COMMITMENT & INTEGRITY
DRIVE RESULTS

1111 Nantasket Ave.
Hull, Massachusetts 02045

T 781.925.0906

WOODARD
&CURRAN

August 14, 2015

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 – July 2015 – Discharge 001-A

Dear Ms. McDonald:

Enclosed please find the completed DMR for the month of July 2015. Please note that the facility operated in complete compliance with all NPDES requirements.

Please find the updated staffing plan and schedule for the Hull WPCF.

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
James Dow – Chief Facility Manager – Town of Hull WPCF
Ryan Joyce – Division of Marine Fisheries

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 J STRUZZIERY CHRMN COMM

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

**DISCHARGE MONITORING REPORT (DMR)**

| MA0101231 | 001 A |
|---|---|
| PERMIT NUMBER | DISCHARGE NUMBER |

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 15 | 07 | 01 | TO | 15 | 07 | 31 |

OMB No. 2040-0004

MAJOR
(SUBR E )
F- FINAL
TREATED SANITARY WASTEWATEF

*** 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 | | | |
| BOD, 5-DAY (20 DEG. C) 00310 1 0 0 EFFLUENT GROSS VALUE | SAMPLE MEASUREMENT | 81 | 208 | LBS/DY | 6 | 15 | 15 | mg/L | 0 | 1/7 | 24 |
| | PERMIT REQUIREMENT | 768 MO AVG | 1,152 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 | 3,885 | ****** | LBS/DY | 280 | ****** | ****** | 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 | ****** | ****** | **** | 6.50 | ****** | 7.00 | SU | 0 | ~~7~~ 01/01 | GR-4 |
| | PERMIT REQUIREMENT | ****** | ****** | **** | 6.5 MINIMUM | ****** | 8.5 MAXIMUM | SU | | WEEKLY | GRAB-4 |
| SOLIDS, TOTAL SUSPENDED 00530 1 0 0 EFFLUENT GROSS VALUE | SAMPLE MEASUREMENT | 166 | 208 | LBS/DY | 12 | 15 | 15 | mg/L | 0 | 1/7 | 24 |
| | PERMIT REQUIREMENT | 768 MO AVG | 1,152 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 | 3,477 | ****** | LBS/DY | 251 | ****** | ****** | 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 | 1.67 | 2.41 ~~5.100~~ | MGD | ****** | ****** | ****** | **** | 0 | 99/99 | RC |
| | PERMIT REQUIREMENT | 3.07 12 MO AVG | DAILY MX | MGD | ****** | ****** | ****** | **** | | CONTINUOUS | RCORDR |
| FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 0 0 See Comments | SAMPLE MEASUREMENT | ****** | ****** | **** | 1.66 | ****** | ****** | MGD | 0 | 99/99 ~~7~~ | RC ~~GR~~ |
| | PERMIT REQUIREMENT | ****** | ****** | **** | REQ MO AVG | ****** | ****** | MGD | | ~~WEEKLY~~ CONTIN | ~~GRAB~~ RCORDR |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| Aram Varjabedian - Pres MGR<br>James Dow, Chief Facility Manager | 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 | 15 | 08 | 14 |
| **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)** MAJOR
(SUBR E )
F- FINAL
TREATED SANITARY WASTEWATER

OMB No. 2040-0004

| PERMIT NUMBER | DISCHARGE NUMBER |
|---|---|
| MA0101231 | 001 A |

Facility HULL W P C F
Location HULL MA 02045
Attn: JOHN J STRUZZIERY CHRMN COM

| MONITORING PERIOD | YEAR | MO | DAY | | YEAR | MO | DAY |
|---|---|---|---|---|---|---|---|
| FROM | 15 | 07 | 01 | TO | 15 | 07 | 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 | ****** | ****** | ****** | 0.07 | ****** | 0.48 | 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 AVG | ****** | 276 DAILY MAX | CFU/100 ml | | WEEKLY | GRAB |
| COLIFORM, FECAL GENERAL | SAMPLE MEASUREMENT | ****** | ****** | ****** | <10 | ****** | 10 | #/100 ml | 0 | 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-CENT | | ONCE/ MONTH | CALCTD |
| SOLIDS, SUSPENDED PERCENT REMOVAL | SAMPLE MEASUREMENT | ****** | ****** | ****** | 95 | ****** | ****** | % | 0 | 1/30 | CA |
| 81011 K 0 0 PERCENTREMOVAL | PERMIT REQUIREMENT | ****** | ****** | ****** | 85 MO AVG | ****** | ****** | PER-CENT | | ONCE/ MONTH | CALCTD |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |
| | SAMPLE MEASUREMENT | | | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | | | |

| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | | | TELEPHONE | | DATE | | |
|---|---|---|---|---|---|---|---|
| Aram Varjabedian - PROJ MGR<br>James Dow, Chief Facility Manager | 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 | 15 | 08 | 14 |
| **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

COMMITMENT & INTEGRITY
DRIVE RESULTS

1111 Nantasket Ave.
Hull, Massachusetts 02045

T 781.925.0906

WOODARD
&CURRAN

HULL, MA WATER POLLUTION CONTROL FACILITY
NPDES NO. MA0101231

Hull Water Pollution Control Facility – Staffing – July 2015

| | |
|---|---|
| Project Manager/Chief Operator – Aram Varjabedian | MA Grade 7C |
| Asst. Project Manager/Asst. Chief Operator – Kevin Stetson | MA Grade 6C |
| Operations/Maintenance Tech 2 – Joseph Basler | MA Grade 4M |
| Operations/Maintenance Tech 1 – Eric Sutton | MA Grade 3M |
| Operations/Maintenance Tech 2 – Rick Clark | |
| Operator-In-Training – John Currier | |

Supplemental O&M Personnel supporting/assisting the Hull facility

| | |
|---|---|
| Pat Owens – Part-time Weekend Operator | MA Grade 5C |
| James Gagliard – Sr. Operations Specialist | MA Grade 6C |
| Harvey King – Sr. Operations Specialist | MA Grade 6C |
| Bill Boornazian – Engineer / Operator | MA Grade 6C |
| Frank Cavaleri – Area Manager | MA Grade 7C |

Hull Water Pollution Control Facility – Schedule – May 2015

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 | 6C | X | X | X | X | X | | |
| O&M Tech 2 | 4M | | | X | X | X | X | X |
| O&M Tech 1 | 3M | X | X | X | X | X | | |
| O&M Tech 2 | | | X | X | X | X | X | |
| Oper-In-Training | | | X | X | X | X | X | |
| Part-Time Operator | 5C | X | | | | | | X |

