

Ludlow Park Homeowners Association Annual Meeting



Yonkers Joint WWTP
Wednesday January 14, 2015
7:30 PM

Yonkers Joint O&M Management Team

- Jeff Bryant
 - Plant Superintendent
 - 231-2847
-
- | | |
|---|---|
| <ul style="list-style-type: none">• Supervisor of Plant Operations• 231-2852 | <ul style="list-style-type: none">• Erwin Vazquez• Supervisor of Maintenance• 231- 2850 |
|---|---|

Odor Remediation Project – SY009

- Phase I, \$9.6 Million – Screen & Grit Bldg HVAC and Odor Control including Ludlow St PS Odor Control
- Phase II, \$9.8 Million – HVAC System Upgrades to Blower, Admin & DAF Bldg's & new boilers
- Phase III, \$7.3 Million – Odor Control for Primary Access Bldg & South Pumping Station, HVAC systems in several other area's and buildings
- 98% Complete
- Scheduled Completion March 2015
- Out For Bid 4th Q 2014
- Construction Start Summer 2015
- Funding Request 3rd Q 2015

Plant Capacity

- 2014 Actual Flow
- Design Flow
- Hydraulic Capacity
- Permitted Flow
- 80 MGD
- 120 MGD
- 330 MGD
- 120 MGD (12 MRA)

Results of Odor Control Projects

Rank	Process Area	Odor Control Method	Cost	Approx Finish
1	Primary Settling Tanks	Covered and Odor Control by Primary Settling Tank Mist Scrubbers (addressed items ranked 1 – 4)	\$ 9.5	1996
2	Primary Settling Influent Channel			
3	Aerated Grit Chambers			
4	Grit Chamber Effluent Channel			
5 & 6	South Yonkers Screen House	CSO Odor Control Mist Scrubbers and Treatment System inside the building	\$ 3.0	1995
7	Blower, Admin, Thickener & Secondary Digester building	Building ventilation & Exhaust, odorous air treatment, digester roofs and blow off vents	\$ 4.5	2008
8	Aeration Basins	Process Controls, Foam Control & Misting, Fine Pore Diffusers	\$ 4.9	2002
9	Primary Thickener Building	Mist Scrubber	\$ 3.1	1994
10	Digester Overflow	Covers & Odor Control to Primary and Secondary Digesters – Activated Carbon	\$ 0.28	2008
11	Final Settling Tanks	Automated Skimmer System	\$ 3.5	2011

