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Fred Hurley,  
*Director*

**TOWN OF NEWTOWN**  
WATER AND SEWER AUTHORITY

Richard B. Zang,  
*Chairman*  
Marianne Brown  
Louis Carbone  
Philip Cruz  
Alan Shepard  
Carl Zencey  
Richard Conte

THESE MINUTES ARE SUBJECT TO APPROVAL BY THE WATER AND SEWER AUTHORITY

The Water and Sewer Authority held its regular meeting on December 13, 2012 at the Waste Water Treatment Plant, 24 Commerce Road, Newtown, CT. Chairman Zang called the meeting to order at 7:00pm.

**Present:** Dick Zang, Marianne Brown, George Hill, Alan Shepard, Gene Vetrano, Carl Zencey

**Absent:** Lou Carbone

**Also Present:** Jason O'Brien and Julio Segarra of United Water, Director of Public Works Fred Hurley, and one member of the press

**Public Participation:** None

**Approval of the Minutes:** the previously distributed minutes of the regular meetings of 9/13/12 and 10/11/12 were unanimously approved.

**OLD BUSINESS**

*20 & 60 Castle Hill Road* – Tabled

*Sandy Hook Automotive Marine lien* – There is nothing new.

*Capital Needs/New well* – Rehabilitating well number 8 seems like a better option than a new well.

*Renewable Energy Project/grant payment* – They are one step closer to getting the next 40% of the Solar Grant. The monitoring system needs to be up and operational which is being worked on.

**NEW BUSINESS**

*Water System Survey response letter* – The state replied to the letter sent by the town, they would like to see the improvements done in a quicker time frame. Their request has to do with well 8 and bringing it back on-line. They want to see the inter connection with Aquarian brought back. During this year and last years' storm event, the issue of capacity for the jail came up. The interconnection with Aquarian would be a beneficial back-up. Fred had a quote from Fuss & O'Neil to review well 8, construction document design and bid. His recommendation is to authorize up to bidding but not the rest. They can do the others as part of the on-call contract. Dick would like to get an estimate from GHD as well.

Alan Shepard moved to put the Fuss & O'Neil estimate on hold and get an estimate from GHD. Gene Vetrano seconded, motion unanimously accepted.

*Hawleyville Sewer Extension* – The town is interested in getting sewers installed in Hawleyville. This is for the development of the properties at Exit 9. They have put \$500,000 in the CIP to do benefit assessments and revised engineering. The benefit assessments should cover the cost for the extension of the sewer.

*Committee Reports:* Gene Vetrano attended a preconstruction, pre-design meeting for the SCADA system with GHD. They were looking at a 6 to 8 month turnaround time.

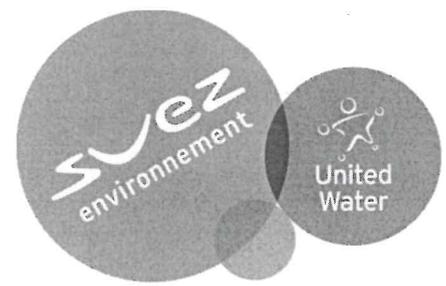
*Report by United Water Environmental Services, Inc.* – The plant ran well during the storm. Hanover pump station blew another voltage regulator. There was a spare in stock and was able to be replaced. A copy of the October and November monthly operating reports are attached.

*Report by Public Works Director* – Reported during the meeting.

*Any other business* – Gene Vetrano moved to add the 2013 meeting schedule to the agenda, Alan Shepard seconded, motion unanimously accepted. Alan Shepard moved to accept 2013 meeting schedule, Gene Vetrano seconded, motion unanimously accepted.

Having no further business, the meeting was adjourned at 8:35pm

Arlene Miles  
Clerk



**MONTHLY OPERATING REPORT**  
**October 2012**  
**TOWN OF NEWTOWN WPCF**

**EXECUTIVE SUMMARY**

During the month of October the plant process performed well. Nitrogen average pound per day during the month was 23 lbs. The open channel flow meter data has been collected from both locations. The meters are located at a manhole on Main Street near School House rd. and Commerce Road. Taunton Lake will be our next areas of focus. The Alum and Ultraviolet processes will be taken offline September 30<sup>th</sup> until May 1, 2013.