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# Hull WWTF
## Monthly Rain, Temperature and Flow
## July, 2015

| Date | Rainfall | Minimum Air Temp | Maximum Air Temp | Effluent Flow |
|---|---|---|---|---|
| | Inches | F | F | MGD |
| 07/01/15 | 0.43 | 62 | 79 | 2.410 |
| 07/02/15 | 0.00 | 64 | 77 | 1.958 |
| 07/03/15 | 0.00 | 63 | 78 | 1.942 |
| 07/04/15 | 0.00 | 63 | 70 | 1.894 |
| 07/05/15 | 0.00 | 72 | 83 | 1.887 |
| 07/06/15 | 0.00 | 62 | 81 | 1.832 |
| 07/07/15 | 0.00 | 66 | 82 | 1.619 |
| 07/08/15 | 0.00 | 68 | 89 | 1.619 |
| 07/09/15 | 0.04 | 64 | 73 | 1.564 |
| 07/10/15 | 1.21 | 61 | 83 | 2.054 |
| 07/11/15 | 0.00 | 61 | 80 | 2.054 |
| 07/12/15 | 0.00 | 72 | 89 | 1.810 |
| 07/13/15 | 0.00 | 67 | 76 | 1.708 |
| 07/14/15 | 0.03 | 66 | 79 | 1.564 |
| 07/15/15 | 0.13 | 67 | 83 | 1.633 |
| 07/16/15 | 0.01 | 61 | 72 | 1.624 |
| 07/17/15 | 0.00 | 61 | 76 | 1.548 |
| 07/18/15 | 0.14 | 64 | 78 | 1.467 |
| 07/19/15 | 0.00 | 63 | 86 | 1.513 |
| 07/20/15 | 0.00 | 72 | 89 | 1.513 |
| 07/21/15 | 0.00 | 76 | 82 | 1.391 |
| 07/22/15 | 0.00 | 68 | 83 | 1.357 |
| 07/23/15 | 0.00 | 67 | 79 | 1.324 |
| 07/24/15 | 0.01 | 65 | 80 | 1.267 |
| 07/25/15 | 0.00 | 62 | 69 | 1.310 |
| 07/26/15 | 0.00 | 58 | 76 | 1.310 |
| 07/27/15 | 0.00 | 66 | 79 | 1.300 |
| 07/28/15 | 0.00 | 68 | 84 | 1.248 |
| 07/29/15 | 0.00 | 70 | 86 | 2.410 |
| 07/30/15 | 0.00 | 68 | 86 | 2.065 |
| 07/31/15 | 0.00 | 66 | 84 | 1.378 |
| Min | 0.00 | 58 | 69 | 1.25 |
| Max | 1.21 | 76 | 89 | 2.41 |
| Avg | 0.06 | 66 | 80 | 1.66 |
| Sum | 2.00 | | | 51.57 |

July 2015

Hingham Flow

| | Daily Com | 100011 - Hingham Flow KGAL |
|---|---|---|
| 1 Wed | | 83.00 |
| 2 Thu | | 81.00 |
| 3 Fri | | 72.00 |
| 4 Sat | | 73.00 |
| 5 Sun | | 71.00 |
| 6 Mon | | 68.00 |
| 7 Tue | | 66.00 |
| 8 Wed | | 65.00 |
| 9 Thu | | 65.00 |
| 10 Fri | | 83.00 |
| 11 Sat | | 76.00 |
| 12 Sun | | 70.00 |
| 13 Mon | | 67.00 |
| 14 Tue | | 63.00 |
| 15 Wed | | 66.00 |
| 16 Thu | | 60.00 |
| 17 Fri | | 54.00 |
| 18 Sat | | 17.00 |
| 19 Sun | | 66.00 |
| 20 Mon | | 65.00 |
| 21 Tue | | 61.00 |
| 22 Wed | | 59.00 |
| 23 Thu | | 62.00 |
| 24 Fri | | 62.00 |
| 25 Sat | | 64.00 |
| 26 Sun | | 69.00 |
| 27 Mon | | 68.00 |
| 28 Tue | | 60.00 |
| 29 Wed | | 64.00 |
| 30 Thu | | 69.00 |
| 31 Fri | | 61.00 |
| MIN | | 17.00 |
| MAX | | 83.00 |
| AVG | | 65.48 |
| SUM | | 2,030.00 |
| GeoMean | | 63.89 |

WOODARD & CURRAN

# Hull Wastewater Treatment Plant Operations Data

July, 2015



| Date | | Manual Screen Used | FINE BAR RACK ON/OFF | GRIT CHAMBER ON/OFF | GRIT CLASSIFIER ON/OFF | PRI CLAR #1 ON/OFF | PRI CLAR #2 ON/OFF | AT #1 ON/OFF | AT #2 ON/OFF | AT #3 ON/OFF | AT #4 ON/OFF | SEC CLAR #1 ON/OFF | SEC CLAR #2 ON/OFF | CL2 BASIN #1 ON/OFF | CL2 BASIN #2 ON/OFF | GRAVITY THICK #1 ON/OFF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wed | 01 | Yes | Off | Off | Off | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Thu | 02 | Yes | Off | Off | Off | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Fri | 03 | Yes | Off | Off | Off | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Sat | 04 | Yes | Off | Off | Off | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Sun | 05 | Yes | Off | Off | Off | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Mon | 06 | Yes | Off | Off | Off | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Tue | 07 | Yes | Off | Off | Off | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Wed | 08 | Yes | Off | Off | Off | Off | Off | On | Off | On | Off | On | Off | On | On | On |
| Thu | 09 | Yes | Off | Off | Off | Off | Off | On | Off | On | Off | On | Off | On | On | On |
| Fri | 10 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Sat | 11 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Sun | 12 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Mon | 13 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Tue | 14 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Wed | 15 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Thu | 16 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Fri | 17 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Sat | 18 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Sun | 19 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Mon | 20 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Tue | 21 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Wed | 22 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Thu | 23 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Fri | 24 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Sat | 25 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Sun | 26 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Mon | 27 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Tue | 28 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Wed | 29 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Thu | 30 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| Fri | 31 | Yes | Off | On | On | Off | On | On | Off | On | Off | On | Off | On | On | On |
| MIN | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| MAX | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| AVG | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| SUM | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

