



City of Scotts Valley



Wastewater Reclamation Facility Annual Report 2014



CITY OF SCOTTS VALLEY

WASTEWATER TREATMENT FACILITY

700 Lundy Lane, Scotts Valley, California 95066
Phone 831.438.0732 Facsimile 831.438.7218

January 28, 2015

Kenneth A. Harris Jr.
Interim Executive Director
Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

Attn: Sheila Soderberg

**SUBJECT: CITY OF SCOTTS VALLEY WASTEWATER TREATMENT FACILITY
2014 ANNUAL REPORT**

Dear Ms. Soderberg:

On behalf of the City of Scotts Valley, I am pleased to submit for your review the enclosed Wastewater Treatment Facility 2014 Annual Report.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

If you have any questions or require additional information, please do not hesitate to call me at (831) 438-5854.

Sincerely,

Scott Hamby
Public Works Director

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CITY OF SCOTTS VALLEY
WASTEWATER DIVISION STAFF - 2014

Scott Hamby	Public Works Director	Grade IV # 6692
Michael Popiel	Wastewater Plant Superintendent	Grade V # 28415
Mark Cattera	Chief Operator	Grade III # 5512
Ted Domingos	Operator II	Grade II # 8607
Tony Alvarez	Operator II	Grade II # 10839
Arthur Soto	Operator II	Grade II # 10607
Carlos Flores	Operator II	Grade II # 35726
Kathleen King	Senior Laboratory Analyst	Grade III # 111032001
Domonique Bertrand	Intern	Grade III # 41473

CITY OF SCOTTS VALLEY WASTEWATER TREATMENT FACILITY ANNUAL REPORT 2014

Plant Summary and Compliance

We are proud to report that we had no discharge violations for the year 2014.

A total 61.33 million gallons of recycled water was used in 2014. This is a reduction in use of over 12 million gallons compared to 2013. As 2013 was a drought year for our area, it is obvious that water conservation measures are working.

Effluent suspended solids averaged 9.0 mg/L (a 96.5% removal rate), effluent cBOD's averaged 3 mg/L (a 98.6% removal rate), and effluent BOD's averaged 4 mg/L (a 98.6% removal rate). Many thanks to a very knowledgeable and dedicated treatment plant staff. Without them, the continued high standards the City has become accustomed to would not be possible.

We said goodbye to 32 year plant veteran Mark Cattera in 2014. Through the years Mark worked his way up from an OIT to Chief Plant Operator and was Acting Division Manager at the time of his retirement. We wish Mark all the best in his retirement. Mark's departure created the opportunity for us to welcome Michael Popiel as the plant's new Wastewater Plant Superintendent. Michael holds a Grade V operator's license and comes to us from the City of San Mateo. Welcome Michael!

Laboratory

The National Pollution Discharge Elimination System (NPDES) implemented electronic reporting for monthly, quarterly, annual Discharge Monitoring Reports (DMR). The electronic reporting is successful at replacing paper NPDES reports. The lab uses Excel for Self Monitoring Data (SMR).

The cost of laboratory supplies and equipment has increased noticeably in 2014. It is harder to control costs. No large equipment purchases were made in 2014. In all laboratory operations were routine for 2014.

Laboratories used during 2014 were:

Inorganic Chemistry and Microbiology:
City of Scotts Valley WWTP
700 Lundy Lane
Scotts Valley, CA 95066
ELAP Certificate No. CA 1062

Bioassay Testing:
Aquatic Bioassay & Consulting Labs
29 N. Olive Street
Ventura, CA 93001
ELAP Certificate No. 1907

HVWS, Biosolid TCDD:
Frontier Analytical Laboratory
5172 Hillsdale Circle
El Dorado Hills, CA 95762
ELAP Certificate No. CA 02113

Metals/Inorganic and Organic Chemistry:
BC Laboratories, Inc.
4100 Atlas Court
Bakersfield, CA 93308
ELAP Certification No. 1186

California Department of Fish and Game
2005 Nimbus Road
Rancho Cordova, CA 95670
ELAP Certification No. CA 1622

Lift Stations

The City of Scotts Valley owns and operates seven lift stations at various locations throughout the City. All stations are inspected three times each week. During these routine inspections, hour readings are taken to verify normal running times and flow throughput. Each pump is individually started and stopped to ensure proper operation, and wet-wells are visually inspected to confirm water levels with digital level reading on automatic pump controllers. Once each week, stations equipped with permanent emergency generators are tested on emergency power to ensure proper operation. Five stations are equipped with permanent emergency stand-by power. At this time, no other stations require permanent on-site emergency power, as limited flows allow ample time for City staff to respond to alarm conditions and provide portable generator power prior to overflows occurring.

All of the City's seven stations have back-up pumps and alarm systems that automatically call 24-hour emergency personnel in case of a power outage or high-level conditions.

Collection System

Following is a summary of the four collection system overflows reported by the City in 2014:

- November 3 – 203 Bean Creek Road. <5 gallons spilled from manhole due to grease blockage. SSO Event ID 810485.
- November 25 – 523 Lockwood Lane. <50 gallons spilled from cleanout due to misc. debris. SSO Event ID 810892.
- December 3 – 700 Lundy Lane at WWTP. 500 gallons of treated secondary effluent spilled from diversion box. Problems associated with plant during rain event. SSO Event ID 811206.

- December 31 – 282 Arabian Way at Carriage Lane. 25 gallons spilled from manhole due to roots and grease. Line cleaned. SSO Event ID 812009.

The City's sanitary sewer collection system is made up of approximately 40 miles of pipeline. City crews spend an average of two days each week performing preventative maintenance using a combination vacuum/hydro-jet truck to clean the lines.

Source Control Program

Industrial

There is currently only one significant industrial user (SIU) remaining in the City of Scotts Valley: ThermoFisher, a categorical metal finishing industry (40 CFR 433.15). Bay Photo, a printer and photo processor discharging treated silver-bearing wastewater, ceased discharging waste in 2014 due to the wastewater interfering with the tertiary ultraviolet light treatment of wastewater. Test results from the Water Treatment Plant identified a decrease in ultraviolet transmittance (UVT), or the ratio of the light entering the water. When transmittance decreases, the ultraviolet light cannot destroy the microorganisms as effectively or efficiently, which can lead to a reduction of water quality. Bay Photo Lab was engaged in this issue for two reasons: 1) the company began operations about the same time as the test results identified the issue, and 2) photo labs are often responsible for discharging colored water which can reduce ultraviolet transmittance. Bay Photo was very receptive and agreed to work with the source control inspector to correct the issue, even agreeing to stop production for a week to see if changes occurred. After attempting several changes in chemical use and treatment, it was determined that Bay Photo could not discharge to the City of Scotts Valley sanitary sewer. They are currently hauling all of the waste for treatment after silver recovery.

Groundwater Remediation: There are currently three groundwater pump and treat sites discharging to the sewer in the City of Scotts Valley, one being the Mañana Woods Groundwater Well, owned by the San Lorenzo Valley Water District. The District started discharging filter backwash water on August 1, 2011. The backwash is treated as necessary to remove pollutants to concentrations below the City of Scotts Valley Sanitary Sewer discharge limits. This site has met all permit conditions to date. The Scotts Valley Water District is the responsible party for the last two sites, which were added in 2013. These sites are El Pueblo Water Treatment Plant, and Well #10 Water Treatment Plant. The discharger has submitted prior analytical results indicating that the filter backwash water meets the discharge requirements. In addition, the discharger is responsible for submitting analytical results annually to ensure compliance with this

permit. A Self-Monitoring Report must be submitted each year by January 31st for all groundwater pump and treat sites.

Grease Trap Installation and Maintenance

The last few years of thorough and consistent annual inspections of local food service facilities has proven to be highly effective as most facilities are operating in compliance with the local fats, oils, and greases (FOG) program and with local ordinances. A few restaurants had minor violations regarding the FOG program that were correctly immediately following inspection. The most common area of correction with food service facilities was regarding businesses that clean their own grease traps. These businesses were not maintaining proper cleaning logs to verify cleanings were conducted with proper frequency. To address this issue, the source control inspector provided these businesses with another Best Environmental Management Practices Pamphlet specific to Food Service Facilities which includes a self cleaning log. The source control inspector will follow up with these businesses to ensure that self-cleaning logs are maintained and with proper frequency. Business managers/owners were notified that they will be asked to hire a service rather than continue to self-clean their grease traps if they cannot maintain a proper cleaning log.

Environmental Compliance

All industrial businesses that have the potential to discharge industrial wastes to the sewer in the City of Scotts Valley are inspected on a yearly basis by the source control inspector. In 2013, most businesses were in compliance with local ordinances and implementing best environmental management practices. However, a few common areas of correction were identified in working with the food service facilities and the auto body and repair shops.

A common area of correction for was exterior washing of equipment or discharge of janitorial wastewater down storm drains. In most instances the problem wasn't remedied without talking to the property owner or manager. A Best Management Practice (BMP) was created for Property Managers. A list of all the Property Managers in town was obtained and the BMP was shared with all of them.

A few vehicle service facilities had a change in management this year and the attention to BMPs in those shops declined. The annual inspections provided a good opportunity to educate and remind. A few businesses were written violation notices on the spot. For

instance, a rockery where significant sediment was leaving the property and entering a storm drain inlet, an auto repair facility where multiple unattended oil and coolant spills were being walked through and tracked outdoors were issued written violations during the time of inspection.

Maintenance and Repairs

- Repaired transfer switch on main plant generator
- Installed new VFD at influent pump station
- Installed ne PLC for SCADA panel
- Replaced bearing and seal on influent pump station washer/compactor
- Repair fuel system on Carbonero pump station generator
- Rebuilt dissolved oxygen probes at aeration basin
- Installed two new graphic chart recorders
- Installed new rotary drum thickener system
- Applied protective coating to inside tank of sewer cleaning truck
- Many other pump and equipment repairs were performed as required

O & M Manual

The plant's main operations and maintenance manual (O&M) was not changed during 2014; however, the plant's O&M manual library was updated to include new equipment that was placed into service over the past year. Updating the plant's O&M manual takes place on an ongoing basis. We have one O&M manual that is used for operational guidelines and minor service to plant equipment. We also catalog individual O&M's for every piece of equipment in place at the treatment plant, collection system, and lift stations.

Training

- All staff was retrained in the biannual Red Cross Adult CPR and Standard First Aid Certification Program.
- All staff participates in the plant's in-house safety/training meetings that are conducted every other Wednesday throughout the year.
- All Operations and Laboratory staff participated in several one-day training classes and seminars related to wastewater treatment, laboratory and maintenance.