Prepared all plant and collection systems for the Sandy storm event.

Below are some of the highlighted major operation and maintenance items that are currently in progress or completed. Solar project at the plant has been completed and is presently on-line the modem communication link has yet to be completed.

Plant generator air discharge permit has been submitted to Fuss & O'Neil to prepare and submit to the Air Compliance Department for modification.

**OPERATION & MAINTENANCE**

- Inspect all plant fire extinguishers, eyewash, and emergency exit lighting.
- Inspect and programmed the replacement effluent sampler in the filter building.
- Hosed secondary wells and troughs.
- Cleaned the grit washer screen, and hopper.
- Cleaned both levels in the filter building.
- Cleaned the roto-mat and the rag hopper.
- Greased gravity belt thickener.
- Inspected and cleaned all eye wash stations.
- Cleaned secondary tanks 1&2 draft tubes.
- Cleaned gravity belt thickener belt.
- Checked calibration of the influent flow meter
- Calibrated Dissolved oxygen probe in the Oxidation ditch.
- Cleaned # 1 oxidation ditch.
- Replaced tubing on both influent and effluent samplers.
- Backwashed and flushed the entire sodium Hydroxide system.
- Ultraviolet light banks A, B, and C were inspected and serviced.
- Ultraviolet system was taken offline September 30<sup>th</sup>.
- The Phosphate control system has also been taken offline September 30<sup>th</sup>.
- The Alum dosing system presently is being cleaned and flushed-out.

- Pulled-out several red bricks from the bottom of the manholes along rt 25 from church up to school house rd. Most of the decking brick and mortar has given away. Poor cement mix.
- The above line was cleaned several times and a major stoppage was averted.
- All generatoe fuel tanks have been filled.
- All equipment was inspected for operation prior to storm event.
- Assisted in replacing communication lines for both natural gas meters.
- Inspect all plant equipment oil levels.
- Painting in lower level of the clarifier building.
- Modifying seal flushing lines in the clarifier building.(In Progress)
- Fire system and sensors were inspected by Simplex-Grinnell technicians. Systems all passed.
- Cleaning and Painting equipment in the filter building. (work in progress)

**PUMP STATIONS**

- All the pump stations was checked prior to storm event.
- ADT alarm system battery was replaced at the Hanover and sandy hook P/S.

**ODOR ABATEMENT**

There were no odor complaints for the month.

**STAFFING**

We are presently fully staffed.

**TRAINING**

All employees continued with our in house OSHA compliance safety training through PureSafety.

**REGULATORY COMPLIANCE**

In Compliance

**SOLIDS HANDLING**

Type	Gallons This Month	Target	Gallons This Year	Target
Sludge (SYNAGRO)	32,000	40,625 gal/mo 2 loads/wk	0.1225MG	0.488 MG 75 loads/yr

**ANALYSIS OF WASTED SLUDGE**

Waste Activated Sludge	Total Gallons	Min %	Max %	Average %	Total Pounds
SYNAGRO	32,000	4.99	5.9	5.27	14273

## EMERGENCY CALL-OUTS

Type	Total This Month	Total for Year
Sewer Backup	0	0
Pump Station	1	5
Plant	1	3
Odor	1	1
Grinder Systems	1	5

## PLANT MAINTENANCE

The following data is provided as a record of maintenance work order activities during the month.

Type	Total This Month	Total for Year
Preventative Maintenance	71	143
Corrective Maintenance	25	99
Emergency Maintenance	0	0
Call-Before-You-Dig (CBYD)	9	134

## FIELD OPERATIONS

Type	Monthly Ft	Total for Yr	Contract	Amount Left
Sewer Cleaning Scheduled	2050	3050	*****	*****
Sewer Cleaning Unscheduled	0	500	*****	*****
Other	Monthly Qty	Total for Yr	Contract	Amount Left
Manhole Inspections	11	17	*****	N/A
Grinder Replacements	0	11	As Necessary	N/A
New Grinder Stations	0	0	*****	N/A