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# Hull Wastewater Treatment Plant Operations Data



| Date | | GRAVITY THICK #2 ON/OFF | SLUDGE TANK #1 ON/OFF | SLUDGE TANK #2 ON/OFF | RST ON/OFF ON/OFF | Rainfall Inches | MIN AIR TEMP DEG F | MAX AIR TEMP DEG F | GRIT REMOVED LBS | CUFT SCREENINGS CUFT | INF TSS (Report) MG/L | INF BOD (Report) MG/L | INF FLOW MGD | INFLUENT Q MINIMUM MGD | INFLUENT Q MAXIMUM MGD | PRI TSS MG/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wed | 01 | Off | Off | On | On | 0.43 | 62 | 79 | 20 | 0.70 | | | | | | |
| Thu | 02 | Off | Off | On | On | 0.00 | 64 | 77 | 20 | 0.70 | 369 | 230 | 1.836 | 1.100 | 3.400 | 58 |
| Fri | 03 | Off | Off | On | On | 0.00 | 63 | 78 | 20 | 0.70 | | | 1.867 | 1.200 | 3.000 | |
| Sat | 04 | Off | Off | On | On | 0.00 | 63 | 70 | 20 | 0.70 | | | 1.867 | 1.100 | 2.900 | |
| Sun | 05 | Off | Off | On | On | 0.00 | 72 | 83 | 20 | 0.70 | | | 1.871 | 1.100 | 2.600 | |
| Mon | 06 | Off | Off | On | On | 0.00 | 62 | 81 | 20 | 0.70 | | | 1.871 | 0.000 | 2.300 | |
| Tue | 07 | Off | Off | On | On | 0.00 | 66 | 82 | 20 | 0.70 | | | 1.672 | 0.000 | 2.100 | |
| Wed | 08 | Off | Off | On | On | 0.00 | 68 | 89 | 20 | 0.70 | | | 1.600 | 0.000 | 1.900 | |
| Thu | 09 | Off | Off | On | On | 0.04 | 64 | 73 | 20 | 0.70 | 137 | 440 | 1.422 | 0.000 | 3.600 | |
| Fri | 10 | Off | Off | On | On | 1.21 | 61 | 83 | 20 | 0.70 | | | 2.118 | 0.000 | 3.600 | |
| Sat | 11 | Off | Off | On | On | 0.00 | 61 | 80 | 20 | 0.70 | | | 2.118 | 0.000 | 3.500 | |
| Sun | 12 | Off | Off | On | On | 0.00 | 72 | 89 | 20 | 0.70 | | | 1.830 | 0.000 | 3.400 | |
| Mon | 13 | Off | Off | On | On | 0.00 | 67 | 76 | 20 | 0.70 | | | 1.759 | 0.000 | 2.900 | |
| Tue | 14 | Off | Off | On | On | 0.03 | 66 | 79 | 20 | 0.70 | | | 1.663 | 0.000 | 3.000 | |
| Wed | 15 | Off | Off | On | On | 0.13 | 67 | 83 | 20 | 0.70 | | | 1.731 | 0.000 | 2.800 | |
| Thu | 16 | Off | Off | On | On | 0.01 | 61 | 72 | 20 | 0.70 | 174 | 230 | 1.731 | 0.000 | 2.400 | |
| Fri | 17 | Off | Off | On | On | 0.00 | 61 | 76 | 20 | 0.70 | | | 1.639 | 0.000 | 2.000 | |
| Sat | 18 | Off | Off | On | On | 0.14 | 64 | 78 | 20 | 0.70 | | | 1.691 | 0.000 | 3.100 | |
| Sun | 19 | Off | Off | On | On | 0.00 | 63 | 86 | 20 | 0.70 | | | 1.718 | 0.000 | 3.400 | |
| Mon | 20 | Off | Off | On | On | 0.00 | 72 | 89 | 20 | 0.70 | | | 1.718 | 0.000 | 3.300 | |
| Tue | 21 | Off | Off | On | On | 0.00 | 76 | 82 | 20 | 0.70 | | | 1.615 | 0.000 | 3.200 | |
| Wed | 22 | Off | Off | On | On | 0.00 | 68 | 83 | 20 | 0.70 | | | 1.603 | 0.000 | 3.100 | |
| Thu | 23 | Off | Off | On | On | 0.00 | 67 | 79 | 20 | 0.70 | 339 | 300 | 1.569 | 0.000 | 3.900 | |
| Fri | 24 | Off | Off | On | On | 0.01 | 65 | 80 | 20 | 0.70 | | | | 0.000 | 3.900 | |
| Sat | 25 | Off | Off | On | On | 0.00 | 62 | 69 | 20 | 0.70 | | | | 0.000 | 4.500 | |
| Sun | 26 | Off | Off | On | On | 0.00 | 58 | 76 | 20 | 0.70 | | | | 0.000 | 4.500 | |
| Mon | 27 | Off | Off | On | On | 0.00 | 66 | 79 | 20 | 0.70 | | | | 0.000 | 4.500 | |
| Tue | 28 | Off | Off | On | On | 0.00 | 68 | 84 | 20 | 0.70 | | | | 0.000 | 4.600 | |
| Wed | 29 | Off | Off | On | On | 0.00 | 70 | 86 | 20 | 0.70 | | | 2.515 | 0.000 | 4.100 | |
| Thu | 30 | Off | Off | On | On | 0.00 | 68 | 86 | 20 | 0.70 | 234 | 200 | 2.453 | 0.000 | 4.600 | |
| Fri | 31 | Off | Off | On | On | 0.00 | 66 | 84 | 20 | 0.70 | | | 1.548 | 0.000 | 4.600 | |
| MIN | | - | - | - | - | 0.00 | 58 | 69 | - | - | 137 | 200 | - | - | - | 58 |
| MAX | | - | - | - | - | 1.21 | 76 | 89 | - | - | 369 | 440 | - | - | - | 58 |
| AVG | | - | - | - | - | 0.06 | 66 | 80 | - | - | 251 | 280 | - | - | - | 58 |
| SUM | | - | - | - | - | 2.00 | - | - | - | - | 1,253 | 1,400 | - | - | - | - |