Public Education/Outreach

Green Schools: The Scotts Valley Green Schools Program was developed in 2010 to provide environmental education to Scotts Valley students and to encourage the introduction of best environmental practices at the schools, following the model of the Green Business Program. The Green Schools Program was funded by the City of Scotts Valley, and offered free to the area schools. It was offered to the ninth graders at Scotts Valley High School, and the fifth graders at Vine Hill elementary School and Baymonte Christian School, the two grade levels in which ecology concepts are taught. In 2010-2011, two series of presentation and three community service events were offered at Scotts Valley High School. Two series of presentations were also offered at Vine Hill Elementary, along with a Save Our Shores presentation. In addition, an Environmental Leadership Council was formed at Vine Hill Elementary. In 2012, due to a cutback in funds, only one set of presentations on water issues was given at Vine Hill Elementary. In both 2013 and 2014, the Green Schools Program was able to return to Scotts Valley High School with a two-day program for the ninth graders. The 2014 Scotts Valley High School ninth grade program occurred on May 5 and 6, and focused on water issues. The program consisted of two parts: groundwater and water conservation, by LeAnne Ravinale from Scotts Valley Water District, and the sewer system, storm water system, watersheds, and storm drain pollution by Sheila Peck, from the Green Schools Program. Ravinale explained the functions of the Scotts Valley Water District, described local aquifers and wells, and demonstrated Scotts Valley's dependence on groundwater. She covered methods of water conservation, the use of recycled water on campus for irrigation, and the link between energy and water use. Peck described the difference between the sewer and storm drain systems, how the storm drain system carries pollutants as well as water, and the increased use of bioretention. The students also sampled local creek water for various pollutants. The program was well-received by both the students and their biology teachers. Now in its third year, it serves as an extension of the ninth grade ecology curriculum.

Green Business: Scotts Valley continues to support the Monterey Bay Area Green Business Program. Goals of the Green Business Program include promoting pollution prevention, waste minimization, and implementing best management practices that go above and beyond the regulatory standards. Since its launch in July 2004, the program has developed nineteen different business certification sectors, including: restaurants, plumbers, office/retail facilities, hotels/hospitality services, custodial companies, beauty salons, laundromats, wineries, painters, and landscapers, property management/multi-family dwellings, schools, medical facilities, garment cleaners, vehicle service facilities, auto body shops, printers, contractors/remodelers, and pharmacies. A significant portion of the program for restaurants, hotels, and plumbers is dedicated to minimizing discharges of fats, oils, and greases (FOG) into the sanitary sewer. The program is supported by a database launched in 2010, which allows it to collect metrics on water and energy savings, and pollution and waste reduction, and so assess the program's impacts.

Sixteen businesses are presently certified through the Green Business Program in Scotts Valley. During the past fiscal year, one new business applied to the program and will be certified shortly.

Sharp Solutions for Home Medicines: The City of Scotts Valley staff members, in collaboration with the County of Santa Cruz and other city agencies, were successful in obtaining a grant in 2008 from the California Integrated Waste Management Board (CIWMB) to implement a pharmaceutical and sharps disposal program. Since that time, the Sharp Solutions for Home Medicines Program has provided a convenient and permanent system to dispose of home-generated used sharps and unwanted pharmaceuticals in the County of Santa Cruz. The County has established 43 convenient and well-publicized drop-off locations, primarily at pharmacies, throughout the region.

Electronic Waste: On Saturday, September 20, 2014, the City of Scotts Valley conducted its 12th annual e-waste collection event. The City collected over 20,000 pounds of electronics, mostly in the form of computers, monitors and television sets, from 225 participants. These items are now banned from landfill disposal because of their hazardous material content of lead, mercury, and other heavy metals.

Appliance Collection: The City of Scotts Valley held its 11th annual Appliance & Tire Collection Event on Saturday, October 18th. 53 participants dropped off a total of 87 tires, 10 water heaters, 5 washers, 3 dryers, 8 oven/stoves and 10 refrigerators. Scrap metal from appliances is shredded, melted and made into new metal products.

On an annual basis, the treatment plant staff provides a number of ongoing public outreach/education services. Some of those services include:

- Oil Recycling: As a member of the County's regional oil recycling program, the City distributes oil recycling containers to local automotive supply stores where they are distributed to residents at no cost. The 2.5 gallon used oil containers have labels containing information on proper disposal practices and can be used throughout the county in any curbside collection program as part of the integrated regional program.
- As always, plant tours are encouraged and given upon request to any person or group wishing to learn about the treatment process. Several individual and group tours were given in 2013.

NPDES PERMIT EFFLUENT VIOLATIONS 2005-2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	0	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	1	0
June	0	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0
August	0	0	0	1*	0	0	0	0	0	0
September	0	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	4	0	0
Total	0	0	0	1	0	0	0	4	1	0

*TCDD

Eff. Weekly

Cl2

Avg.BOD

CBOD,TSS

sett.solid

TABLE 1

2014 PLANT FLOW AND RAINFALL

	Total Plant Flow Eff.+Rec.MGD Mo. Total	Effluent Daily Flow MGD Mo. Total	Effluent Inst. Max. MGD (peak)	Recycled Total Flow Million Gallons Mo. Total	Rainfall Inches (Total)
January	23.541	20.010	1.90	3.531	0.05
February	23.842	22.550	2.87	1.292	13.42
March	26.119	24.502	2.08	1.617	3.50
April	24.169	19.567	2.58	4.602	1.06
May	23.939	15.169	3.00	8.770	0.02
June	23.263	13.685	1.86	9.578	0.03
July	22.124	11.896	3.09	9.730	0.10
August	22.254	13.349	2.24	8.905	0.00
September	21.867	15.426	2.12	6.441	0.88
October	22.327	16.790	2.41	5.537	1.69
November	21.410	20.247	2.10	1.163	3.97
December	30.748	30.587	3.35	0.161	15.30
Total	285.60	223.78		61.33	40.02
Average	23.80	18.65	2.47	5.11	3.34
Maximum	30.75	30.59	3.35	9.73	15.30
Minimum	21.41	11.90	1.86	0.16	0.00

ADDWF, MGD	0.741
Eff + Recycle	

TABLE 2

2014 Influent & Effluent Suspended Solids

	Influent mg/L	Effluent mg/L	Effluent lb/day	Percent Removal
January	288	6	30	98.0%
February	280	9	52	96.6%
March	238	6	45	97.4%
April	260	6	34	97.7%
May	275	6	26	97.9%
June	284	8	31	97.0%
July	289	9	32	96.8%
August	256	8	27	97.0%
September	280	9	34	96.7%
October	288	13	65	95.2%
November	240	8	44	96.6%
December	189	17	133	91.5%
Average	264	9	46	96.5%
Maximum	289	17	133	98.0%
Minimum	189	6	26	91.5%

TABLE 3

2014 Influent & Effluent BOD & cBOD

	Influent BOD mg/L	Effluent BOD mg/L	Effluent BOD lb/day	BOD Percent Removal	Influent cBOD mg/L	Effluent cBOD mg/L	Effluent cBOD lb/day	cBOD Percent Removal
January	334	5	28	98.6%	268	4	23	98.6%
February	280	5	31	98.1%	263	4	24	98.4%
March	290	3	20	98.8%	233	3	16	98.8%
April	300	3	19	98.9%	260	2	15	99.0%
May	340	3	17	99.2%	263	2	13	99.2%
June	314	4	22	98.9%	270	3	18	98.9%
July	338	4	24	98.8%	298	3	19	98.9%
August	333	4	23	98.9%	268	3	19	98.8%
September	330	4	25	98.7%	263	3	20	98.7%
October	350	5	31	98.5%	284	4	23	98.7%
November	313	4	25	98.7%	253	3	20	98.6%
December	280	8	51	97.0%	234	7	41	97.1%
Average	317	4	26	98.6%	263	3	21	98.6%
Maximum	350	8	51	99.2%	298	7	41	99.2%
Minimum	280	3	17	97.0%	233	2	13	97.1%

TABLE 4

2014 Tertiary Effluent Nitrogen

	Tertiary Ammonia mg/L as N	Tertiary Organic N mg/L as N	Tertiary Nitrate mg/L as N	Tertiary Nitrite mg/L as N	Influent Total N mg/L as N	Tertiary Nitrogen Removal Percent
January	0.07	1.2	6.6	< 0.01	82.75	90.7
February	0.08	0.8	5.9	< 0.01	78.50	91.5
March	0.34	0.9	3.4	0.26	79.25	94.2
April	0.07	1.0	6.0	< 0.10	71.20	90.1
May	0.25	0.9	6.8	< 0.10	75.25	89.8
June	0.11	1.3	5.5	< 0.01	87.50	92.2
July	0.08	1.2	5.3	< 0.01	78.00	91.7
August	0.21	1.1	3.9	< 0.10	92.75	94.6
September	0.06	0.8	3.1	0.10	81.80	95.2
October	0.08	1.0	1.8	< 0.10	102.25	97.3
November	0.11	0.8	1.8	< 0.01	67.50	96.2
December	0.08	0.9	1.0	< 0.10	62.75	97.0
Average	0.13	1.0	4.2	< 0.1	80.0	93.4
Maximum	0.34	1.3	6.8	< 0.26	102.3	97.3
Minimum	0.06	0.8	1.0	< 0.0	62.8	89.8

TABLE 5

2014 Influent & Effluent pH and Effluent Turbidity, Settleable Solids, and Oil & Grease

	Influent pH Std Units	Effluent pH Std Units	Effluent Turbidity NTU	Effluent Settleable Solids m/L	Effluent Oil & Grease mg/L	Effluent Oil & Grease lb/day
January	8.2	7.1	4.5	< 0.1	< 5	< 30
February	8.2	7.2	5.9	< 0.1	5	33
March	8.1	7.1	3.7	< 0.1	< 5	< 30
April	8.1	7.0	3.9	< 0.1	< 5	< 30
May	8.2	7.1	2.8	< 0.1	< 5	< 30
June	8.1	7.1	2.9	< 0.1	< 5	< 30
July	8.1	7.1	4.4	< 0.1	< 5	< 30
August	8.1	7.1	4.4	< 0.1	< 5	< 30
September	8.2	7.2	2.6	< 0.1	< 5	< 30
October	8.2	7.1	6.3	< 0.1	< 5	< 30
November	8.2	7.1	3.5	< 0.1	< 5	< 30
December	8.0	7.0	4.1	< 0.1	< 5	< 30
Average	8.2	7.1	4.1	< 0.1	< 5.0	< 31
Maximum	8.2	7.2	6.3	< 0.1	5.0	33
Minimum	8.0	7.0	2.6	< 0.1	< 5.0	< 30

TABLE 6

2014 Effluent Chlorine Residual and Bacteriological Quality

	Chlorine Residual mg/L <small>@Santa Cruz</small>	Total Coliform MPN/100mL	Fecal Coliform MPN/100mL	Enterococcus MPN/100mL
January	< 0.01	3150	1160	42
February	< 0.01	3870	500	48
March	< 0.01	690	200	54
April	< 0.01	4754	< 200	57
May	< 0.07	5860	< 240	59
June	< 0.02	2800	< 220	157
July	< 0.01	3640	< 220	107
August	< 0.01	3780	840	106
September	< 0.01	1920	690	115
October	< 0.01	9220	1050	147
November	< 0.01	3590	270	82
December	< 0.01	10400	< 400	132
Geometric	< 0.02	3,670	402	84
Maximum	< 0.07	10,400	1,160	157
Minimum	< 0.01	690	< 200	42