## PUMP STATIONS

Station	Baldwin	Hanover	Sandy Hook	Taunton Lake	Hawley-ville	Fairfield Hills Metering
<b>Number Inspections/Mo.</b>	<b>9</b>	<b>10</b>	<b>10</b>	<b>9</b>	<b>9</b>	<b>8</b>
<b>Service Failures</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Number Callouts</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Maintenance &amp; Repair</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Flow (Total MG)</b>	<b>.111</b>	<b>.394</b>	<b>1.704</b>	<b>.429</b>	<b>.447</b>	<b>4.538</b>
<b>(Avg. Daily GPD)</b>	<b>3,590</b>	<b>12,726</b>	<b>54,986</b>	<b>13,851</b>	<b>14,448</b>	<b>146,413</b>

## FINANCIAL STATUS – MAINTENANCE

Item	Budget \$	\$ Spent/Mo	\$ Spent/Yr	\$ Remaining
<b>Preventative and Predictive</b>	<b>\$55,000</b>	<b>\$4,979.65</b>	<b>\$17,747.72</b>	<b>\$37,252.28</b>
<b>Capital Repair and Replacement</b>	<b>\$95,000</b>	<b>\$2,580.72</b>	<b>\$38,122.02</b>	<b>\$56,877.98</b>

## FLOW AND LOADS TRACKING

Budget Month/Yr	Influent Flow, MGD	Influent BOD, lbs	Influent TSS, lbs	Calendar Month / Year	Average N, lbs
July 2012	.325	670	489	January 2012	22
August 2012	.343	712	494	February 2012	14.6
September 2012	.365	694	544	March 2012	14.8
October 2012	.389	729	638	April 2012	7.0
November 2012				May 2012	12
December 2012				June 2012	10
January 2013				July 2012	13
February 2013				August 2012	21
March 2013				September 2012	14.6
April 2013				October 2012	23
May 2013				November 2012	
June 2013				December 2012	
Monthly Average	.356	701	541	Calendar Year to Date Average	15
Contract	Average 0.53 MGD Adjustment = Change in Flow in MG * \$17.83/MG	Avg. 999 lbs/day Adjustment = Change in BOD in lbs * \$0.04/lb	Avg. 703 lbs/day Adjustment = Change in TSS in lbs * \$0.16/lb	Contract	NPDES Permit Limit = 17 Lbs/day
Deviation % (+/-)	-33	-29.8	-23	Deviation % (+/-)	-11.7

## FAIRFIELD HILLS WTF

### EXECUTIVE SUMMARY

The staff continues to improve equipment and standard operating methods to prevent Fairfield Hills WTP failures. Well # 3 is operating as the lead pump at <40 gallons per minute. The water treatment plant operated very well in October.

We had a Department of Public Health inspection August 22.

The DPH sanitary inspection findings were two violations at the water treatment plant, some requirement modifications, and recommendations.

A new Chlorine residual controller and ph probe are checked and calibrated at the Water Treatment plant.

Backflow and cross-connection inspections were completed in August.

Two locations failed: Reed school and Garner prison.

Reed school was repaired and re-inspected. (Passed)

The garner prison facility was repaired internally by their plumber and failed the inspection. The backflow was repaired and tested by Butterworth & Scheck and passed.

**There was flushing of the lines at Fairfield Hills during the month of October.**

Listed below are some of the highlighted major operation and maintenance items that are currently in progress or have been completed.

## OPERATION & MAINTENANCE

- Inspected WTP and made adjustments as needed.
- Monitor chlorine and ph controller at the WTP and adjust as needed.

## STAFFING

Currently, all the regulatory required staffing positions are met for the Water Treatment Facilities.

## REGULATORY COMPLIANCE

The Department of Health Monitoring Report did meet full compliance during the month.

## EMERGENCY CALL-OUTS

Type	Total This Month	Total for Year
Plant WTP	1	4
Well Houses	0	0
Reservoirs (Storage)	0	0
Customer Service Issues	0	4
Water Main Breaks	0	0

## FAIRFIELD HILLS MAINTENANCE

The following data is provided as a record of maintenance work order activities during the month.