WOODARD & CURRAN

# Hull Wastewater Treatment Plant Operations Data



| 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 30 MIN | MLSS 60 MIN SET MIN | MLSS MG/L | RAS TSS MG/L | RAS FLOW MGD | SEC #1 BLANKET FT | SEC #2 BLANKET FT | WAS TSS THCK MG/L | WAS FLOW GALLONS THCK GAL | EFF TSS (Report) MG/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wed 01 | | | 1.0 | 129 | 475 | 190 | 190 | 1,469 | 5,268 | 1.4100 | 3.0 | | | 33,000 | |
| Thu 02 | | | 1.0 | 174 | 460 | 300 | 250 | 1,726 | 5,570 | 1.1050 | 3.0 | | | 25,000 | 11.0 |
| Fri 03 | | | 1.0 | 141 | 470 | 250 | 230 | 1,777 | 4,882 | 1.1130 | 4.0 | | | 25,000 | |
| Sat 04 | | | 0.0 | 140 | 500 | 260 | 230 | 1,848 | 5,480 | 1.1250 | 3.0 | | | 25,000 | |
| Sun 05 | | | 1.0 | 149 | 500 | 300 | 250 | 2,016 | 4,324 | 1.1300 | 3.0 | | | 25,000 | |
| Mon 06 | | | 1.0 | 198 | 800 | 400 | 380 | 2,020 | 5,326 | 1.1480 | 2.0 | | | 25,000 | |
| Tue 07 | | | 1.0 | 189 | 775 | 500 | 300 | 2,641 | 5,654 | 1.1480 | 2.0 | | | 25,000 | |
| Wed 08 | | | | 164 | 600 | 325 | 260 | 1,980 | 5,488 | 1.1330 | 3.0 | | | 25,000 | |
| Thu 09 | | | | 136 | 500 | 300 | 300 | 2,197 | 2,197 | 1.0620 | 3.0 | | | 27,000 | 13.0 |
| Fri 10 | | | 0.5 | 168 | 520 | 250 | 220 | 1,484 | 6,082 | 0.9740 | 3.0 | | | 27,000 | |
| Sat 11 | | | 2.0 | 168 | 330 | 200 | 200 | 1,187 | 4,516 | 1.0620 | 2.0 | | | 29,000 | |
| Sun 12 | | | 2.0 | 170 | 700 | 350 | 300 | 2,050 | 4,672 | 1.5720 | 3.0 | | | 33,000 | |
| Mon 13 | | | 1.0 | 144 | 600 | 300 | 250 | 2,072 | 5,650 | 1.5900 | 2.0 | | | 33,000 | |
| Tue 14 | | | 0.5 | 141 | 500 | 300 | 250 | 2,121 | 4,876 | 1.5900 | 2.0 | | | 33,000 | |
| Wed 15 | | | 1.0 | 131 | 500 | 300 | 240 | 2,279 | 4,496 | 1.5810 | 3.0 | | | 33,000 | |
| Thu 16 | | | 1.5 | 136 | 530 | 290 | 240 | 2,124 | 5,116 | 1.5810 | 3.0 | | | 34,000 | 15.0 |
| Fri 17 | | | 1.0 | 110 | 350 | 240 | 220 | 2,166 | 4,792 | 1.5830 | 2.0 | | | 34,000 | |
| Sat 18 | | | 1.0 | 111 | 440 | 250 | 250 | 2,245 | 4,550 | 1.5830 | 1.5 | | | 34,000 | |
| Sun 19 | | | 0.5 | 113 | 350 | 200 | 50 | 1,763 | 4,326 | 1.5870 | 0.5 | | | 32,000 | |
| Mon 20 | | | 1.0 | 91 | 300 | 200 | 200 | 2,177 | 4,820 | 1.5870 | 3.0 | | | 21,000 | |
| Tue 21 | | | 1.0 | 114 | 400 | 250 | 230 | 2,179 | 4,788 | 1.5800 | 1.5 | | | 28,000 | |
| Wed 22 | | | 2.0 | 123 | 370 | 250 | 180 | 2,031 | 4,680 | 1.5650 | 3.0 | | | 28,000 | |
| Thu 23 | | | 1.0 | 102 | 330 | 220 | 200 | 2,145 | 4,906 | 1.5600 | 1.0 | | | 28,000 | 10.0 |
| Fri 24 | | | 1.0 | 98 | 330 | 200 | 200 | 2,044 | 4,780 | 1.5570 | 2.0 | | | 28,000 | |
| Sat 25 | | | 1.0 | 92 | 330 | 200 | 190 | 2,164 | 4,606 | 1.5560 | 1.0 | | | 28,000 | |
| Sun 26 | | | 1.0 | 82 | 330 | 200 | 190 | 2,432 | 4,872 | 1.5550 | 1.0 | | | 28,000 | |
| Mon 27 | | | 1.0 | 70 | 300 | 175 | 150 | 2,482 | 5,112 | 1.5550 | 1.0 | | | 28,000 | |
| Tue 28 | | | 1.0 | 68 | 300 | 170 | 160 | 2,499 | 3,884 | 1.5590 | 0.0 | | | 28,000 | |
| Wed 29 | | | 1.0 | 88 | 300 | 200 | 160 | 2,258 | 4,944 | 1.6590 | 1.0 | | | 39,000 | |
| Thu 30 | | | 1.0 | 87 | 250 | 200 | 180 | 2,285 | 4,992 | 1.6590 | 1.0 | | | 39,000 | 11.0 |
| Fri 31 | | | 1.0 | | | | | | | 1.5440 | 2.0 | | | 35,000 | |
| MIN | | | 0 | 68 | 250 | 170 | 50 | 1,187 | 2,197 | 0.9740 | 0.0 | | | 21,000 | 10.0 |
| MAX | | | 2 | 198 | 800 | 500 | 380 | 2,641 | 6,082 | 1.6590 | 4.0 | | | 39,000 | 15.0 |
| AVG | | | 1 | 128 | 448 | 259 | 222 | 2,062 | 4,855 | 1.4198 | 2.1 | | | 29,516 | 12.0 |
| SUM | - | - | - | - | - | - | - | - | - | - | - | - | - | 915,000 | - |