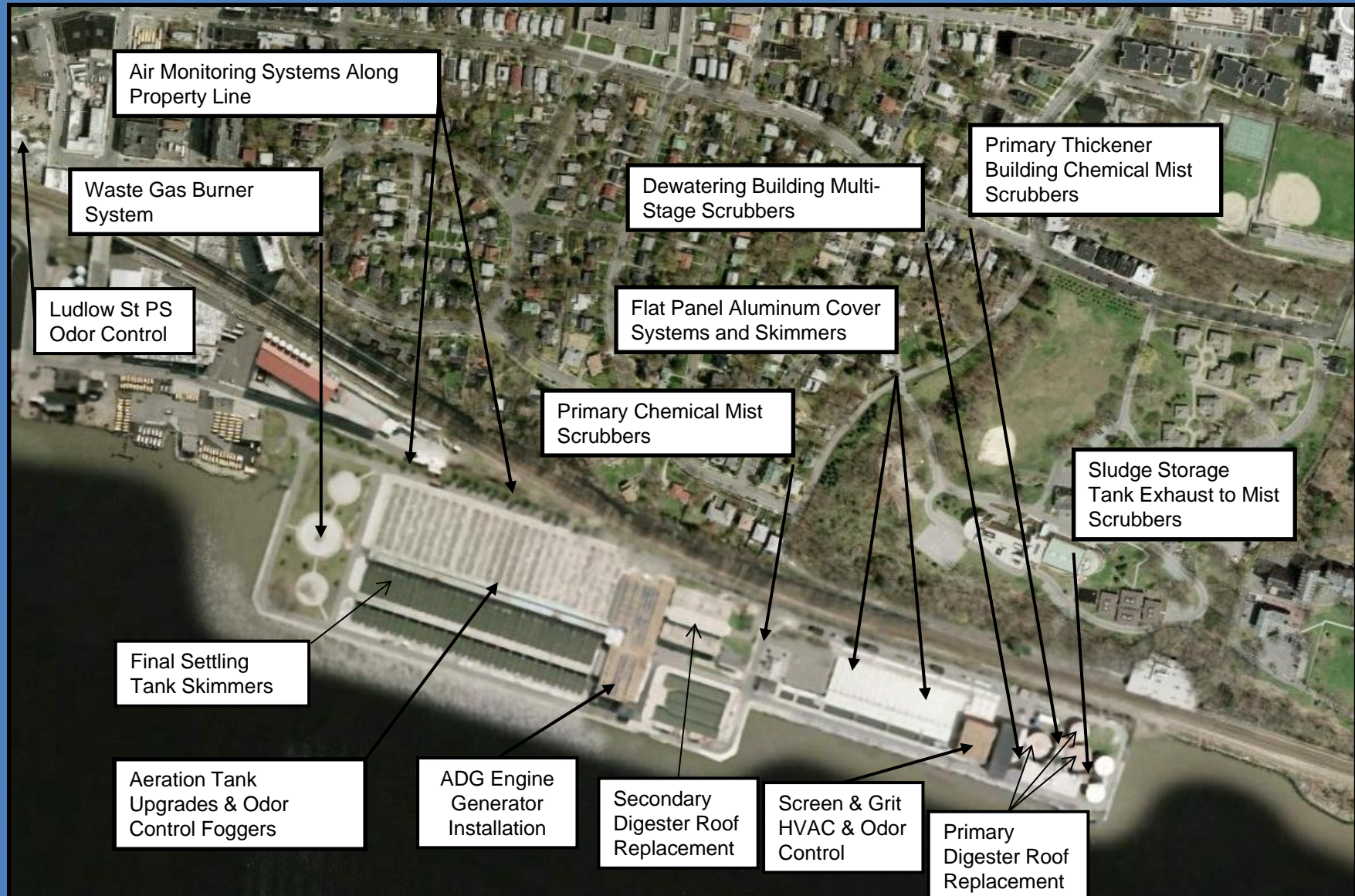
Results of Odor Control Projects (cont.)

Rank	Process Area	Odor Control Method	Cost	Approx Finish
12 & 13	Screen & Grit HVAC and Odor Control / Breezeway	98% Complete	\$ 9.6	2015
14 & 15	Sludge Storage Tank Vents	Primary Thickener Odor Control System	\$ 2.0	2005
	Ludlow St PS Additional Mitigation	Odor Control with Carbon Filters	\$ 3.2	2013
	Dewatering Building & Truck Loading Bay	3 Stage Scrubber	\$ 3.5	2001
	Centrifuge & Cake Pump Room	Dewatering Upgrade -Centrifuge Controls and Centrate Pumping system	\$ 3.65	2012
	Digester Gas Flares	Upgrades Controls & Replace Primary Flare	\$ 0.9	1999
	Permanganate Storage Silo	Chemical Storage for Primary Thickener Odor Control	\$ 1.0	2003
	HVAC Phase II (2015)	HVAC Blower, Administration and DAF Thickener Buildings, New Secondary Boilers	\$ 9.8	
	HVAC Phase III (2016)	HVAC in many area's, Odor Control for Primary Access Bldg & South Pumping Station	\$ 7.3	

Results of Odor Control Projects (cont.)