TABLE 7

2014 Sludge Wasting

	WAS Flow MGD	WAS Percent Solids	Sludge Hauled Tons/mnth (dry wt)	Hours Press or Aeromod per/mnth	Sludge % Solids
January	0.7947	0.96	29.8	150	14.6
February	0.6833	0.92	22.4	126	14.8
March	0.6936	0.93	25.4	129	14.4
April	0.7559	0.87	27.0	140	14.3
May	0.7258	0.93	28.3	135	13.6
June	0.6396	0.86	22.6	119	13.7
July	0.4928	0.92	24.8	109	8.2
August	0.6228	0.89	21.0	124	7.1
September	0.6457	0.82	23.1	130	7.4
October	0.6934	0.79	23.5	140	7.4
November	0.7255	0.76	21.6	137	9.7
December	0.7697	0.77	27.7	155	14.4
Total	8.243		297.2	1,593	
Average	0.687	0.87	24.8	133	11.6
Maximum	0.795	0.96	29.8	155	14.8
Minimum	0.493	0.76	21.0	109	7.1

TABLE 8

2014 Plant Operating Parameters

	Aerator lbs	Clarifier lbs	Total lbs	RAS mg/L	MLSS mg/L	Clar. SS mg/L	MCRT 7-day	F/M 7-day	SVI Ratio
January	15915	9272	25,187	9414	6261	2191	9.2	0.16	152
February	14575	8667	23,242	9270	5612	2048	8.9	0.18	162
March	14274	8586	22,861	9163	5669	2029	9.0	0.18	164
April	14129	8179	22,307	8760	5629	1933	8.8	0.18	167
May	14804	8670	23,474	9220	5881	2049	9.4	0.17	162
June	14043	7778	21,821	8621	5593	1838	9.8	0.18	170
July	15249	9652	24,901	9014	6085	2281	16.4	0.17	159
August	14901	9916	24,818	8509	5916	2343	11.6	0.16	162
September	14484	10592	25,076	8148	5745	2503	13.3	0.18	168
October	14267	11183	25,450	8163	5650	2643	13.6	0.17	172
November	13344	10977	24,321	7687	5333	2594	11.1	0.18	184
December	12211	10495	22,706	7705	4856	2480	9.8	0.25	197
Average	14,350	9,497	23,847	8,639	5,686	2,244	10.9	0.18	168
Maximum	15,915	11,183	25,450	9,414	6,261	2,643	16.4	0.25	197
Minimum	12,211	7,778	21,821	7,687	4,856	1,838	8.8	0.16	152