WOODARD & CURRAN

# Hull Wastewater Treatment Plant Operations Data

July, 2015



| Date | | EFF BOD (Report) MG/L | EFF FECAL #/100 ML | EFF MAX DAILY FLOW MGD | EFF MIN DAILY FLOW MGD | EFF FLOW MGD | EFF #1 PH SU | CL2 RES #1 MG/L | CL2 RES #2 MG/L | CL2 RES #3 MG/L | CL2 RES Daily Avg MG/L | THICKENED SLUDGE % TS | THICKENER #1 BLANKET FT | THICKENER #2 BLANKET FT | LEACHATE TSS MG/L | LEACHATE BOD MG/L | LEACHATE COD MG/L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wed | 01 | | | 4.400 | 0.700 | 2.410 | 6.90 | 0.92 | 0.06 | 0.13 | 0.37 | 6.4 | 0.5 | | | | |
| Thu | 02 | 4.8 | 10 | 4.500 | 0.800 | 1.958 | 6.80 | 0.03 | 0.04 | 0.04 | 0.04 | | 1.0 | | | | |
| Fri | 03 | | | 2.100 | 0.800 | 1.942 | 6.80 | 0.01 | 0.01 | 0.02 | 0.01 | 6.6 | 3.0 | | | | |
| Sat | 04 | | | 2.100 | 0.700 | 1.894 | 6.90 | 0.00 | 0.00 | 0.01 | 0.00 | | 4.0 | | | | |
| Sun | 05 | | | 2.100 | 0.800 | 1.887 | 7.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 5.5 | | | | |
| Mon | 06 | | | 2.100 | 0.800 | 1.832 | 6.80 | 0.00 | 0.00 | 0.00 | 0.00 | 8.8 | 1.5 | | | | |
| Tue | 07 | | | 2.100 | 0.700 | 1.619 | 6.70 | 0.05 | 0.05 | 0.56 | 0.22 | 6.6 | 1.0 | | | | |
| Wed | 08 | | | 2.100 | 0.700 | 1.619 | 6.80 | 0.01 | 0.00 | 0.00 | 0.00 | | 1.5 | | | | |
| Thu | 09 | 15.0 | 10 | 5.000 | 0.000 | 1.564 | 6.90 | 0.03 | 0.04 | 0.13 | 0.07 | 5.7 | | | | | |
| Fri | 10 | | | 4.000 | 0.700 | 2.054 | 6.70 | 0.00 | 0.01 | 0.02 | 0.01 | | 0.5 | | | | |
| Sat | 11 | | | 4.000 | 0.700 | 2.054 | 6.90 | 0.02 | 0.04 | 0.07 | 0.04 | 6.9 | 0.5 | | | | |
| Sun | 12 | | | 3.700 | 0.700 | 1.810 | 6.60 | 0.02 | 0.02 | 0.00 | 0.01 | | 2.0 | | | | |
| Mon | 13 | | | 4.600 | 0.700 | 1.708 | 6.60 | 0.00 | 0.01 | 0.02 | 0.01 | 7.0 | 2.0 | | | | |
| Tue | 14 | | | 4.600 | 0.700 | 1.564 | 6.60 | 0.04 | 0.08 | 0.05 | 0.06 | | 5.0 | | | | |
| Wed | 15 | | | 2.100 | 0.700 | 1.633 | 6.60 | 0.05 | 0.00 | 0.00 | 0.02 | 6.4 | 0.5 | | | | |
| Thu | 16 | 3.0 | 10 | 2.100 | 0.300 | 1.624 | 6.70 | 0.03 | 0.03 | 0.02 | 0.03 | | 0.5 | | | | |
| Fri | 17 | | | 2.100 | 0.700 | 1.548 | 6.60 | 0.06 | 0.11 | 0.02 | 0.06 | 5.7 | 0.0 | | | | |
| Sat | 18 | | | 2.100 | 0.700 | 1.467 | 6.50 | 0.00 | 0.06 | 0.04 | 0.03 | | 0.5 | | | | |
| Sun | 19 | | | 2.100 | 0.700 | 1.513 | 6.60 | 0.04 | 0.03 | 0.03 | 0.03 | | 3.0 | | | | |
| Mon | 20 | | | 2.100 | 0.800 | 1.513 | 6.70 | 0.77 | 0.04 | 0.06 | 0.29 | 6.8 | 2.0 | | | | |
| Tue | 21 | | | 2.100 | 0.700 | 1.391 | 6.50 | 0.04 | 0.03 | 0.08 | 0.05 | | 1.0 | | | | |
| Wed | 22 | | | 2.100 | 0.800 | 1.357 | 6.60 | 0.05 | 0.02 | 0.03 | 0.03 | 5.3 | 2.0 | | | | |
| Thu | 23 | 3.4 | 10 | 2.100 | 0.700 | 1.324 | 6.70 | 0.85 | 0.51 | 0.08 | 0.48 | | 3.0 | | | | |
| Fri | 24 | | | 4.900 | 0.700 | 1.267 | 6.80 | 0.00 | 0.00 | 0.02 | 0.01 | 6.6 | 2.0 | | | | |
| Sat | 25 | | | 4.800 | 0.700 | 1.310 | 6.60 | 0.01 | 0.02 | 0.01 | 0.01 | | 0.5 | | | | |
| Sun | 26 | | | 5.000 | 0.700 | 1.310 | 6.70 | 0.04 | 0.07 | 0.01 | 0.04 | | 4.0 | | | | |
| Mon | 27 | | | 4.900 | 0.700 | 1.300 | 6.80 | 0.02 | 0.03 | 0.04 | 0.03 | 6.0 | 2.5 | | | | |
| Tue | 28 | | | 5.000 | 0.700 | 1.248 | 6.70 | 0.00 | 0.01 | 0.02 | 0.01 | | 3.0 | | | | |
| Wed | 29 | | | 5.000 | 0.700 | 2.410 | 6.80 | 0.00 | 0.02 | 0.03 | 0.02 | 6.1 | 2.0 | | | | |
| Thu | 30 | 3.0 | 10 | 5.000 | 0.000 | 2.065 | 6.60 | 0.01 | 0.03 | 0.01 | 0.02 | | 3.0 | | | | |
| Fri | 31 | | | 5.100 | 0.700 | 1.378 | 6.60 | 0.00 | 0.01 | 0.02 | 0.01 | 5.6 | 3.0 | | | | |
| MIN | | 3.0 | 10 | 2.100 | 0.000 | 1.248 | 6.50 | 0.00 | 0.00 | 0.00 | 0.00 | - | - | - | - | - | - |
| MAX | | 15.0 | 10 | 5.100 | 0.800 | 2.410 | 7.00 | 0.92 | 0.51 | 0.56 | 0.48 | - | - | - | - | - | - |
| AVG | | 5.8 | 10 | 3.419 | 0.661 | 1.664 | 6.71 | 0.10 | 0.04 | 0.05 | 0.07 | - | - | - | - | - | - |
| SUM | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