Type	Total This Month	Total for Year
Preventative Maintenance	1	10
Corrective Maintenance	1	6
Emergency Maintenance	1	1

## FIELD OPERATIONS

Other	Monthly Qty	Total for Year
Valve Inspections	5	28
Hydrant Inspections	4	19
Service Inspections	0	0
Call-Before-You-Dig (CBYD)	0	11

## FINANCIAL STATUS – MAINTENANCE

Item	Budget \$	\$ Spent/Mo	\$ Spent/Yr	\$ Remaining
Preventative and Predictive	\$15,500.00	\$1,235.22	\$5,260.66	\$10,239.34
Capital Repair and Replacement	\$20,000.00	\$368.09	\$22,139.32	-\$2,139.32

## FLOW TRACKING

<b>Month/Yr</b>	<b>Well No. 3 Gallons</b>	<b>Well No. 7 Gallons</b>	<b>Well No. 8 Gallons</b>	<b>Plant Production Gallons</b>
<b>July 2012</b>	<b>746,000</b>	<b>5,772,400</b>	<b>0</b>	<b>6,518,400</b>
<b>August 2012</b>	<b>735,000</b>	<b>5,885,200</b>	<b>0</b>	<b>6,620,200</b>
<b>September 2012</b>	<b>567,000</b>	<b>4,065,500</b>	<b>0</b>	<b>4,632,500</b>
<b>October 2012</b>	<b>776,000</b>	<b>5,494,200</b>	<b>0</b>	<b>6,270,200</b>
<b>November 2012</b>			<b>0</b>	
<b>December 2012</b>			<b>0</b>	
<b>January 2013</b>			<b>0</b>	
<b>February 2013</b>			<b>0</b>	
<b>March 2013</b>			<b>0</b>	
<b>April 2013</b>			<b>0</b>	
<b>May 2013</b>			<b>0</b>	
<b>June 2013</b>			<b>0</b>	
<b>Monthly Average</b>	<b>706,000</b>	<b>5,304,325</b>	<b>0</b>	<b>6,010,325</b>
<b>Daily Average</b>	<b>25,032</b>	<b>177,232</b>	<b>0</b>	<b>202,264</b>



**MONTHLY OPERATING REPORT**  
**November 2012**  
**TOWN OF NEWTOWN WPCF**

**EXECUTIVE SUMMARY**

During the month of November the plant process performed well. Nitrogen average pound per day during the month was 25 lbs. The open channel flow meter data has been collected from both locations. The meters are located at a manhole on Main Street near School House rd. and Commerce Road. Taunton Lake will be our next areas of focus.

The Alum and Ultraviolet processes has been taken offline September 30<sup>th</sup> until May 1, 2013.

Prepared all plant and collection systems for the Sandy storm event.

All pump stations were on emergency generator power during the Storm and a few days after.

Hanover pump station generator failed during the storm due to the voltage regulator.

I was able to rush in and replace the component and restore the generator power without a by-pass event. Few days after had Cummins technician check my installation. Checked ok

The solar panels were damaged during the storm and have been off-line since the storm.

Executive and Absolute electric companies were notified and inspected the extent of the damage.

Several manhole inverts blocked by bricks and mortar from the deck area of each manhole. The debris was manually removed and the lines jetted prior to the storm event.

The manhole rehabilitation will submitted as a capitol expense project.

I am happy to say the SCADA project has been started; Greg Knapp and I have toured the pump stations have started designing the back-up float system for each of the stations.

Plant generator air discharge permit has been submitted to Fuss & O'Neil to prepare and submit to the Air Compliance Department for modification.

Below are some of the highlighted major operation and maintenance items that are currently in progress or completed.

**OPERATION & MAINTENANCE**

- Inspect all plant fire extinguishers, eyewash, and emergency exit lighting.
- Inspect and programmed the replacement effluent sampler in the filter building.
- Hosed secondary wells and troughs.
- Cleaned the grit washer screen, and hopper.
- Cleaned both levels in the filter building.