Rank	Process Area	Odor Control Method	Cost	Approx Finish
	Air Monitoring System	Installed H ₂ S Monitors on East Property Line and weather station for real time monitoring	\$ 0.4	1995
	Foam Application to Sludge Cake	Unsuccessful trial in 2008 to reduce odors during hauling	\$ 0.05	2008
	Ludlow Park	Install Carbon Inserts in Manholes	\$ 0.01	2011
		Total Expended including current project construction estimates	\$ 69.8	

Odor Abatement Projects Completed



Yonkers Joint WWTP H₂S Monitoring System

PRINT
H₂S REPORT
SUMMARY

Weekly Summary

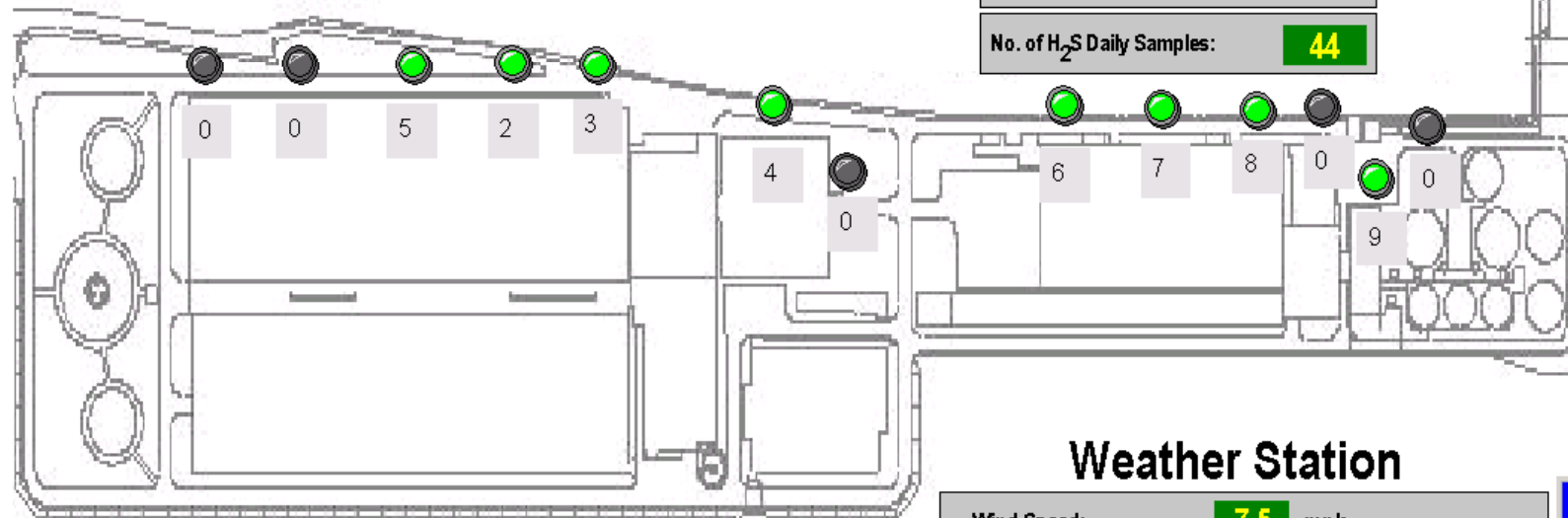
Daily Summary

PRINT
H₂S REPORT
DATA

Current Week

N

H₂S Units - Current Values

H₂S Unit 2 0.00 ppbH₂S Unit 6 0.21 ppbH₂S Unit 3 0.00 ppbH₂S Unit 7 3.21 ppbH₂S Unit 4 0.00 ppbH₂S Unit 8 0.00 ppbH₂S Unit 5 0.00 ppbH₂S Unit 9 0.00 ppbNo. of H₂S Weekly Samples: 332No. of H₂S Daily Samples: 44Trending
Units 2,3,4,5Trending
Units 6,7,8,9Rain Fall Graph
and Report