WOODARD & CURRAN

# Hull Wastewater Treatment Plant Operations Data

**July, 2015**



| Date | | LEACHATE gal | Groundwater Underdrain gal | Potable H2O Calc. GPD | Thickened Feed Sludge Gallons to truck | THICKENED SLDG LBS/DAY | Sludge Holding Tank Level Ft | Thickened Sludge Holding Tank Level Ft | EFF TEMP DEG C | Enterococci No/100ml | Toxicity % | GALS HEATING OIL Inches |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wed | 01 | | | 218 | 9,000 | 4,803 | 6.7 | 8.7 | 18.6 | | | 43 |
| Thu | 02 | | | 300 | 0 | | 6.8 | 7.4 | 18.8 | <10 | | 43 |
| Fri | 03 | | | 210 | 9,000 | 4,958 | 6.7 | 6.9 | 19.1 | | | 43 |
| Sat | 04 | | | 255 | 0 | | 6.7 | 6.7 | 19.2 | | | 43 |
| Sun | 05 | | | 263 | 0 | | 6.7 | 6.9 | 19.6 | | | 43 |
| Mon | 06 | | | 300 | 9,000 | 6,653 | 6.8 | 7.8 | 20.6 | | | 43 |
| Tue | 07 | | | 278 | 9,000 | 5,008 | 6.7 | 7.1 | 20.2 | | | 43 |
| Wed | 08 | | | 300 | 0 | | 6.8 | 7.0 | 19.8 | | | 43 |
| Thu | 09 | | | 308 | 9,000 | 4,315 | 6.8 | 7.4 | 19.3 | 10 | | 43 |
| Fri | 10 | | | 300 | 0 | | 6.8 | 6.6 | 19.5 | | | 43 |
| Sat | 11 | | | 375 | 9,000 | 5,208 | 6.8 | 7.7 | 20.1 | | | 43 |
| Sun | 12 | | | 278 | 0 | | 6.8 | 8.0 | 20.6 | | | 43 |
| Mon | 13 | | | 345 | 9,000 | 5,317 | 6.8 | 7.9 | 20.5 | | | 43 |
| Tue | 14 | | | 788 | 0 | | 6.8 | 7.1 | 20.4 | | | 43 |
| Wed | 15 | | | 308 | 9,000 | 4,860 | 6.7 | 7.9 | 20.4 | | | 43 |
| Thu | 16 | | | 360 | 0 | | 6.7 | 8.1 | 19.5 | <10 | | 43 |
| Fri | 17 | | | 1,350 | 9,000 | 4,303 | 6.7 | 7.3 | 19.9 | | | 43 |
| Sat | 18 | | | 368 | 0 | | 6.8 | 9.0 | 20.3 | | | 43 |
| Sun | 19 | | | 330 | 0 | | 6.8 | 8.0 | 21.3 | | | 43 |
| Mon | 20 | | | 375 | 9,000 | 5,144 | 6.8 | 5.7 | 21.6 | | | 43 |
| Tue | 21 | | | 278 | 0 | | 6.8 | 9.9 | 21.8 | | | 43 |
| Wed | 22 | | | 308 | 9,000 | 4,005 | 6.9 | 8.7 | 21.2 | | | 43 |
| Thu | 23 | | | 375 | 0 | | 6.9 | 8.1 | 21.1 | <10 | | 43 |
| Fri | 24 | | | 330 | 9,000 | 4,995 | 6.9 | 7.7 | 21.4 | | | 43 |
| Sat | 25 | | | 398 | 0 | | 6.9 | 7.0 | 20.9 | | | 43 |
| Sun | 26 | | | 330 | 0 | | 6.8 | 7.1 | 21.2 | | | 43 |
| Mon | 27 | | | 353 | 9,000 | 4,503 | 6.9 | 6.1 | 21.9 | | | 43 |
| Tue | 28 | | | 330 | 0 | | 6.9 | 7.0 | 22.0 | | | 43 |
| Wed | 29 | | | 368 | 9,000 | 4,578 | 7.1 | 7.5 | 22.6 | | | 43 |
| Thu | 30 | | | 383 | 0 | | 7.1 | 9.1 | 22.3 | <10 | | 43 |
| Fri | 31 | | | 375 | 9,000 | 4,203 | 7.1 | 9.8 | 22.8 | | | 43 |
| MIN | | - | - | - | 0 | 4,005 | 7 | 6 | 19 | <10 | - | - |
| MAX | | - | - | - | 9,000 | 6,653 | 7 | 10 | 23 | 10 | - | - |
| AVG | | - | - | - | 4,355 | 4,857 | 7 | 8 | 21 | <10 | - | 43 |
| SUM | | - | - | - | 135,000 | 72,853 | - | - | - | <50 | - | - |

July 2015 Sludge Holding Tank

| | | HT | | Misc | | | |
|---|---|---|---|---|---|---|---|
| | 01 Plant Log | 163 - HT #1 LEVEL FT | 164 - HT #2 LEVEL FT | 304 - RST Feed Gal | 305 - TS to RST % | 306 - TS Filtrate from RST % | 307 - RST Thickend Sludge Out % |
| 1 Wed | | 6.70 | 8.70 | 34946.00 | 1.20 | 0.99 | 6.80 |
| 2 Thu | | 6.77 | 7.40 | 33203.00 | 1.20 | 1.00 | 7.60 |
| 3 Fri | | 6.70 | 6.90 | 33411.00 | 1.40 | 1.00 | 8.10 |
| 4 Sat | | 6.70 | 6.70 | 29950.00 | 1.40 | 1.10 | 7.70 |
| 5 Sun | | 6.70 | 6.90 | 29950.00 | 1.39 | 1.00 | 5.80 |
| 6 Mon | | 6.80 | 7.80 | 33908.00 | 1.60 | 1.10 | 7.70 |
| 7 Tue | | 6.70 | 7.10 | 33685.00 | 1.50 | 1.20 | 7.80 |
| 8 Wed | | 6.80 | 7.00 | 30929.00 | 1.50 | 1.10 | 8.00 |
| 9 Thu | | 6.80 | 7.40 | 39134.00 | 1.60 | 1.30 | 7.90 |
| 10 Fri | | 6.80 | 6.60 | 31593.00 | 1.60 | 1.10 | 8.20 |
| 11 Sat | | 6.80 | 7.70 | 35005.00 | 1.40 | 0.98 | 6.40 |
| 12 Sun | | 6.80 | 8.00 | 46885.00 | 1.40 | 1.00 | 7.40 |
| 13 Mon | | 6.80 | 7.90 | 45501.00 | 1.40 | 1.00 | 7.90 |
| 14 Tue | | 6.80 | 7.10 | 40974.00 | 1.40 | 1.10 | 7.30 |
| 15 Wed | | 6.70 | 7.90 | 39787.00 | 1.30 | 1.20 | 8.30 |
| 16 Thu | | 6.70 | 8.10 | 51785.00 | 1.40 | 1.20 | 7.90 |
| 17 Fri | | 6.70 | 7.30 | 38011.00 | 1.40 | 1.30 | 6.40 |
| 18 Sat | | 6.80 | 9.00 | 47523.00 | 2.90 | 0.24 | 7.30 |
| 19 Sun | | 6.80 | 8.00 | 33410.00 | 1.50 | 1.20 | 7.80 |
| 20 Mon | | 6.80 | 5.70 | 40480.00 | 1.50 | | 8.00 |
| 21 Tue | | 6.80 | 9.90 | 45239.00 | 1.50 | 1.10 | 8.20 |
| 22 Wed | | 6.90 | 8.70 | 43352.00 | 1.50 | 1.20 | 7.90 |
| 23 Thu | | 6.90 | 8.10 | 41964.00 | 1.50 | 1.10 | 8.00 |
| 24 Fri | | 6.90 | 7.70 | 40559.00 | 1.50 | 1.10 | 7.60 |
| 25 Sat | | 6.90 | 7.00 | 38590.00 | 1.40 | 1.00 | 7.90 |
| 26 Sun | | 6.80 | 7.10 | 52566.00 | 1.40 | 1.00 | 7.40 |
| 27 Mon | | 6.90 | 6.10 | 33615.00 | 1.40 | | 7.50 |
| 28 Tue | | 6.90 | 7.00 | 38393.00 | 1.40 | 1.00 | 7.60 |
| 29 Wed | | 7.10 | 7.50 | 23030.00 | 1.40 | 1.10 | 7.30 |
| 30 Thu | | 7.10 | 9.10 | 38250.00 | 1.00 | 1.20 | 7.70 |
| 31 Fri | | 7.10 | 9.80 | 49750.00 | 1.60 | 1.20 | 8.30 |
| MIN | | 6.70 | 5.70 | 23,030.00 | 1.00 | 0.24 | 5.80 |
| MAX | | 7.10 | 9.90 | 52,566.00 | 2.90 | 1.30 | 8.30 |
| AVG | | 6.82 | 7.65 | 38,560.58 | 1.47 | 1.07 | 7.60 |
| SUM | | 211.47 | 237.20 | 1,195,378.00 | 45.59 | 31.11 | 235.70 |
| GeoMean | | 6.82 | 7.59 | 37,940.64 | 1.45 | 1.04 | 7.58 |