FIGURE 1

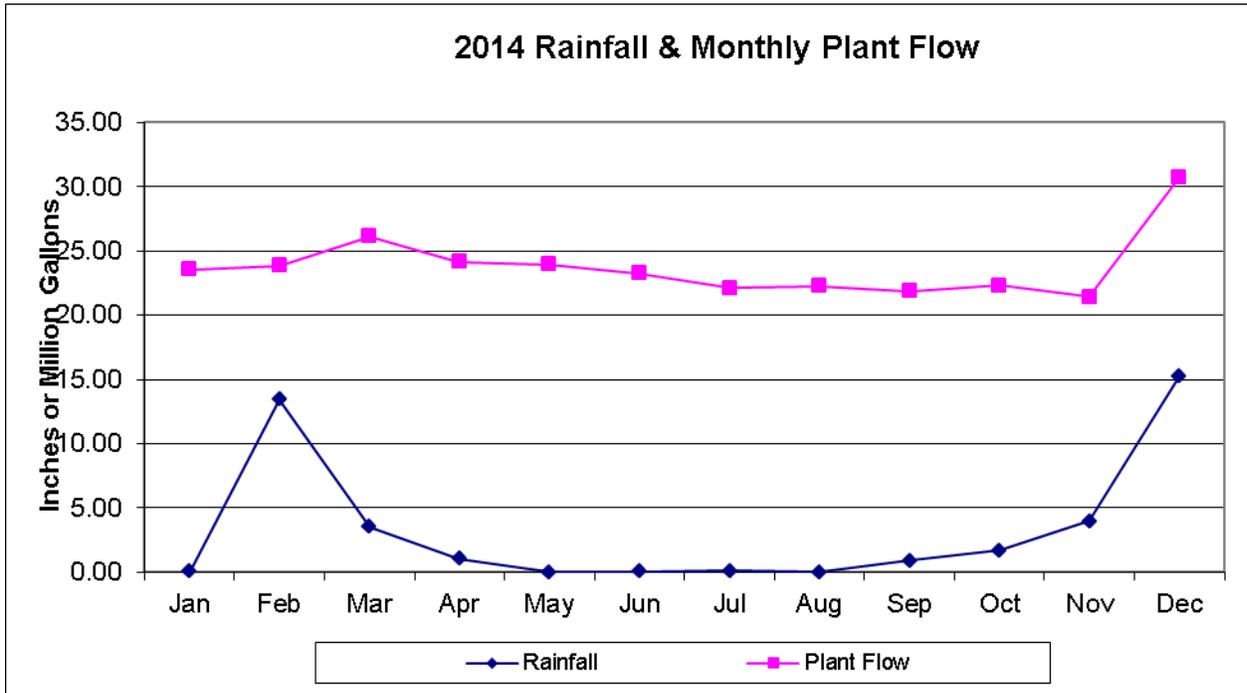


FIGURE 2

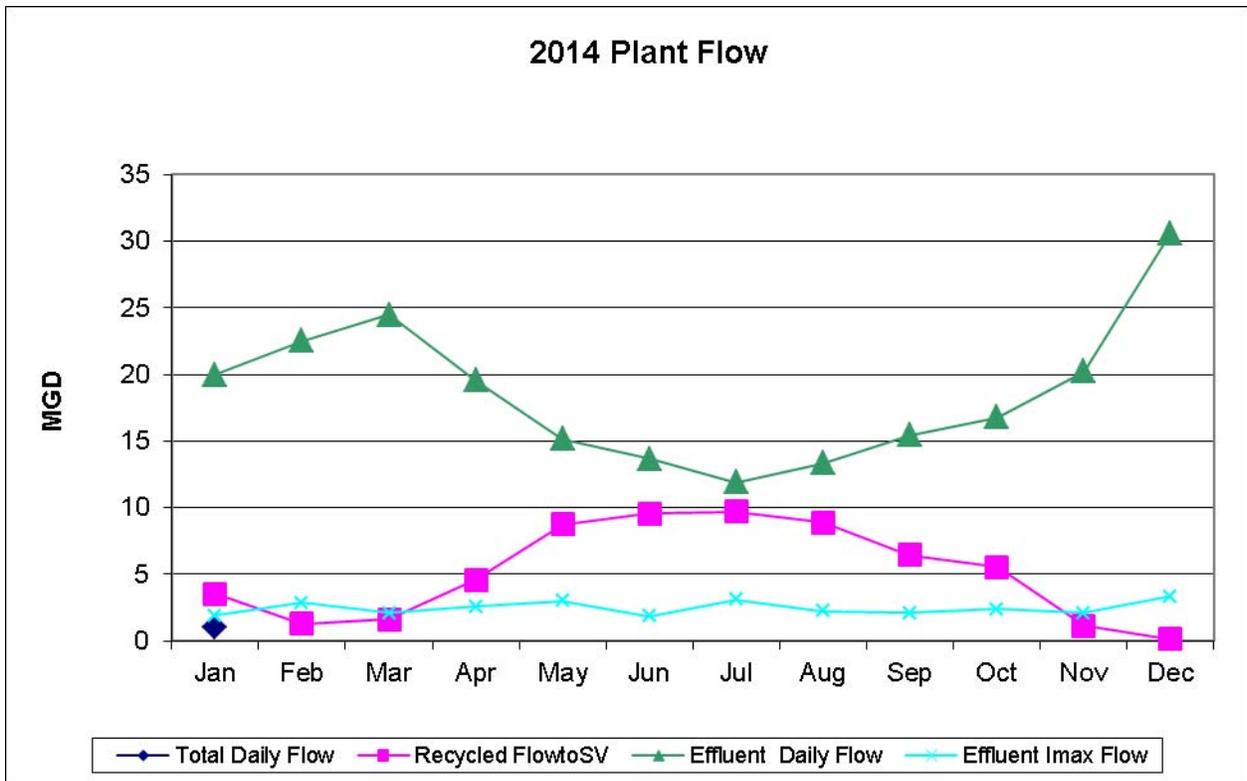


FIGURE 3

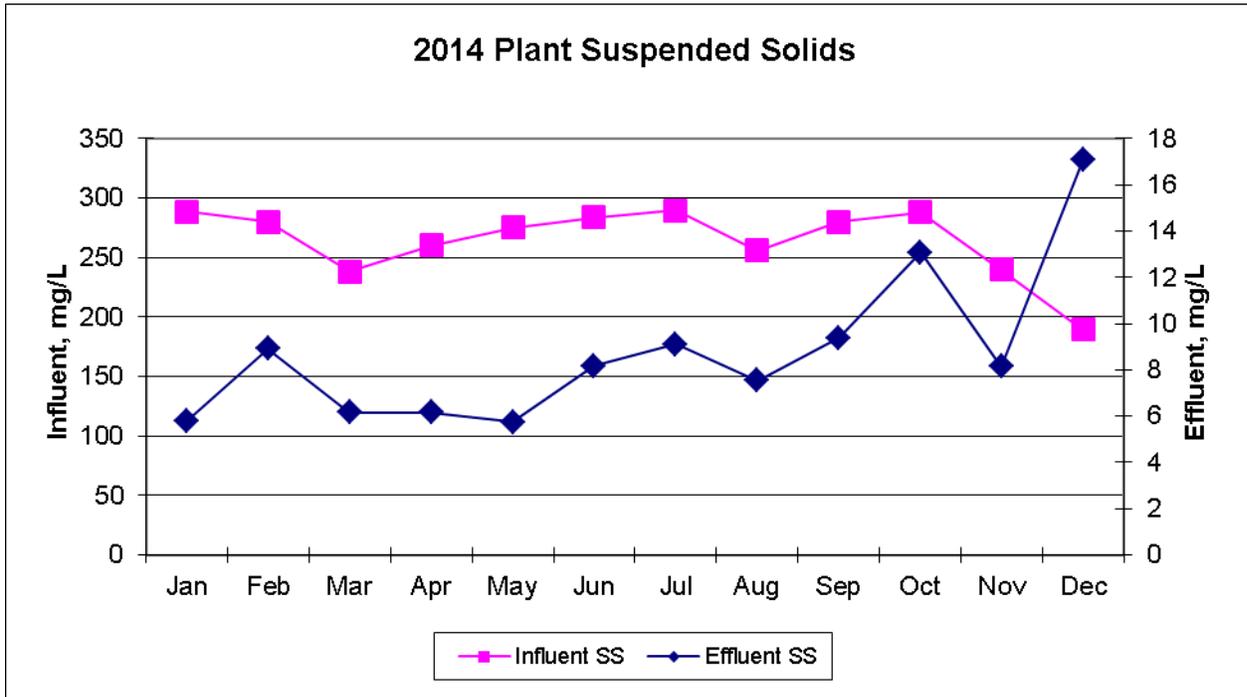


FIGURE 4

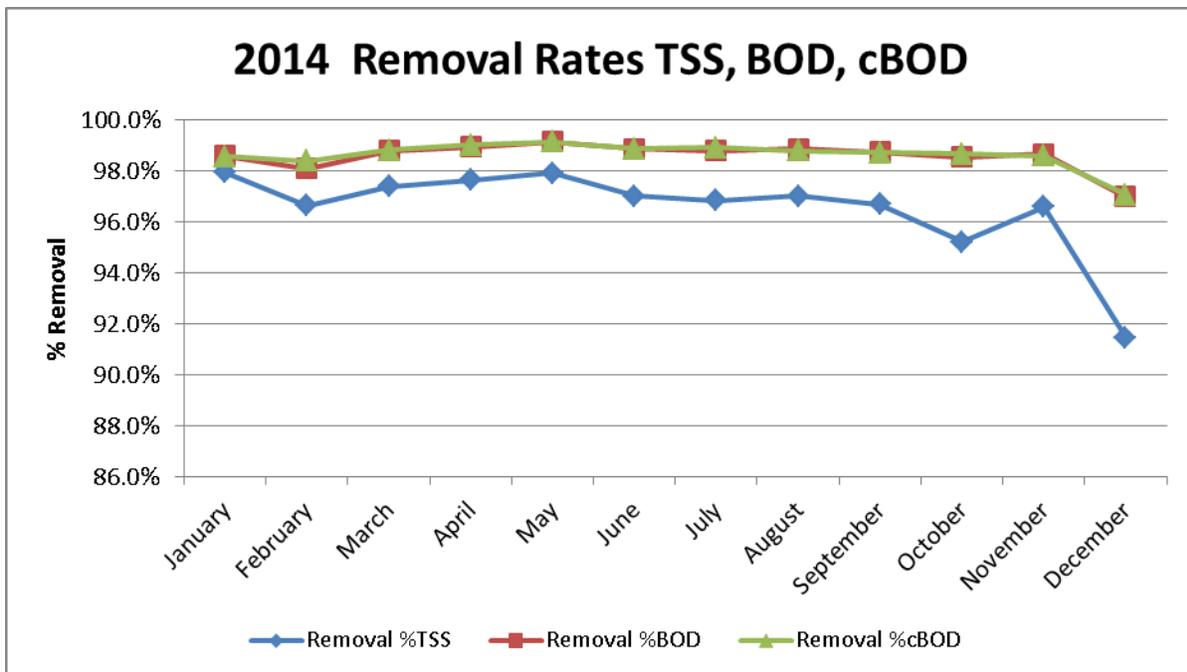


FIGURE 5

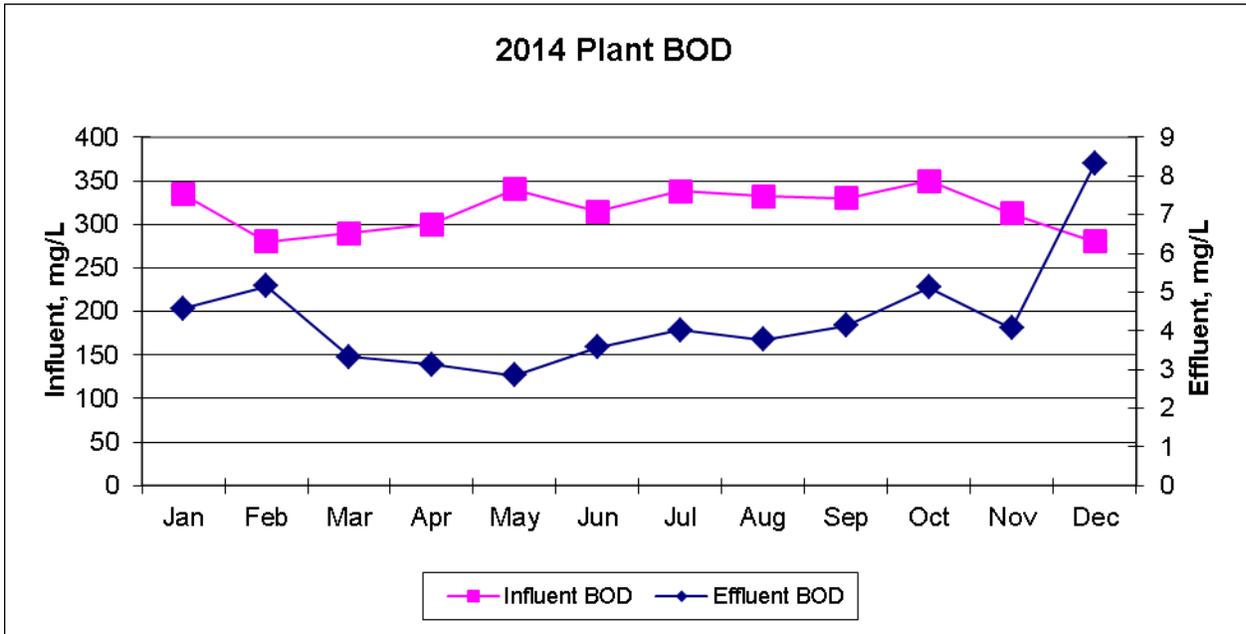


FIGURE 6

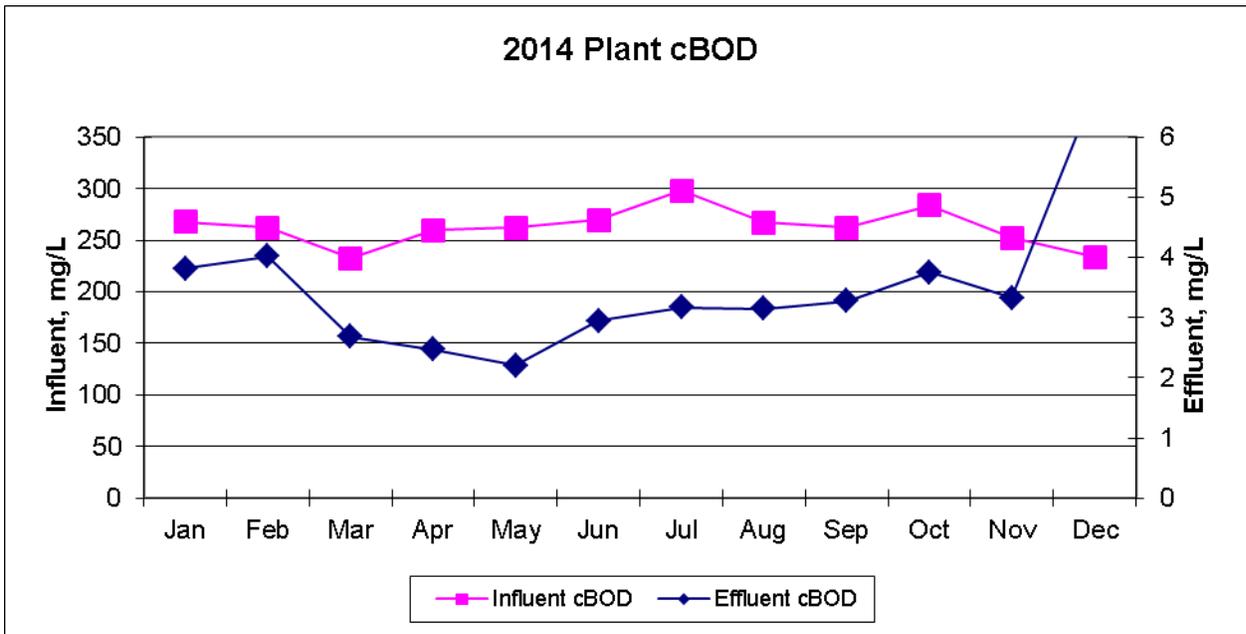


FIGURE 7

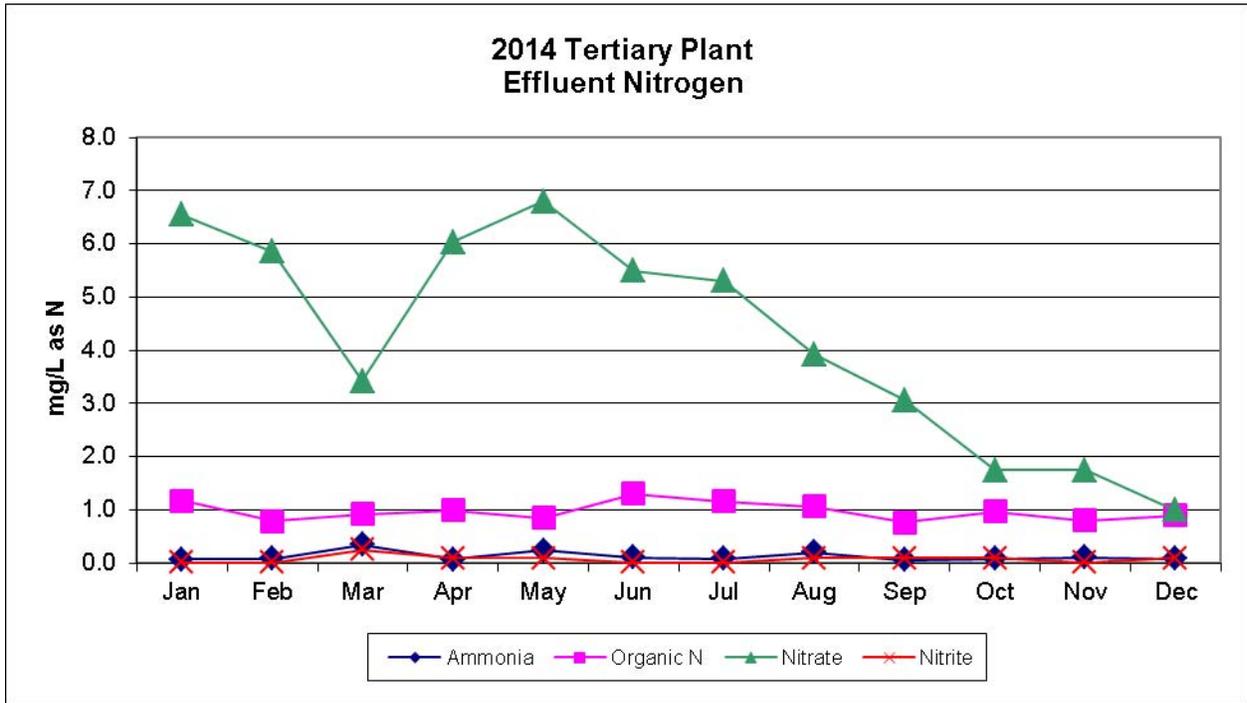


FIGURE 8

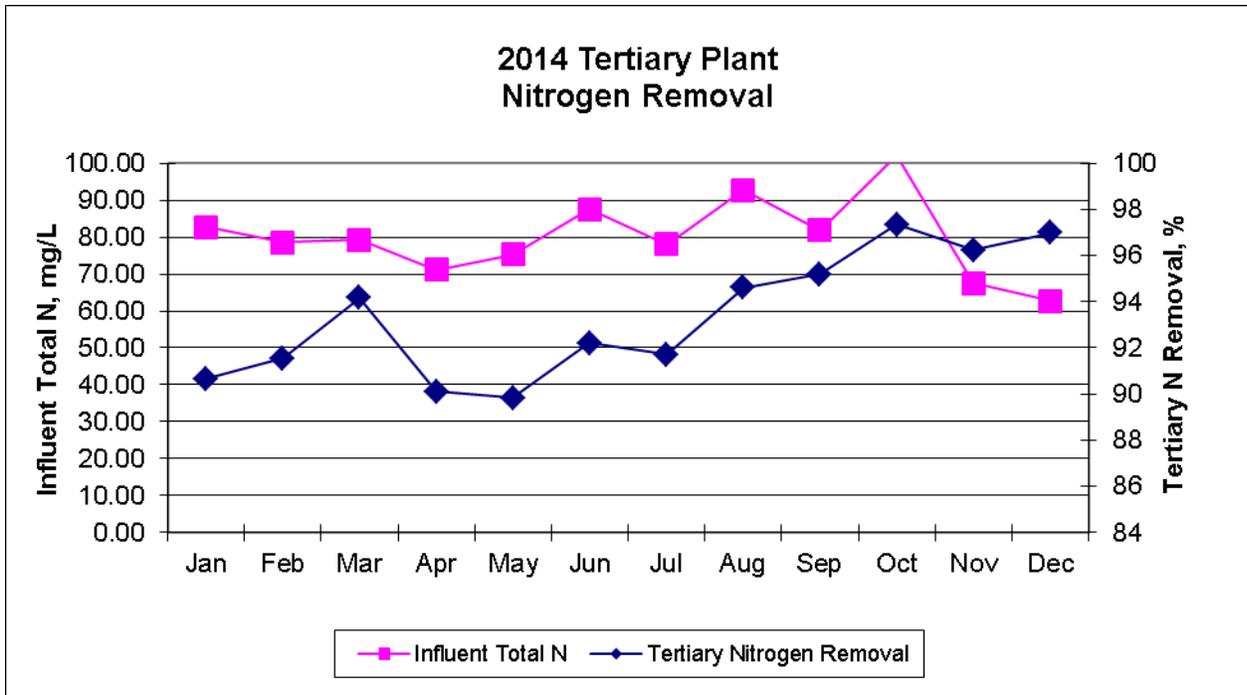


FIGURE 9

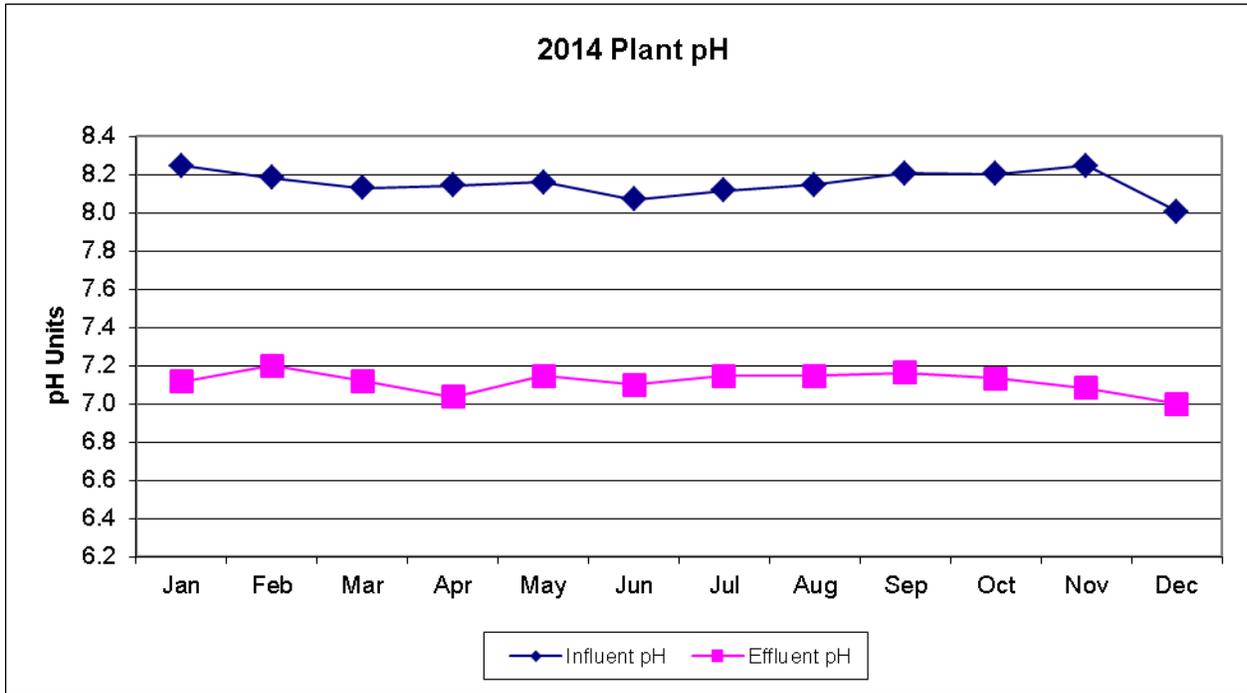


FIGURE 10

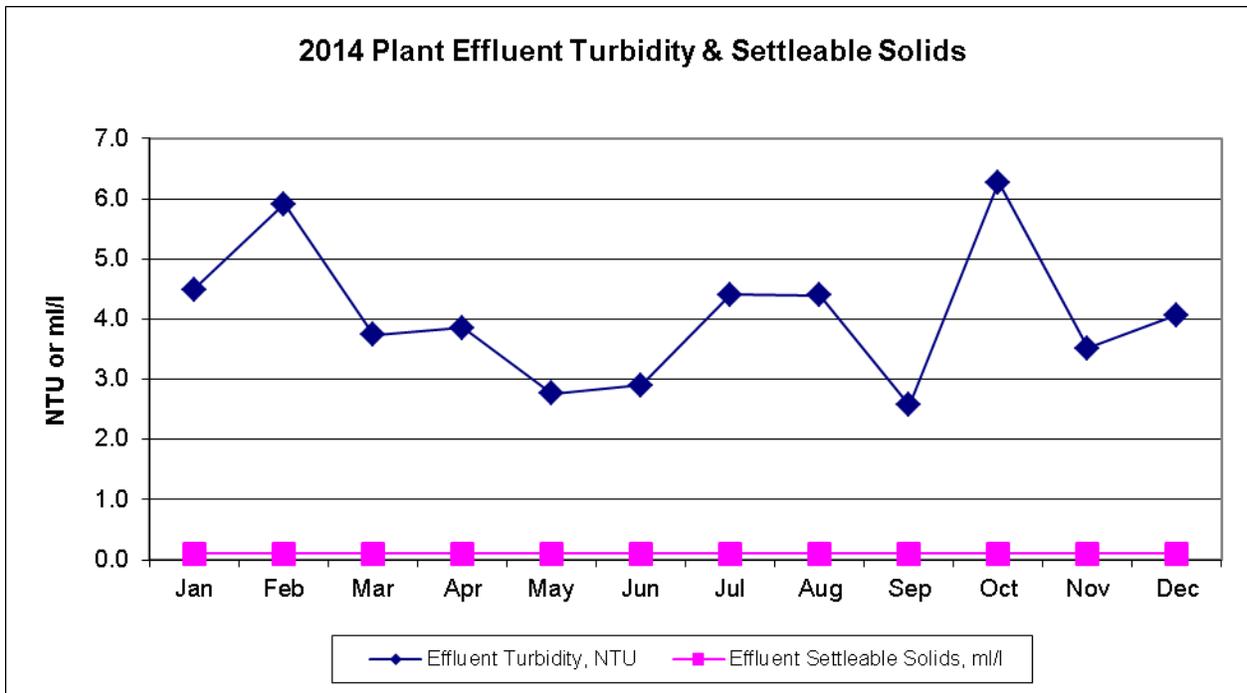


FIGURE 11

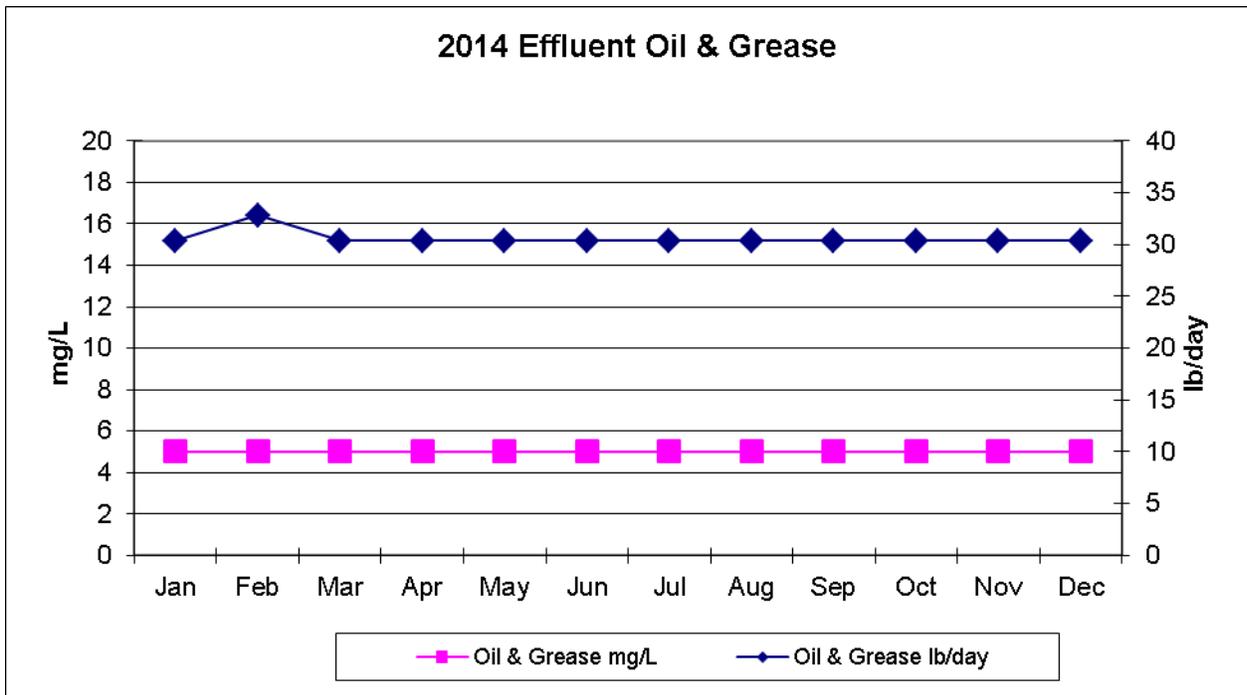


FIGURE 12

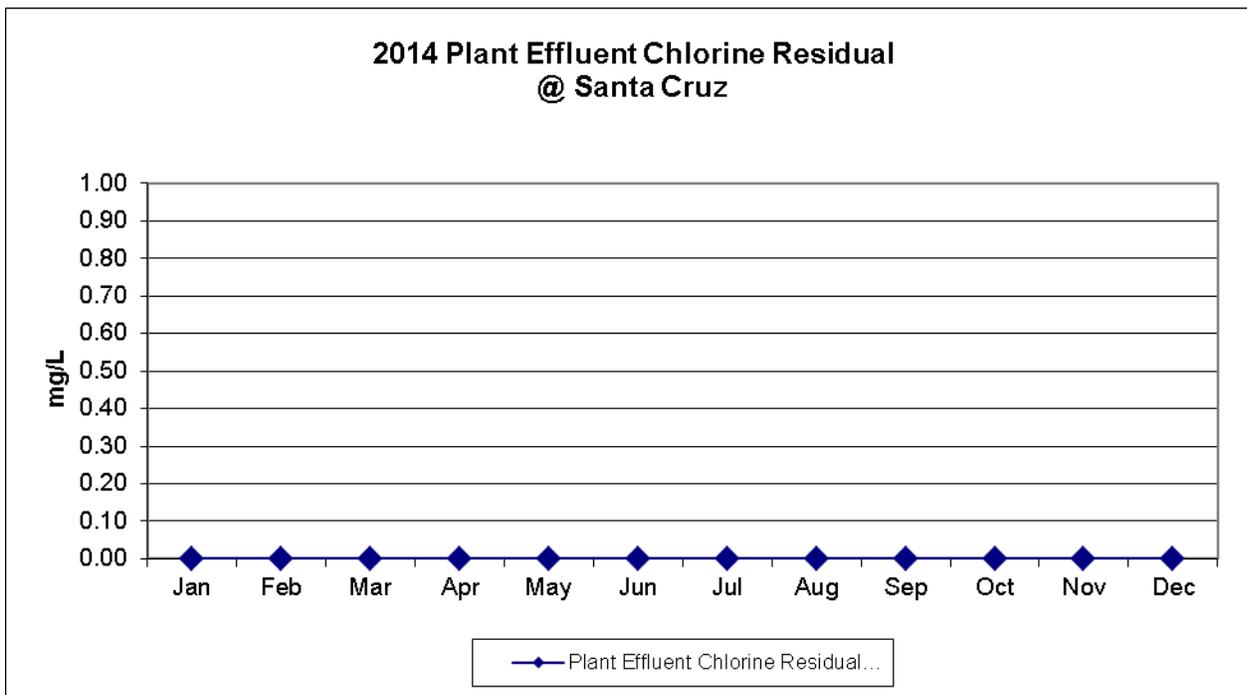


FIGURE 13

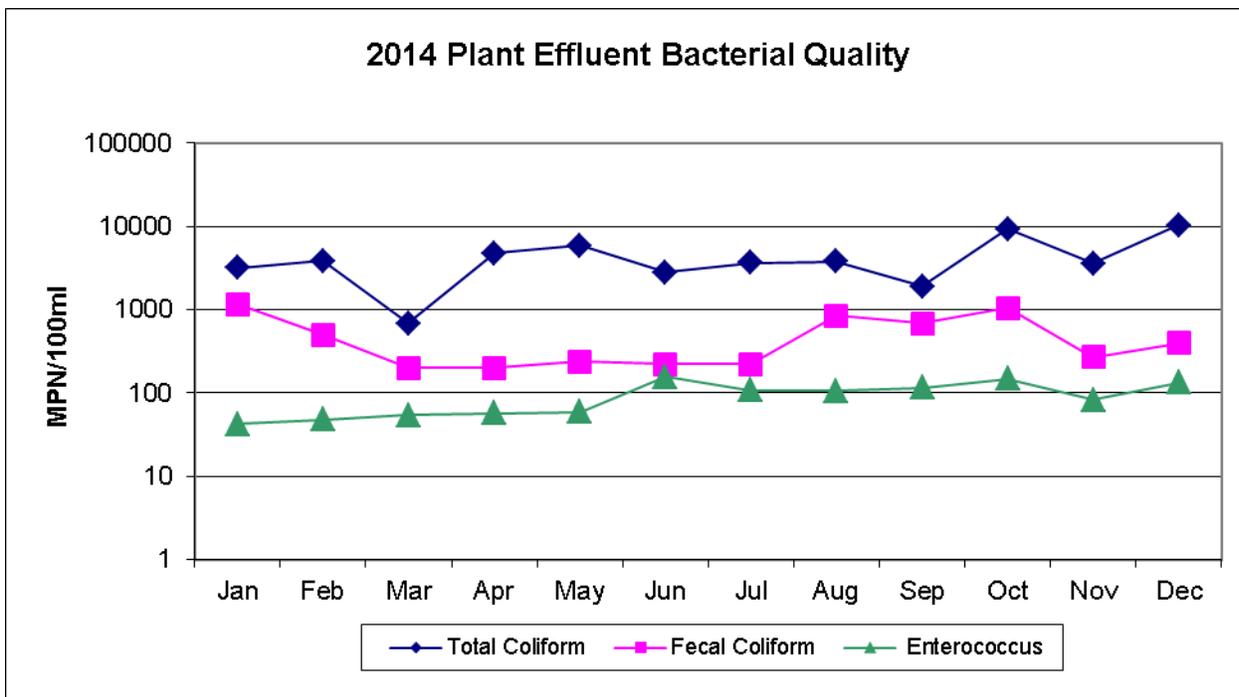


FIGURE 14

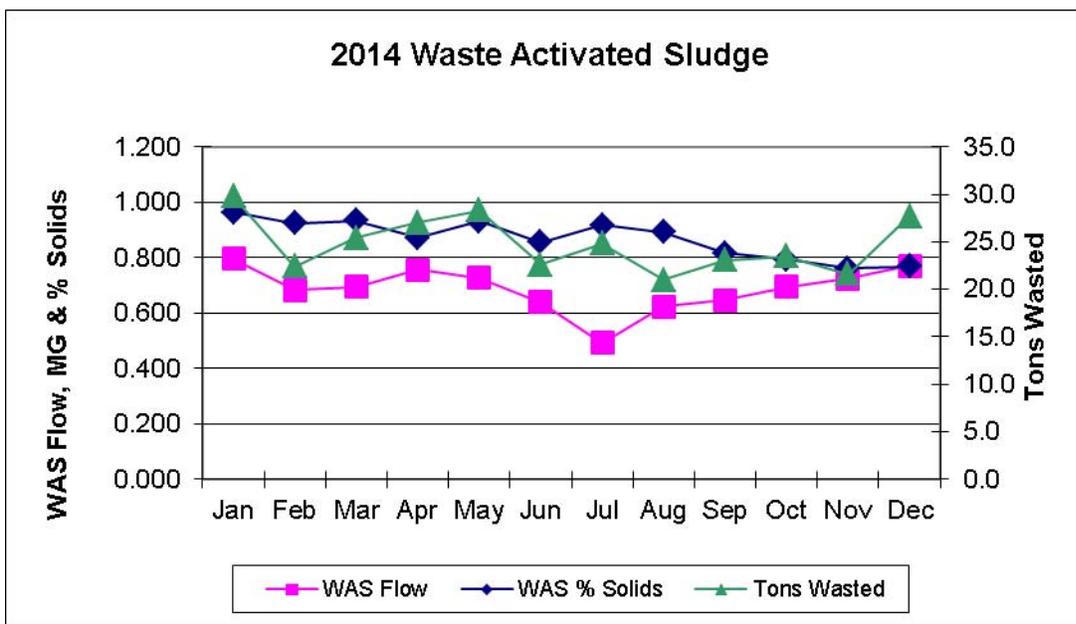


FIGURE 15

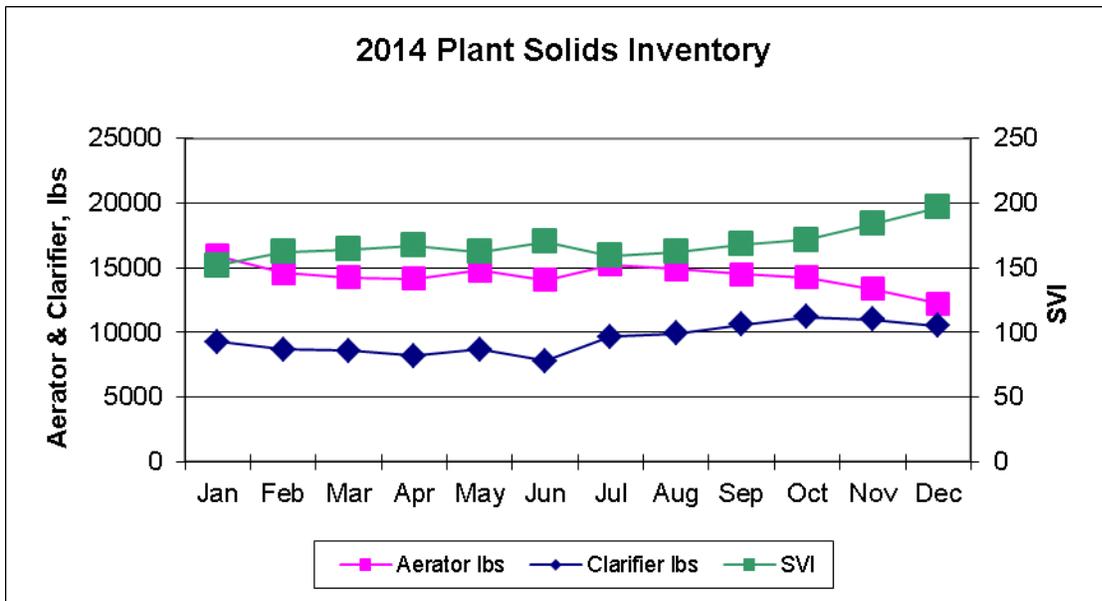


FIGURE 16

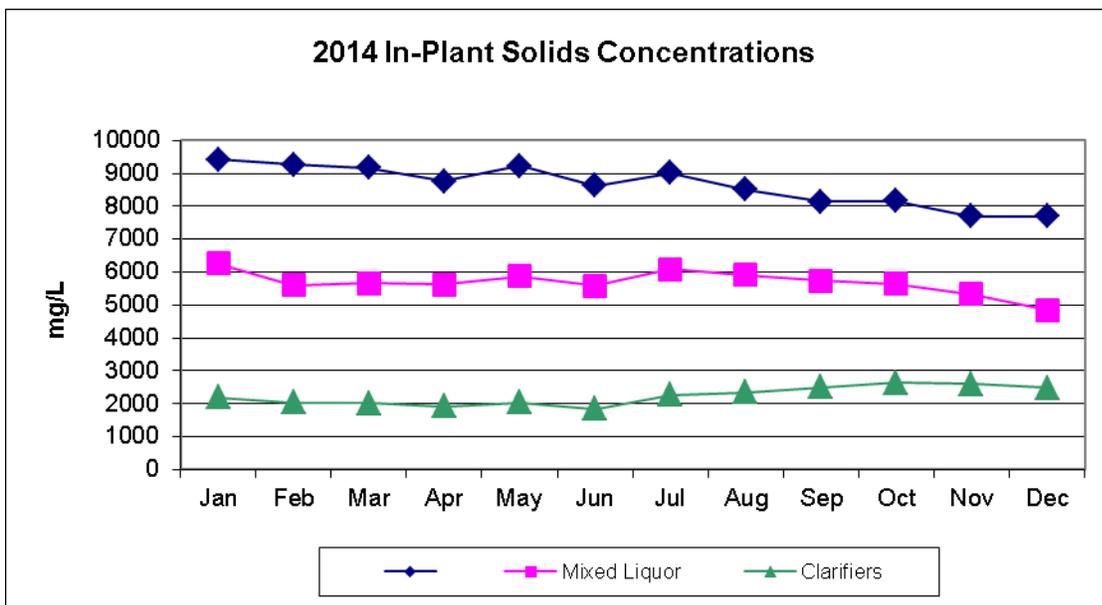


FIGURE 17

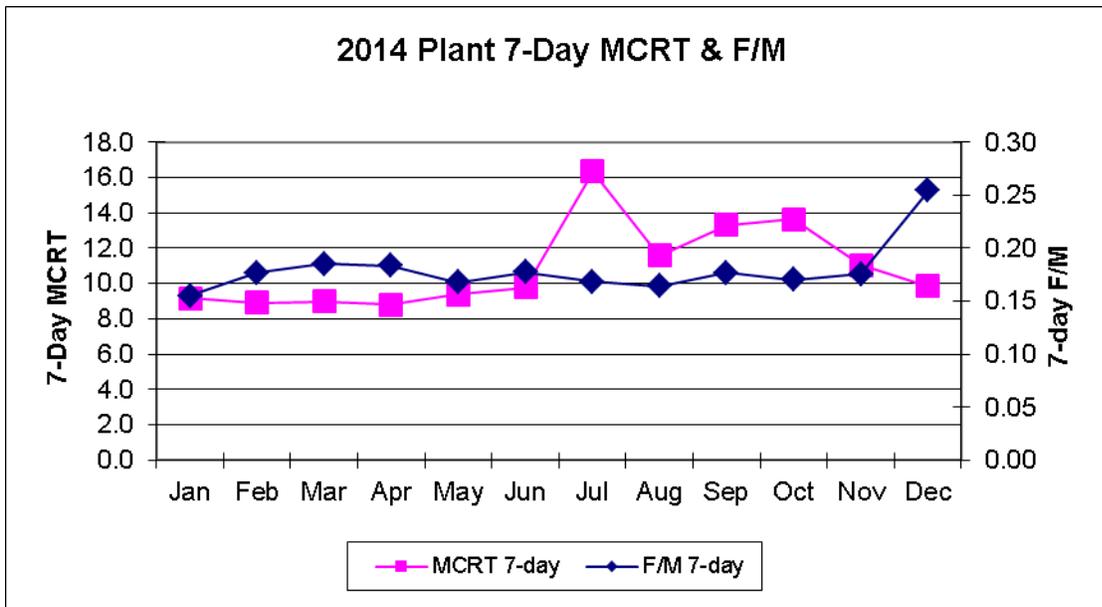


FIGURE 18

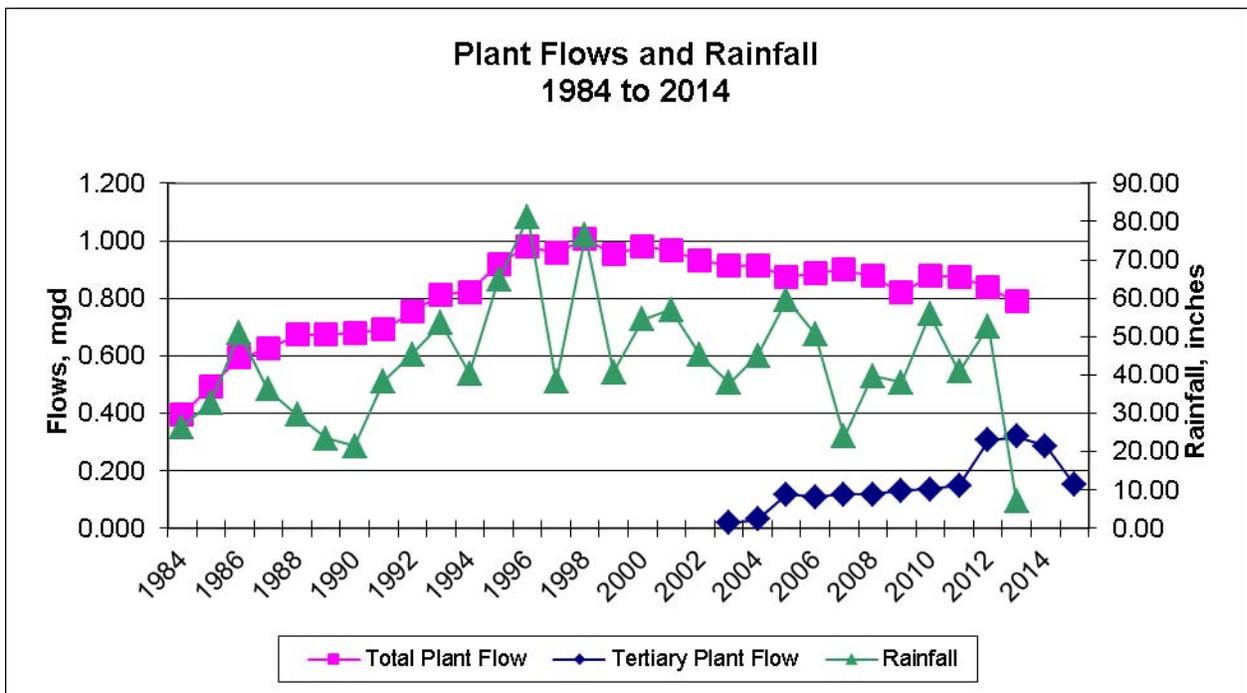
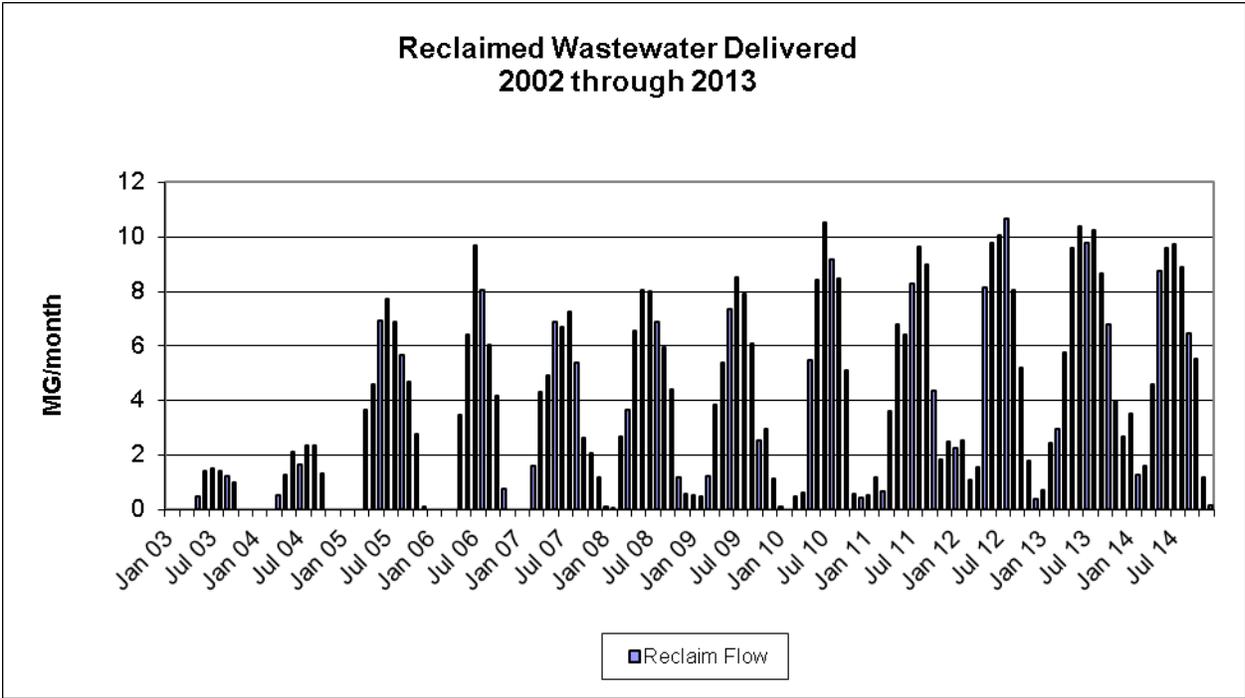


FIGURE 19





CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

CERTIFICATE OF ENVIRONMENTAL LABORATORY ACCREDITATION

Is hereby granted to

City of Scotts Valley Wastewater Reclamation Facility Lab

700 Lundy Lane

Scotts Valley, CA 95066

Scope of the certificate is limited to the
"Fields of Testing"
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site,
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: 1062

Expiration Date: 12/31/2015

Effective Date: 01/01/2014

Richmond, California
subject to forfeiture or revocation


David Mazzer, Ph.D., Assistant Division Chief
Division of Drinking Water and Environmental Management

City of Scotts Valley Discharger Self Monitoring Report

Annual Biosolids Hazardous Waste Determination
 NPDES#: 0048828 FAC ID: 3440103001

700 Lundy Lane
 Scotts Valley, CA 95066

Date of Report:	SLUDGE CAKE Annual hazardous waste determination					
2014 Annual	CONSTITUENT	Wet weight reporting in mg/kg			TTLc Times Exceeded	Sample Date
Remarks:		Detection Limit (ML) & Units mg/kg	Result mg/kg	TTLc mg/kg		
	Antimony/Antimony Compounds	5.0	ND	500	0	1/14/2014
	Arsenic/ Arsenic Compounds	1.00	7.90E-01	500	0	1/14/2014
	Barium/Barium Compounds excluding Barite	0.5	15.0	10,000	0	1/14/2014
	Beryllium/ Beryllium Compounds	0.5	ND	75	0	1/14/2014
	Cadmium/ Cadmium Compounds	0.052	7.6E-02	100	0	1/14/2014
	Chromium (VI) Compounds	0.32	1.50E-01	500	0	1/14/2014
	Chromium/ Chromium (III) Compounds	0.4	7.40E-01	2,500	0	1/14/2014
	Cobalt/ Cobalt Compounds	0.098	1.90E-01	8,000	0	1/14/2014
	Copper/ Copper Compounds	1	26.0	2,500	0	1/14/2014
	Fluoride Salts	38.0	ND	18,000	0	1/14/2014
	Lead/ Lead Compounds	0.5	ND	1,000	0	1/14/2014
	Mercury/ Mercury Compounds	0.025	4.800E-02	20	0	1/14/2014
	Molybdenum and/or molybdenum compounds	0.05	8.5E-01	3,500	0	1/14/2014
	Nickel and/or nickel compounds	0.5	1.4	2,000	0	1/14/2014
	Selenium and/or selenium compounds	0.98	ND	100	0	1/14/2014
	Silver and/or silver compounds	0.067	4.8E-01	500	0	1/14/2014
	Thallium and/or thallium compounds	0.64	ND	700	0	1/14/2014