Rainfall Daily Accumulation: 0.00 in

INFLUENT FLOW

81.9 MGD

Weather Station

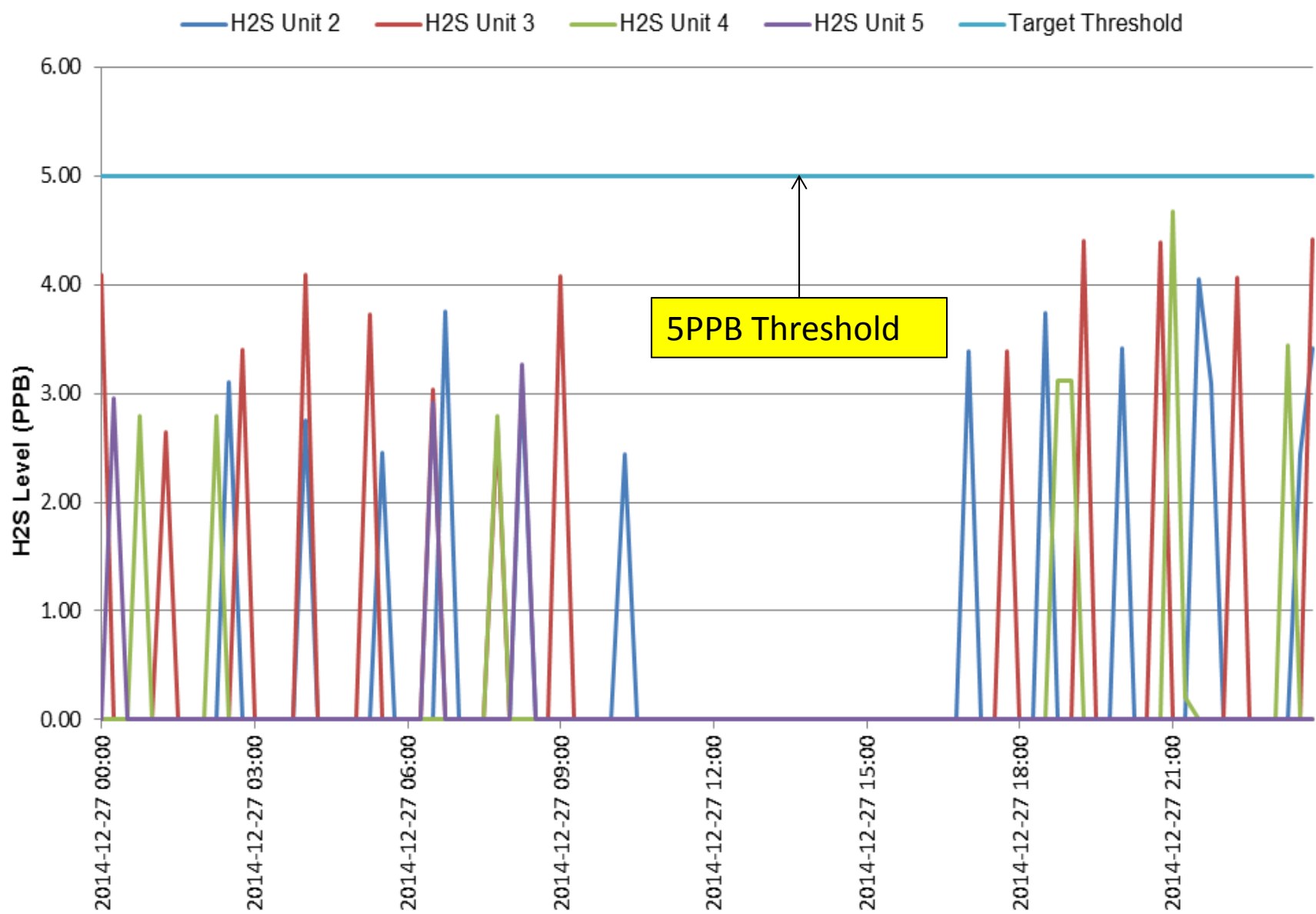
Wind Speed: 7.5 mph

Temperature: -39.3 degF -39.6 degC

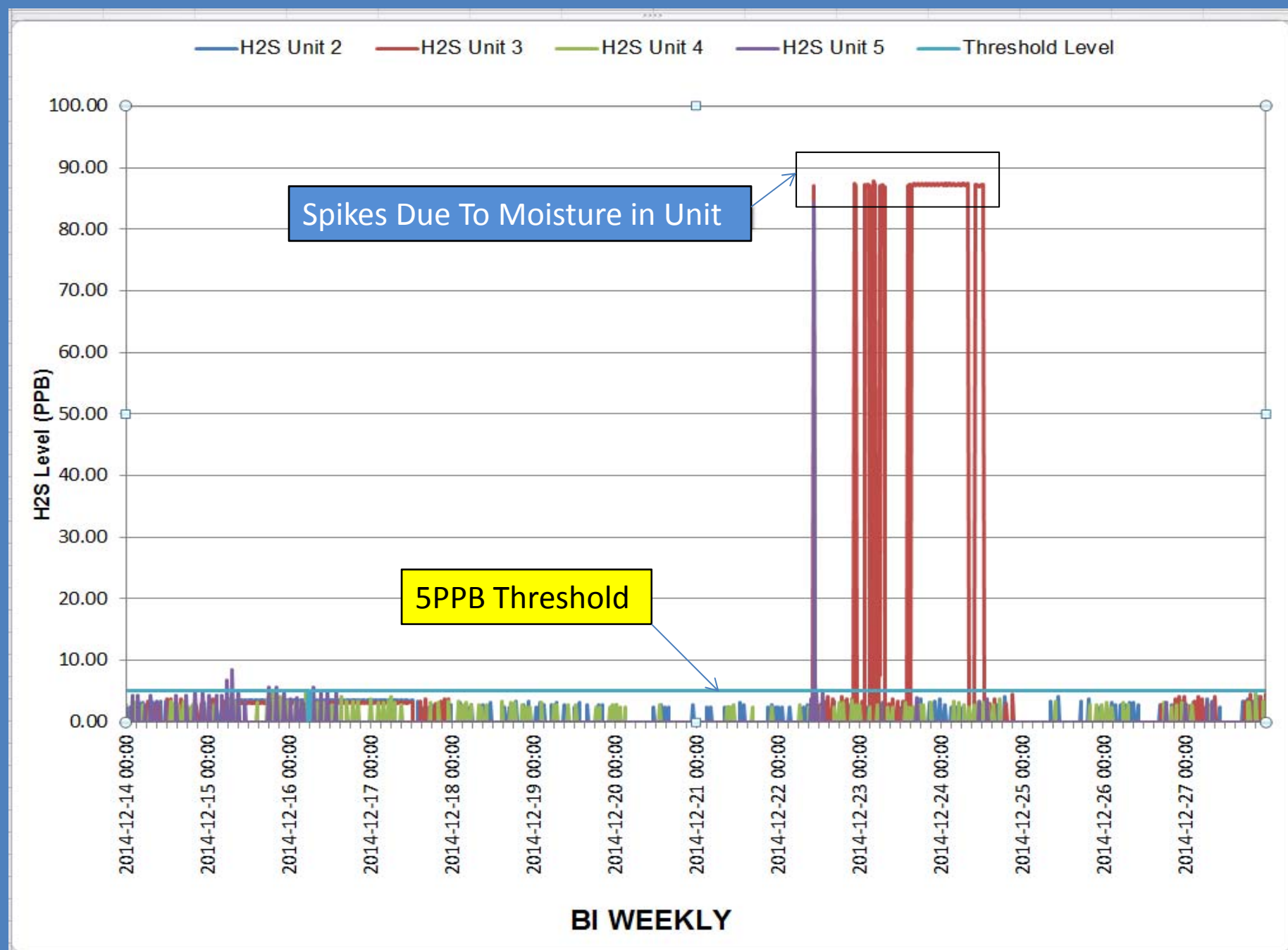
Humidity: 49.4 %

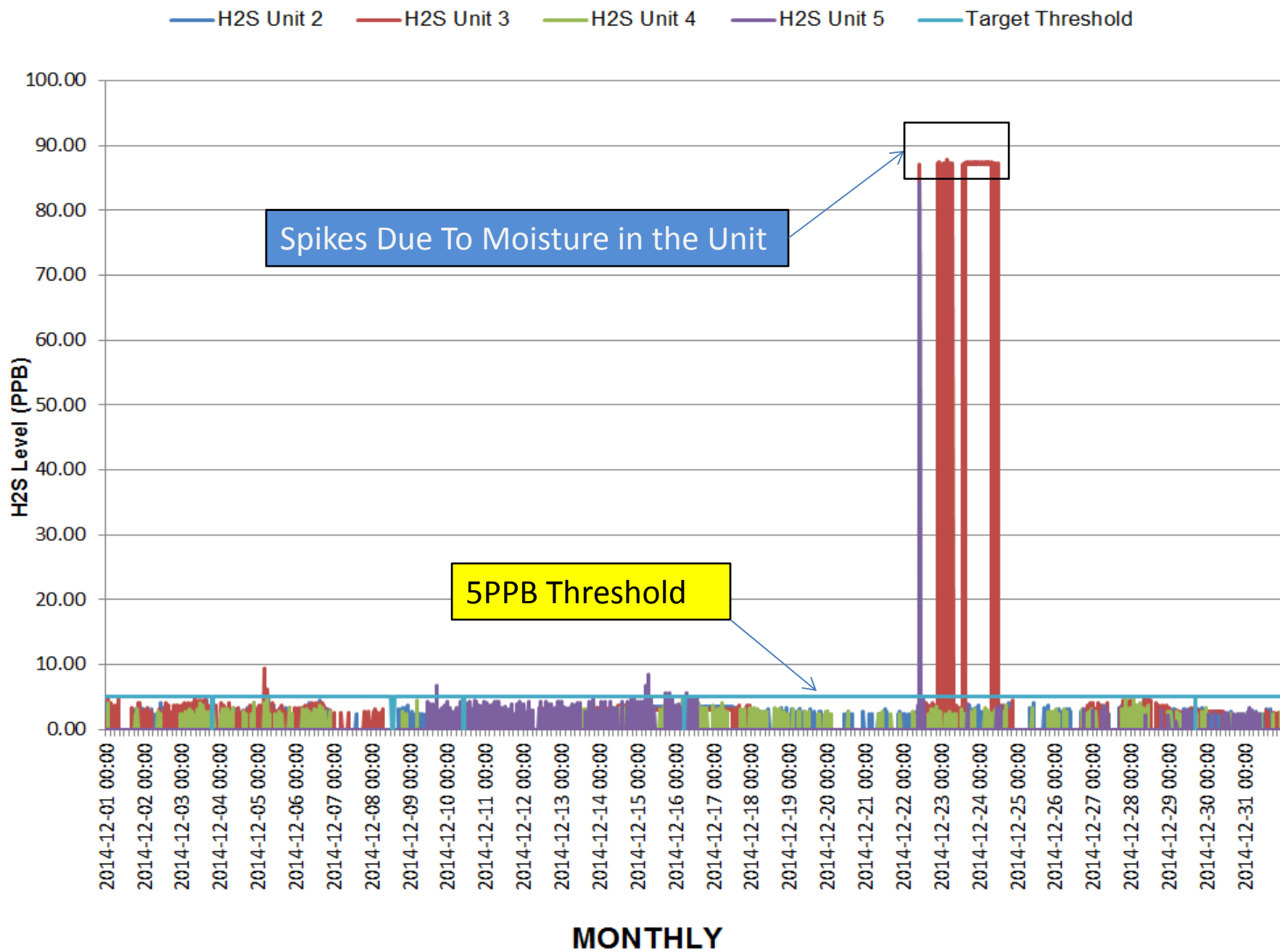
Barometric Pressure: 30.2 in of Hg

Weather
TrendingDirection
Trending



DAILY REPORT





Annual Performance Report Page 1

Yonkers Joint Annual Performance Report 2014												