July 2015

Hydrogen Sulfide Data

| | | Hydrogen Sulfide Weather Data | | | Hydrogen Sulfide Inside Plant Data | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 03 Hydorgen Sulfide Log | 400011 - Wind Direction Direction | 400012 - Outside Temp Deg F | 400013 - Outside Condition Condition | 400021 - Front Door ppm | 400022 - Head Works ppm | 400023 - Primary Tank No. 1 ppm | 400024 - Primary Tank No. 2 ppm | 400025 - Gravity Thickener ppm | 400026 - Aeration Tanks ppm | 400027 - Rotory Sludge Thickener Room ppm | 400028 - Scrubber In ppm | 400029 - Roof Exhaust Scrubber Out ppm |
| 1 Wed | | ese-8 | 62 | mostly cloudy | 0.003 | 10.000 | | 7.800 | 42.000 | 0.015 | 0.004 | 26.000 | 2.000 |
| 2 Thu | | w-11 | 63 | sunny | 0.006 | 2.300 | | 2.300 | 7.500 | 0.005 | 0.004 | 3.300 | 0.020 |
| 3 Fri | | nw-6 | 62 | sunny | 0.006 | 15.000 | | 0.160 | 50.000 | 0.016 | 0.006 | 21.000 | 2.900 |
| 4 Sat | | ssw-2 | 64 | mostly cloudy | 0.002 | 6.000 | | 0.240 | 50.000 | 0.014 | 0.007 | 23.000 | 3.100 |
| 5 Sun | | w-10 | 61 | partly cloudy | 0.011 | 12.100 | | 50.000 | 50.000 | 0.260 | 0.008 | 49.000 | 11.000 |
| 6 Mon | | s-12 | 68 | sunny | 0.008 | 16.100 | | 12.000 | 50.000 | 0.009 | 0.083 | 34.000 | 1.400 |
| 7 Tue | | se-3 | 66 | cloudy | 0.003 | 9.000 | | 25.000 | 2.900 | 0.023 | 0.005 | 34.000 | 1.410 |
| 8 Wed | | sw-10 | 71 | p[artly cloudy | | | | | | | | | |
| 9 Thu | | ne-9 | 65 | partly cloudy | 0.006 | 0.100 | | | 50.000 | 0.210 | 0.013 | 25.000 | 2.700 |
| 10 Fri | | ese-5 | 59 | cloudy | 0.000 | 2.200 | | 0.870 | 34.000 | 0.005 | 0.004 | 27.000 | 3.600 |
| 11 Sat | | nnw-6 | 73 | sunny | 0.040 | 5.000 | | 0.009 | 28.000 | 0.007 | 0.033 | 11.000 | 0.350 |
| 12 Sun | | w-9 | 71 | partly cloudy | 0.002 | 0.140 | | 0.450 | 1.500 | 0.006 | 0.056 | 2.400 | 0.004 |
| 13 Mon | | nne-3 | 69 | partly cloudy | 0.003 | 0.130 | | 0.500 | 14.000 | 0.005 | 0.006 | 7.400 | 0.960 |
| 14 Tue | | calm | 65 | partly cloudy | 0.003 | 4.700 | | 0.620 | 2.300 | 0.002 | 0.007 | 4.100 | 0.005 |
| 15 Wed | | ssw-4 | 69 | partly cloudy | 0.002 | 5.800 | | 0.710 | 2.200 | 0.014 | 0.005 | 3.000 | 0.570 |
| 16 Thu | | n-15 | 61 | fair | 0.002 | 4.700 | | 0.280 | 8.900 | 0.001 | 0.008 | 7.400 | 0.810 |
| 17 Fri | | nw-4 | 61 | Partly cloudy | 0.002 | 7.800 | | 0.730 | 16.000 | 0.005 | 7.600 | 18.000 | 0.650 |
| 18 Sat | | s-9 | 64 | showers | 0.001 | 9.300 | | 0.011 | 15.000 | 0.012 | 0.008 | 11.000 | 0.058 |
| 19 Sun | | s-6 | 75 | partly cloudy | 0.009 | 11.000 | | 13.000 | 16.000 | 0.110 | 0.007 | 25.000 | 2.400 |
| 20 Mon | | wsw-9 | 85 | partly cloudy | 0.007 | 5.300 | | 2.400 | 11.000 | 0.010 | 0.004 | 12.000 | 0.660 |
| 21 Tue | | wnw-4 | 72 | mostly cloudy | 0.009 | 22.000 | | 2.900 | 12.000 | 0.020 | 0.009 | 31.000 | 1.200 |
| 22 Wed | | nw-13 | 70 | sunny | 0.003 | 14.100 | | 7.500 | 1.200 | 0.018 | 0.003 | 4.800 | 0.012 |
| 23 Thu | | w-6 | 64 | sunny | 0.005 | 16.000 | | 2.200 | 7.800 | 0.009 | 0.057 | 10.700 | 0.120 |
| 24 Fri | | wnw-8 | 64 | sunny | 0.006 | 5.700 | | 3.100 | 2.200 | 0.005 | 0.600 | 6.600 | 0.200 |
| 25 Sat | | n-10 | 62 | cloudy | 0.000 | 3.000 | | 0.003 | 0.430 | 0.000 | 0.002 | 2.100 | 0.029 |
| 26 Sun | | s-6 | 64 | cloudy | 0.000 | 12.000 | | 17.000 | 26.000 | 0.013 | 0.001 | 22.000 | 2.500 |
| 27 Mon | | ssw-4 | 71 | partly cloudy | 0.013 | 11.000 | | 13.000 | 28.000 | 0.019 | 0.004 | 20.000 | 1.700 |
| 28 Tue | | s-6 | 75 | partly cloudy | 0.013 | 20.000 | | 2.500 | 23.000 | 0.006 | 0.470 | 18.000 | 3.900 |
| 29 Wed | | w-5 | 70 | sunny | 0.003 | 3.000 | | 3.200 | 29.000 | 0.010 | | 7.500 | 1.400 |
| 30 Thu | | sw-6 | 72 | fair | 0.006 | 6.500 | | 3.200 | 39.000 | 0.010 | 0.015 | 29.000 | 2.800 |
| 31 Fri | | w-12 | 72 | partly cloudy | 0.002 | 6.500 | | 1.800 | 50.000 | 0.002 | 0.009 | 3.200 | 0.009 |
| MIN | | - | 59 | - | 0.000 | 0.100 | - | 0.003 | 0.430 | 0.000 | 0.001 | 2.100 | 0.004 |
| MAX | | - | 85 | - | 0.040 | 22.000 | - | 50.000 | 50.000 | 0.260 | 7.600 | 49.000 | 11.000 |
| AVG | | - | 67 | - | 0.006 | 8.216 | - | 5.982 | 22.331 | 0.028 | 0.312 | 16.617 | 1.616 |
| SUM | | - | 2,090 | - | 0.176 | 246.470 | - | 173.483 | 669.930 | 0.841 | 9.038 | 498.500 | 48.467 |
| GeoMean | | - | 67 | - | 0.008 | 5.031 | - | 1.311 | 12.626 | 0.013 | 0.013 | 11.939 | 0.461 |