	Vanadium and/or vanadium compounds	0.11	2.6E-01	2,400	0	1/14/2014
	Zinc and/or zinc compounds	0.25	38.0	5,000	0	1/14/2014
	Aldrin	0.000056	ND	1.4	0	1/14/2014
	Chlordane	0.015	ND	2.5	0	1/14/2014
	DDT, DDE, DDD	0.0005	ND	1.0	0	1/14/2014
	2,4-Dichlorophenoxyacetic acid	0.0019	ND	100	0	1/14/2014
	Dieldrin	0.000032	ND	8	0	1/14/2014
	Dioxin (2,3,7,8-TCDD)		5.15E-07	0.01	0	1/14/2014
	Endrin	0.000035	ND	0.2	0	1/14/2014
	Heptachlor	0.0026	ND	4.7	0	1/14/2014
	Kepone	0.0025	ND	21	0	1/14/2014
	Lead compounds, organic	0.5	ND	13	0	1/14/2014
	Lindane	0.00025	ND	4	0	1/14/2014
	Methoxychlor	0.00013	ND	100	0	1/14/2014
	Mirex	0.00033	ND	21	0	1/14/2014
	Pentachlorophenol	0.0011	ND	17	0	1/14/2014
	Polychlorinated biphenyls(PCBs)		ND	50	0	1/14/2014
	Toxaphene	0.0074	ND	5	0	1/14/2014
	Trichloroethylene	0.00077	ND	2,040	0	1/14/2014
	2,4,5-Trichlorophenoxypropionic acid	0.0012	ND	10.0	0	1/14/2014
	Conclusion: Not Hazardous Material					
	Data submitted as required by monitoring report program IX 5 Hazardous Waste Determination of Sludge					