Month	FLOW	Suspended Solids			Carbonaceous Biochemical Oxygen Demand			SLUDGE REMOVED			Removed from Sewage	
	MGD	Influent	Effluent	Efficiency	Influent	Effluent	Efficiency	Wet Tons	% Solids	Dry Tons	SCREENINGS	GRIT
		Mg/L	Mg/L	% Removal	Mg/L	Mg/L	% Removal				Pounds	CU.YDS.
January	76	141	7	95	131	6	95	2,995	22.3	607	34,000	100
February	81	135	9	94	131	8	94	2,483	23.2	523	44,000	100
March	89	141	14	90	120	12	90	2,648	23.0	553	40,000	140
April	94	132	8	94	117	7	94	2,813	24.5	625	42,000	120
May	107	152	9	94	109	7	94	2,828	25.4	653	44,000	220
June	81	164	6	97	151	6	96	3,002	25.4	763	42,000	140
July	77	139	12	92	141	11	92	2,407	25.5	557	40,000	140
August	67	158	8	95	122	6	95	2,477	25.8	582	36,000	120
September	63	168	7	96	132	6	96	2,810	23.3	594	36,000	100
October	67	164	6	96	129	5	96	2,959	23.2	624	36,000	120
November	70	178	9	95	166	10	94	2,700	24.2	594	54,000	100
December	90	130	7	95	114	7	94	2,879	24.2	633	58,000	140
Ave	80	150	9	94	130	8	94	2750	24.2	609	42,166	128