# Hydrogen Sulfide Data

| | | Hydrogen Sulfide Outside Plant Data | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 03 Hydorgen Sulfide Log | 400030 - % Removal % | 400031 - Cemetery Flag Pole ppm | 400032 - Garage At Cemetery ppm | 400033 - Duck Lane ppm | 400034 - Duck Lane And Nantasket Ave ppm | 400035 - Seawall Across From Plant ppm | 400036 - Fire Hydrant Across Inland Bay Side ppm | 400037 - Front Of Aeration Bayside ppm |
| 1 Wed | | 92.3 | 0.004 | 0.004 | 0.005 | 0.005 | 0.005 | 0.008 | 0.005 |
| 2 Thu | | 99.4 | 0.007 | 0.007 | 0.007 | 0.007 | 0.008 | 0.009 | 0.006 |
| 3 Fri | | 86.2 | 0.006 | 0.008 | 0.009 | 0.008 | 0.008 | 0.007 | 0.006 |
| 4 Sat | | 86.5 | 0.005 | 0.007 | 0.007 | 0.006 | 0.007 | 0.008 | 0.005 |
| 5 Sun | | 77.6 | 0.008 | 0.008 | 0.008 | 0.007 | 0.007 | 0.007 | 0.008 |
| 6 Mon | | 95.9 | 0.004 | 0.005 | 0.005 | 0.005 | 0.005 | 0.004 | 0.004 |
| 7 Tue | | 95.9 | 0.003 | 0.003 | 0.003 | 0.003 | 0.004 | 0.003 | 0.003 |
| 8 Wed | | | | | | | | | |
| 9 Thu | | 89.2 | 0.006 | 0.006 | 0.004 | 0.004 | 0.005 | 0.004 | 0.004 |
| 10 Fri | | 86.7 | 0.005 | 0.001 | 0.001 | 0.002 | 0.001 | 0.002 | 0.003 |
| 11 Sat | | 96.8 | 0.010 | 0.011 | 0.012 | 0.011 | 0.011 | 0.012 | 0.009 |
| 12 Sun | | 99.8 | 0.002 | 0.001 | 0.001 | 0.002 | 0.002 | 0.002 | 0.002 |
| 13 Mon | | 87.0 | 0.003 | 0.003 | 0.003 | 0.003 | 0.004 | 0.004 | 0.003 |
| 14 Tue | | 99.9 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.001 |
| 15 Wed | | 81.0 | 0.003 | 0.003 | 0.003 | 0.003 | 0.004 | 0.003 | 0.002 |
| 16 Thu | | 89.1 | 0.004 | 0.003 | 0.002 | 0.003 | 0.004 | 0.002 | 0.004 |
| 17 Fri | | 96.4 | 0.002 | 0.001 | 0.002 | 0.001 | 0.002 | 0.001 | 0.002 |
| 18 Sat | | 99.5 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.002 |
| 19 Sun | | 90.4 | 0.005 | 0.007 | 0.006 | 0.009 | 0.010 | 0.014 | 0.006 |
| 20 Mon | | 94.5 | 0.005 | 0.006 | 0.006 | 0.007 | 0.007 | 0.007 | 0.007 |
| 21 Tue | | 96.1 | 0.003 | 0.003 | 0.004 | 0.005 | 0.006 | 0.014 | 0.003 |
| 22 Wed | | 99.8 | 0.006 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.005 |
| 23 Thu | | 98.9 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.005 | 0.004 |
| 24 Fri | | 97.0 | 0.002 | 0.002 | 0.002 | 0.002 | 0.003 | 0.004 | 0.002 |
| 25 Sat | | 98.6 | 0.001 | 0.001 | 0.000 | 0.001 | 0.001 | 0.001 | 0.002 |
| 26 Sun | | 88.6 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 27 Mon | | 91.5 | 0.001 | 0.001 | 0.002 | 0.003 | 0.005 | 0.003 | 0.002 |
| 28 Tue | | 78.3 | 0.002 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 | 0.002 |
| 29 Wed | | 81.3 | 0.002 | 0.002 | 0.003 | 0.004 | 0.004 | 0.007 | 0.003 |
| 30 Thu | | 90.3 | 0.004 | 0.004 | 0.004 | 0.004 | 0.007 | 0.018 | 0.004 |
| 31 Fri | | 99.7 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 |
| MIN | | 77.6 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| MAX | | 99.9 | 0.010 | 0.011 | 0.012 | 0.011 | 0.011 | 0.018 | 0.009 |
| AVG | | 92.1 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.005 | 0.004 |
| SUM | | 2,764.2 | 0.108 | 0.105 | 0.107 | 0.113 | 0.130 | 0.156 | 0.109 |
| GeoMean | | 91.9 | 0.006 | 0.005 | 0.007 | 0.006 | 0.005 | 0.005 | 0.005 |