	Sunny							
Tue	12	WNW-18	41	Sunny							
Wed	13	WNW 12	40	Sunny							
Thu	14	W-7	45	Sunny							
Fri	15	SSW-5	53	Cloudy							
Sat	16	NW-11	55	Partly cloudy							
Sun	17	S-4	52	Partly cloudy							
Mon	18	NE-3	52	cloudy							
Tue	19	NE-18	51	Sunny							
Wed	20	NE-18	51	Sunny							
Thu	21	S-6	50	Sunny							
Fri	22	SW-10	57	Sunny							
Sat	23	WNW-5	65	Showers	0.000	0.000	0.000	0.001	0.001	0.001	0.000
Sun	24	NE-12	50	Sunny							
Mon	25	ENE-8	47	Cloudy							
Tue	26	SSE-3	51	Fog							
Wed	27	SW-8	59	Sunny							
Thu	28	SW-10	66	Mostly cloudy							
Fri	29	SSW-12	67	Cloudy							
Sat	30	SW-10	65	Cloudy	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Sun	31	NW-16	59	Sunny							
Min.			39		0.000	0.000	0.000	0.000	0.000	0.000	0.000
Max.			70		0.000	0.000	0.000	0.001	0.001	0.001	0.000
Ave.			52		0.000	0.000	0.000	0.001	0.001	0.001	0.000
Target					<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005