- Cleaned the roto-mat and the rag hopper.
- Greased gravity belt thickener.
- Inspected and cleaned all eye wash stations.
- Cleaned secondary tanks 1&2 draft tubes.
- Cleaned gravity belt thickener belt.
- Checked calibration of the influent flow meter
- Calibrated Dissolved oxygen probe in the Oxidation ditch.
- Cleaned # 1 oxidation ditch.
- Replaced tubing on both influent and effluent samplers.
- Ultraviolet system was taken offline September 30<sup>th</sup>.
- The Phosphate control system has also been taken offline September 30<sup>th</sup>.
- Pulled-out several red bricks from the bottom of the manholes along Route 25 from church up to school house rd. Most of the decking brick and mortar has given away. Poor cement mix.
- The above line was cleaned several times and a major stoppage was averted.
- Inspect all plant equipment oil levels.
- Painting in lower level of the clarifier building. (on-going)
- Modifying seal flushing lines in the clarifier building.(In Progress)
- Cleaning and Painting equipment in the filter building. (work in progress)

### **PUMP STATIONS**

- All the pump stations were checked prior and during the storm event.
- Replaced voltage regulator at Hanover pump station during the storm.
- Had Cummins tech come site verify my installation and determine root cause.
- Pumped and inspect Bungaloo terr. Septic field.

### **ODOR ABATEMENT**

There were no odor complaints for the month.

### **STAFFING**

We are presently fully staffed.

### **TRAINING**

All employees continued with our in house OSHA compliance safety training through PureSafety.

### **REGULATORY COMPLIANCE**

In Compliance

## SOLIDS HANDLING

Type	Gallons This Month	Target	Gallons This Year	Target
Sludge (SYNAGRO)	32,500	40,625 gal/mo 2 loads/wk	0.155MG	0.488 MG 75 loads/yr

## ANALYSIS OF WASTED SLUDGE

Waste Activated Sludge	Total Gallons	Min %	Max %	Average %	Total Pounds
SYNAGRO	32,500	4.96	5.77	5.26	14257

## EMERGENCY CALL-OUTS

Type	Total This Month	Total for Year
Sewer Backup	0	0
Pump Station	2	7
Plant	0	3
Odor	0	1
Grinder Systems	5	10

## PLANT MAINTENANCE

The following data is provided as a record of maintenance work order activities during the month.

Type	Total This Month	Total for Year
Preventative Maintenance	17	160
Corrective Maintenance	14	113
Emergency Maintenance	1	1
Call-Before-You-Dig (CBYD)	41	175

## FIELD OPERATIONS

Type	Monthly Ft	Total for Yr	Contract	Amount Left
Sewer Cleaning Scheduled	2050	3050	*****	*****
Sewer Cleaning Unscheduled	0	500	*****	*****
Other	Monthly Qty	Total for Yr	Contract	Amount Left
Manhole Inspections	11	17	*****	N/A
Grinder Replacements	3	14	As Necessary	N/A
New Grinder Stations	0	0	*****	N/A

## PUMP STATIONS

Station	Baldwin	Hanover	Sandy Hook	Taunton Lake	Hawley-ville	Fairfield Hills Metering
Number Inspections/Mo.	8	9	8	8	8	8
Service Failures	0	1	0	0	0	0
Number Callouts	0	2	1	0	0	0
Maintenance & Repair	0	1	0	0	0	0
Flow (Total MG)	.111	.376	1.636	.435	.462	4.383
(Avg. Daily GPD)	3,717	12,548	54,550	14,523	15,424	146,125

## FINANCIAL STATUS – MAINTENANCE

Item	Budget \$	\$ Spent/Mo	\$ Spent/Yr	\$ Remaining
Preventative and Predictive	\$55,000	\$5,507.69	\$23,255.41	\$31,744.59
Capital Repair and Replacement	\$95,000	\$6,945.57	\$45,067.59	\$49,932.41

## FLOW AND LOADS TRACKING

Budget Month/Yr	Influent Flow, MGD	Influent BOD, lbs	Influent TSS, lbs	Calendar Month / Year	Average N, lbs
July 2012	.325	670	489	January 2012	22
August 2012	.343	712	494	February 2012	14.6
September 2012	.365	694	544	March 2012	14.8
October 2012	.389	729	638	April 2012	7.0
November 2012	.416	881	798	May 2012	12
December 2012				June 2012	10
January 2013				July 2012	13
February 2013				August 2012	21
March 2013				September 2012	14.6
April 2013				October 2012	23
May 2013				November 2012	25
June 2013				December 2012	
Monthly Average	.305	737	593	Calendar Year to Date Average	16
<b>Contract</b>	Average 0.53 MGD Adjustment = Change in Flow in MG * \$17.83/MG	Avg. 999 lbs/day Adjustment = Change in BOD in lbs * \$0.04/lb	Avg. 703 lbs/day Adjustment = Change in TSS in lbs * \$0.16/lb	<b>Contract</b>	<b>NPDES Permit Limit = 17 Lbs/day</b>
Deviation % (+/-)	.305	.26	-16	Deviation % (+/-)	-6

## FAIRFIELD HILLS WTF

### EXECUTIVE SUMMARY

The staff continues to improve equipment and standard operating methods to prevent Fairfield Hills WTP failures. Well # 3 is operating as the lead pump at <40 gallons per minute. The water treatment plant operated very well in October.