Annual Performance Report Page 2

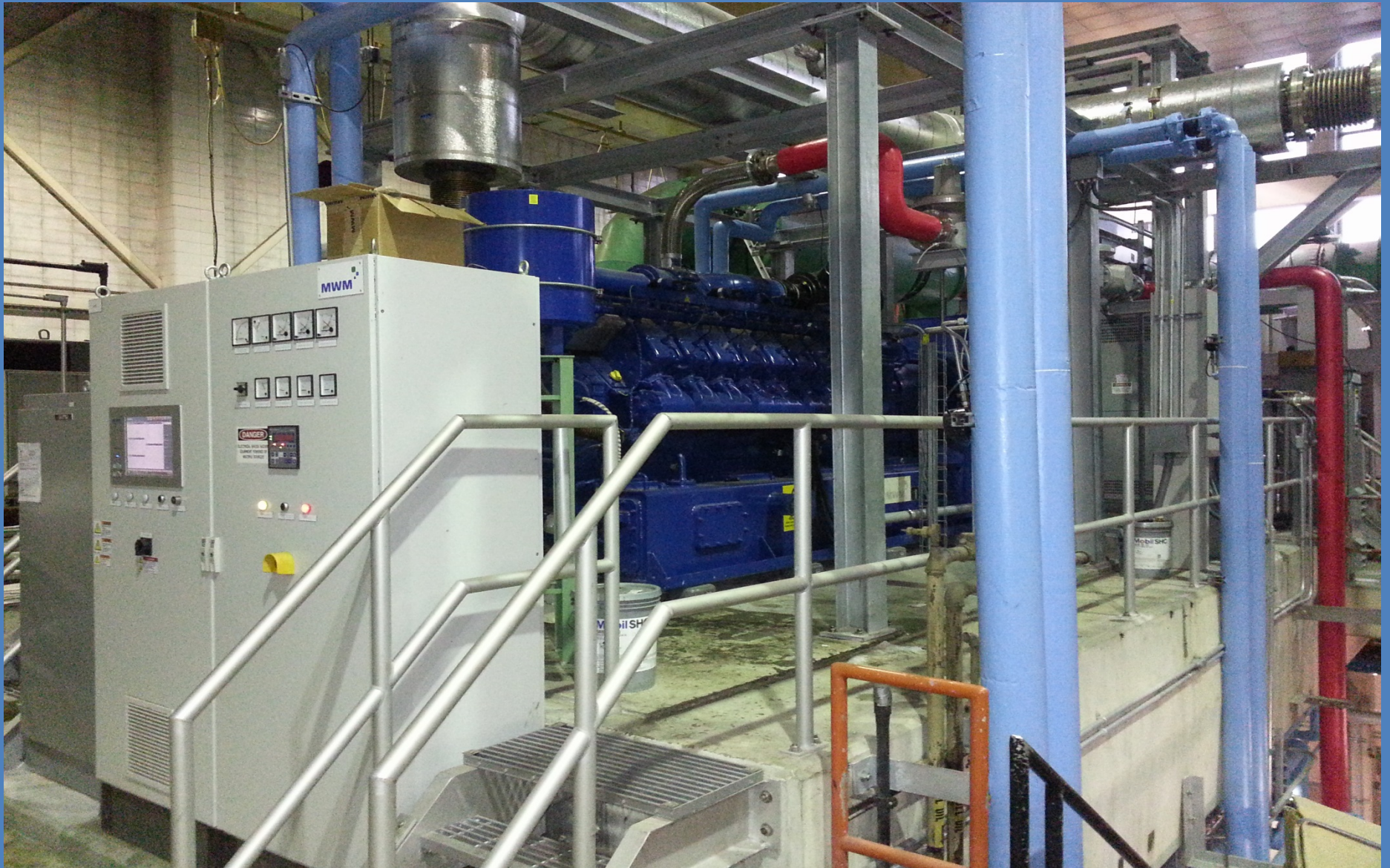
Yonkers Joint

Annual Performance Report

2014

MONTH	Sodium Hypochlorite	Liquid Polymer Used	Potassium Permanganate	Sodium Bisulfite	Fuel Oil	Water	Electric Usage		Digester Gas	
		Dewatering					Used	Demand	Produced	Wasted
		Pounds					KWH	KW	CF x 1000	CF x 1000
January	32,539	42,176	0	17,379	6,923	505,419	2,890,729	4,226	19,886	17,248
February	30,477	36,644	0	13,871	16,628	454,441	2,591,147	4,291	18,924	16,413
March	37,510	39,699	0	18,709	2,814	445,691	2,844,743	4,456	19,986	17,511
April	32,708	39,030	0	17,033	662	496,124	2,596,904	4,456	19,136	16,285
May	37,771	42,221	0	18,661	789	574,851	2,493,868	4,456	21,721	18,610
June	35,077	39,819	0	17,860	0	497,750	2,545,773	4,456	21,851	18,663
July	51,595	31,794	0	18,119	0	660,574	2,767,662	4,456	19,337	16,898
August	50,995	35,154	0	17,903	0	670,860	2,854,552	4,456	18,650	16,558
September	44,555	39,881	0	17,051	746	611,320	2,721,934	4,456	18,696	16,647
October	36,599	41,916	0	14,511	219	626,589	2,637,587	4,456	19,498	15,846
November	39,363	36,842	1,800	14,375	0	658,043	2,702,651	4,456	18,981	12,375
December	49,022	35,278	1,800	15,446	0	607,689	2,759,961	4,456	22,210	12,573
Total	478,211	460,454	3,600	200,918	28,781	6,809,351	32,407,511	53,077	238,876	195,627
Average	39,851	38,371	1,800	16,743	2,398	567,446	2,700,626	4,423	19,906	16,302
Daily Avg.	1,310	1,262		550	79	18,656	88,788	145	654	536

New Anaerobic Digester Gas Fueled Engine Generator



New Anaerobic Digester Gas Fueled Engine Generator

- Runs on Digester gas
- Will generate approximately 40% of electricity required to run the entire plant
- Decreases the amount of digester gas flared off reducing odors

Enterprise ADG Engine Driven Blower



Enterprise ADG Engine Driven Blower

- Runs on anaerobic digester gas
- Supplies approximately 60% of air required for process
- Reduces the amount of digester gas flared off reducing odors

Questions