City of Scotts Valley Discharger Self Monitoring Report

Annual Biosolids Monitoring

NPDES#: 0048828 FAC ID: 3440103001

700 Lundy Lane

Scotts Valley, CA 95066

Date of Report:		SLUDGE CAKE, TABLE 6 --Annual and First Quarter Biosolids Monitoring 1/14/2014			
2014 1st Quarter	CONSTITUENT	Detection Limit (ML) & Units	Result dry weight mg/kg	Table 3 Limit	Times Exceeded
Remarks:					
	TotalQuantity (Annual)	1.00 Tons	297		
	Moisture	0.05 %	85.6		
	pH	std. units	6.4		0
	Boron	0.5 mg/kg	66.0		0
	Cadmium	0.052 mg/kg	0.53	39.0	0
	Copper	1 mg/kg	180	1500.0	0
	Chromium Total	0.5 mg/kg	7.30		0
	Lead	2.5 mg/kg	2.90	300.0	0
	Mercury	0.16 mg/kg	0.34	17.0	0
	Nickel	0.5 mg/kg	9.9	420.0	0
	Silver	0.5 mg/kg	3.30		0
	Zinc	2.5 mg/kg	260	2800.0	0
	Total Kjeldahl nitrogen	800 mg/kg	72,000		0
	Ammonia (as N)	50 mg/kg	4,800		0
	Nitrate (as N)	1 mg/kg	85		0
	Total Phosphorus	200 mg/kg	26,000		0
	Grease & Oil (petroleum)	62 mg/kg	2,600		0
	Potassium	50 mg/kg	11,000		0
	Paint Filter Test	pass/fail	pass		0
	Disposal Location	Monterey Peninsula Landfill and Recycling Facility 14201 Del Monte Boulevard Marina, CA 93933-1670		2014	

City of Scotts Valley Discharger Self Monitoring Report

2014 Ocean Plan Table B Monitoring
 NPDES#: 0048828 FAC ID: 3440103001

700 Lundy Lane
 Scotts Valley, CA 95066

2014								
TABLE B -- PROTECTION OF MARINE AQUATIC LIFE								
2014 Annual Effluent Remarks:	CONSTITUENT (HV = High Volume water sample)	Detection Limit & Units	Result	Sample Date	Discharge Limits			Times Limit Exceeded
					6-Month Median ug/L	Daily Max. ug/L	Instant. Max. ug/L	
	Arsenic	2 ug/L	1.1	3/10-11/2014	1,112	4,448	11,120	0
	Cadmium	1 ug/L	ND	3/10-11/2014	139	556	1,390	0
	Chromium (hexavalent)	0.2 ug/L	ND	3/10-11/2014	278	1,112	2,780	0
	Copper	2.0 ug/L	6.30	3/10-11/2014	417	1,668	4,170	0
	Lead	1.0 ug/L	0.33	3/10-11/2014	278	1,112	2,780	0
	Mercury	0.20 ug/L	0.058	3/10-11/2014	5.56	22	55.6	0
	Nickel	2.0 ug/L	3.1	3/10-11/2014	695	2,780	6,950	0
	Selenium	2.0 ug/L	ND	3/10-11/2014	2,085	8,340	20,850	0
	Silver	1.0 ug/L	0.24	3/10-11/2014	97.30	389.2	973	0
	Zinc	5.0 ug/L	64.0	3/10-11/2014	2,780	11,120	27,800	0
	Cyanide	5.0 ug/L	8.8	3/10-11/2014	139	556	1,390	0
	Phenolic Compounds (non-chlorinated)	1.0 ug/L	ND	3/10-11/2014	4,170	16,680	41,700	0
	Chlorinated Phenolics	0.4 ug/L	ND	3/10-11/2014	139	556	1,390	0
	HV Endosulfans	ug/L	<0.00064	2/28-4/2/14	1.25	2.5	3.8	0
	HV Endrin	ug/L	<0.00004	2/28-4/2/14	0.28	0.56	0.83	0
	Lindane	0.005 ug/L	ND	3/10-11/2014	0.56	1.11	1.67	0
	Radioactivity	pCi/L	38±1.66	3/10-11/2014	Section 30253 CCR			0
TABLE B2 - PROTECTION OF HUMAN HEALTH -- NONCARCINOGENS								
	CONSTITUENT (HV = High Volume water sample)	Detection Limit & Units	Result	Sample Date	30-day Average Limit ug/L			Times Limit Exceeded
	Acrolein	7.9 ug/L	ND	3/10-11/2014	30,580			0
	Antimony	0.1 ug/L	ND	3/10-11/2014	166,800			0
	Bis (2-chloroethoxy) methane	0.27 ug/L	ND	3/10-11/2014	611.60			0
	Bis (2-chloroisopropyl) ether	0.30 ug/L	ND	3/10-11/2014	16,800			0
	Chlorobenzene	0.093 ug/L	ND	3/10-11/2014	79,230			0
	Chromium III	5.00 ug/L	ND	3/10-11/2014	3.E+07			0
	Di-n-butyl phthalate	0.39 ug/L	ND	3/10-11/2014	486,500			0
	Dichlorobenzenes	0.31 ug/L	ND	3/10-11/2014	708,900			0
	Diethyl phthalate	0.33 ug/L	ND	3/10-11/2014	5.E+06			0
	Dimethyl phthalate	0.39 ug/L	ND	3/10-11/2014	1.E+08			0
	4,6-Dinitro-2-methyl phenol	0.34 ug/L	ND	3/10-11/2014	30,580			0
	2,4-Dinitrophenol	0.20 ug/L	ND	3/10-11/2014	556			0
	Ethylbenzene	0.098 ug/L	ND	3/10-11/2014	569,900			0
	HV Fluoranthene	ug/L	<0.0068	2/28-4/2/14	2,085			0
	Hexachlorocyclopentadiene	0.0500 ug/L	ND	3/10-11/2014	8,062			0
	Nitrobenzene	0.26 ug/L	ND	3/10-11/2014	681.1			0
	Thallium	0.10 ug/L	ND	3/10-11/2014	278			0
	Toluene	0.093 ug/L	0.67	3/10-11/2014	1.E+07			0
	Tributyltin	0.005 ug/L	ND	3/10-11/2014	0.19			0
	1,1,1-Trichloroethane	0.11 ug/L	ND	3/10-11/2014	8.E+07			0

City of Scotts Valley Discharger Self Monitoring Report

2014 Annual Ocean Plan Table B Monitoring

700 Lundy Lane

NPDES#: 0048828 FAC ID: 3440103001

Scotts Valley, CA 95066

2014							
TABLE B3 - PROTECTION OF HUMAN HEALTH -- CARCINOGENS							
2014 Annual Effluent	CONSTITUENT (HV = High Volume water sample)	Detection Limit & Units		Result	Sample Date	30-day Average Limit ug/L	Times Limit Exceeded
Remarks:							
	Acrylonitrile	1.2	ug/L	ND	3/10-11/2014	13.90	0
	Aldrin	0.0013	ug/L	ND	3/10-11/2014	0.00	0
	Benzene	0.083	ug/L	ND	3/10-11/2014	820.1	0
	Benzidine	7.1	ug/L	ND	3/10-11/2014	9.6E-03	0
	Beryllium	0.23	ug/L	ND	3/10-11/2014	4.590	0
	Bis(2-Chloroethyl)ether	0.68	ug/L	ND	3/10-11/2014	6.260	0
	Bis(2-ethylhexyl)phthalate	4.0	ug/L	16.0	3/10-11/2014	486.5	0
	Carbon tetrachloride	0.18	ug/L	ND	3/10-11/2014	125.10	0
	HV Chlordane		ug/L	<0.0003	2/28-4/2/14	0.00	0
	Chloroform	0.5	ug/L	27	3/10-11/2014	1,195.4	0
	HV DDT		ug/L	<0.0002	2/28-4/2/14	0.02	0
	1,4-Dichlorobenzene	0.06	ug/L	ND	3/10-11/2014	2,502	0
	3,3-Dichlorobenzidine	8.2	ug/L	ND	3/10-11/2014	1.13	0
	1,2-Dichloroethane	0.17	ug/L	ND	3/10-11/2014	3,892	0
	1,1,-Dichloroethylene	0.17	ug/L	ND	3/10-11/2014	125.10	0
	Dichlorobromomethane		ug/L	17.4	3/10-11/2014	861.80	0
	Methylene chloride	0.48	ug/L	ND	3/10-11/2014	62,550	0
	1,3-Dichloropropene	0.21	ug/L	ND	3/10-11/2014	1,237	0
	HV Dieldrin		ug/L	<0.00009	2/28-4/2/14	0.010	0
	2,4-Dinitrotoluene	0.26	ug/L	ND	3/10-11/2014	361.4	0
	1,2-Diphenylhydrazine	0.34	ug/L	ND	3/10-11/2014	22.4	0
	Halomethanes	2	ug/L	17	3/10-11/2014	18,070	0
	HV Heptachlor		ug/L	<0.00006	2/28-4/2/14	0.010	0
	HV Heptachlor Epoxide		ug/L	<0.00005	3/10-11/2014	0.00	0
	HV Hexachlorobenzene		ug/L	<0.00006	2/28-4/2/14	0.030	0
	Hexachlorobutadiene	0.24	ug/L	ND	3/10-11/2014	1,946	0
	Hexachloroethane	0.32	ug/L	ND	3/10-11/2014	348	0
	Isophorone	0.31	ug/L	ND	3/10-11/2014	101,470	0
	N-Nitrosodimethylamine	0.61	ug/L	ND	3/10-11/2014	1014.70	0
	N-Nitrosodi-N-Propylamine	1.3	ug/L	ND	3/10-11/2014	52.82	0
	N-Nitrosodiphenylamine	0.44	ug/L	ND	3/10-11/2014	347.50	0
	HV PAH		ug/L	<0.031	2/28-4/2/14	1.22	0
	HV PCBs		ug/L	0.00	2/28-4/2/14	0.00	0
	HV TCDD Equivalents		ug/L	5E-07	2/28-4/2/14	5.42E-07	0
	1,1,2,2,-Tetrachloroethane	0.17	ug/L	ND	3/10-11/2014	319.70	0
	Tetrachloroethylene	0.13	ug/L	ND	3/10-11/2014	278	0
	Toxaphene	0.42	ug/L	ND	3/10-11/2014	0.030	0
	Trichloroethylene	0.085	ug/L	ND	3/10-11/2014	3,753	0
	1,1,2-Trichloroethane	0.16	ug/L	ND	3/10-11/2014	1,306.60	0
	2,4,6-Trichlorophenol	0.6	ug/L	ND	3/10-11/2014	40.31	0
	Vinyl chloride	0.12	ug/L	ND	3/10-11/2014	5,004	0