We had a Department of Public Health inspection August 22.

The DPH sanitary inspection findings were two violations at the water treatment plant, some requirement modifications, and recommendations.

A new Chlorine residual controller and ph probe are checked and calibrated at the Water Treatment plant. Check and maintain calibrations of all equipment.

Butterworth & Scheck and I performed a cross-connection inspection at the Garner facility. All went well.

**There was flushing of the lines at Fairfield Hills during the month of November.**

Listed below are some of the highlighted major operation and maintenance items that are currently in progress or have been completed.

## OPERATION & MAINTENANCE

- Inspected WTP and made adjustments as needed.
- Monitor chlorine and ph controller at the WTP and adjust as needed.

## STAFFING

Currently, all the regulatory required staffing positions are met for the Water Treatment Facilities.

## REGULATORY COMPLIANCE

The Department of Health Monitoring Report did meet full compliance during the month.

## EMERGENCY CALL-OUTS

Type	Total This Month	Total for Year
Plant WTP	0	4
Well Houses	0	0
Reservoirs (Storage)	0	0
Customer Service Issues	0	4
Plant WTP	0	4

## FAIRFIELD HILLS MAINTENANCE

The following data is provided as a record of maintenance work order activities during the month.

Type	Total This Month	Total for Year
Preventative Maintenance	1	11
Corrective Maintenance	0	6
Emergency Maintenance	0	1

## FIELD OPERATIONS

Other	Monthly Qty	Total for Year
Valve Inspections	5	28
Hydrant Inspections	4	19
Service Inspections	0	0
Call-Before-You-Dig (CBYD)	0	11

**FINANCIAL STATUS – MAINTENANCE**

<b>Item</b>	<b>Budget \$</b>	<b>\$ Spent/Mo</b>	<b>\$ Spent/Yr</b>	<b>\$ Remaining</b>
<b>Preventative and Predictive</b>	<b>\$15,500.00</b>	<b>\$948.67</b>	<b>\$6,209.33</b>	<b>\$9,290.67</b>
<b>Capital Repair and Replacement</b>	<b>\$20,000.00</b>	<b>\$253.76</b>	<b>\$22,393.08</b>	<b>-\$2,393.08</b>

**FLOW TRACKING**

<b>Month/Yr</b>	<b>Well No. 3 Gallons</b>	<b>Well No. 7 Gallons</b>	<b>Well No. 8 Gallons</b>	<b>Plant Production Gallons</b>
<b>July 2012</b>	<b>746,000</b>	<b>5,772,400</b>	<b>0</b>	<b>6,518,400</b>
<b>August 2012</b>	<b>735,000</b>	<b>5,885,200</b>	<b>0</b>	<b>6,620,200</b>
<b>September 2012</b>	<b>567,000</b>	<b>4,065,500</b>	<b>0</b>	<b>4,632,500</b>
<b>October 2012</b>	<b>776,000</b>	<b>5,494,200</b>	<b>0</b>	<b>6,270,200</b>
<b>November 2012</b>	<b>499,000</b>	<b>3,448,700</b>	<b>0</b>	<b>3,947,700</b>
<b>December 2012</b>			<b>0</b>	
<b>January 2013</b>			<b>0</b>	
<b>February 2013</b>			<b>0</b>	
<b>March 2013</b>			<b>0</b>	
<b>April 2013</b>			<b>0</b>	
<b>May 2013</b>			<b>0</b>	
<b>June 2013</b>			<b>0</b>	
<b>Monthly Average</b>	<b>664,600</b>	<b>4,933,200</b>	<b>0</b>	<b>5,597,800</b>
<b>Daily Average</b>	<b>16,633</b>	<b>114.956</b>	<b>0</b>	<b>131,590</b>