

STATEMENT OF BASIS

Applicant: Valley Queen Cheese Factory, Inc
Permit Number: SD0027987
Contact Person: Dave Gonzebach, CEO
Jim Nelson, Wastewater Operator
200 East Railway Avenue
Milbank, SD 57252
Phone: (605) 432-4563 (Operator extension: 621)
Permit Type: Minor Industrial Wastewater Treatment Facility - Renewal

DESCRIPTION

Valley Queen Cheese has built a wastewater treatment plant to treat its wastewater and discharge to the South Fork Whetstone River. The treatment plant is located directly across the road from the Valley Queen Cheese factory in Section 7, Township 120 North, Range 48 West, in Grant County (Latitude 45.221450°; Longitude -96.637869°, – Navigational Quality GPS).

Valley Queen Cheese Whey Plant Description

This facility receives about 4.0 million pounds of milk per day. The milk is placed in seven silos capable of storing 3.4 million pounds of milk. Following off-loading of the milk, the trucks are washed and rinsed using solutions of sodium hydroxide and 60 to 80 ppm of chlorine. Wash water is reused for several days before disposal to the treatment system.

In the first part of the cheese production process, milk is pasteurized before it flows through evaporators that remove 25% of the water. Following evaporation, the milk enters the cheese vats where culture is added and heating occurs. The curd and whey are then separated. Curd is packaged, compressed, and placed into coolers for shipment off-site for additional processing. Additional whey is removed from the curd during the packaging process.

After being separated from the curd, the whey cream is removed. Valley Queen Cheese then adjusts the pH of the separated whey, pasteurizes, and evaporates the whey to 62% solids. The whey is cooled and centrifuged. The products generated through this process, lactose crystals and delactosed whey, are then sent to facilities that further process them into other products.

The facility generates a significant quantity of water from the evaporation of the milk and whey. This water, referred to as “cow water”, is used throughout the plant for washing, rinsing, heat exchange, etc. This cow water is potable; however, it is not used for drinking, the facility receives drinking water from the city of Milbank. More cow water is generated than can be used and some of it will be discharged to the wastewater treatment facility. Boiler blow-down water will also be discharged to the wastewater treatment facility.

Wastewater Treatment Description

Valley Queen Cheese originally constructed its wastewater treatment plant in 2005 and upgraded the treatment plant in 2011. The treatment plant receives cow water, boiler blow-down water,

and about 75% of the factory's domestic wastewater, the other 25% of the domestic wastewater flows to the city of Milbank's wastewater treatment system.

Valley Queen Cheese balances and blends the flows using equalization silos, screens the wastewater from the factory, and adjusts its pH at the factory prior to treatment at the wastewater treatment plant. The wastewater is screened by floor drain screens and a basket screen in the lift station, as well as a ¼" Hellan® mechanical screen located between the lift station and the treatment building. An influent pump station pumps the wastewater to an ADI-BVF® (BVF) reactor. The BVF reactor has been patented by ADI Systems, Inc and is a low-rate anaerobic up-flow sludge bed process and anaerobic treatment system that is designed to treat warm water wastestreams of moderate to high organic strength. The BVF reactor is designed to remove 91% of the chemical organic demand (COD) and 92% of the total suspended solids (TSS) from the wastewater stream.

Raw wastewater is split between the BVF reactor and the anaerobic selector tank. Flow to the BVF reactor is evenly distributed into the lower portion of approximately one-half of the BVF reactor's sludge bed. There is a provision to recycle supernatant to the influent distribution system. Internal settlers are used to retain solids in the reactor. The BVF reactor has been designed to hold 2.2 million gallons, with a hydraulic retention time of at least 6.45 days. A geomembrane cover has been placed over the BVF reactor. The geomembrane cover will allow the collection and removal of biogas and provide odor and temperature control. The biogas is flared off.

Following the BVF reactor, the anaerobic effluent flows by gravity to a 49,500-gallon anaerobic selector tank, where it is mixed with return activated sludge and raw wastewater. The selector tank denitrifies the wastewater and biologically removes phosphorus. The detention time in this tank is 64 minutes under normal flow and 61 minutes during peak conditions.

From the selector tank, the wastewater flows to two aeration basins. The sequencing batch reactors that had been used with the previous treatment plant were converted into the aeration basins with the 2011 upgrade. The aeration basins have a static level of 20 feet and contain 500,000 gallons of mixed liquor. These are continuous flow-through units that are designed to treat 560,000 gallons per day, with a peak design of 615,000 gallons per day.

From the aeration basins, the wastewater flows by gravity to a round concrete clarifier. This clarifier has a diameter of 45 feet, a side water depth of 14 feet, and a volume of 166,500 gallons. This unit is designed for a continuous flow of 560,000 gallons per day with a peak of 615,000 gallons per day. This clarifier is equipped with a top and bottom scraper mechanism to remove both scum from the top and sludge from the bottom. There is also a flocculation tank incorporated into this clarifier for use when a polymer or chemical, such as ferric, is needed.

From the clarifier, the wastewater flows to the dissolved air floatation (DAF) unit located in the new addition east of the mechanical building. This unit is designed to handle a normal daily flow of 560,000 gallons with a daily peak of 615,000 gallons. The finished water from this DAF flows to the UV for disinfection prior to discharge. This DAF unit is also used for thickening of solids before they are pumped to the aerated sludge storage tank.

The wastewater then travels by gravity to the ultraviolet (UV) disinfection system and then flows over cascade aeration into the South Fork Whetstone River (Outfall 001).

The old 60,000-gallon surge tank has been converted to a sludge storage tank. Thickened waste activated sludge is pumped to this tank for further aeration treatment, storage, and eventually disposal at land application sites.

RECEIVING WATERS

Any discharge from this facility will enter the South Fork Whetstone River, which is classified by the South Dakota Surface Water Quality Standards (SDSWQS), Administrative Rules of South Dakota (ARSD) Sections 74:51:03:01 and 74:51:03:04 for the following beneficial uses:

- (6) Warmwater marginal fish life propagation waters;
- (8) Limited contact recreation waters;
- (9) Fish and wildlife propagation, recreation, and stock watering waters; and
- (10) Irrigation waters.

The South Fork Whetstone River flows about eight miles to the confluence with the Whetstone River, which is classified by the SDSWQS ARSD Sections 74:51:03:01 and 74:51:03:04 for the following beneficial uses:

- (5) Warmwater semipermanent fish life propagation waters;
- (8) Limited contact recreation waters;
- (9) Fish and wildlife propagation, recreation, and stock watering waters; and
- (10) Irrigation waters.

Due to the distance from the outfall to the Whetstone River, the limits placed in the permit will be based on the beneficial used of the South Fork Whetstone River. However, these limits will also be protective of the designated beneficial used for the Whetstone River.

ANTIDegradation

The South Dakota Department of Environment and Natural Resources (SDDENR) has fulfilled the antidegradation review requirements for this permit. In accordance with South Dakota's Antidegradation Implementation Procedure and the SDSWQS, no further review is required. The results of SDDENR's review are included in Attachment 1.

MONITORING DATA

Valley Queen Cheese has been submitting Discharge Monitoring Reports (DMRs) as required under the current permit. The facility requested a change from concentration-based to mass-based limits; this change was effective March 1, 2008. As shown in Attachment 2, the facility has had the following violations between December 01, 2005, and the March 01, 2008, addendum:

Parameter	Number of violations
Biochemical Oxygen Demand (BOD ₅)	5
Flow	816
Nitrogen-Ammonia	28
Dissolved Oxygen	1
Total Suspended Solids (TSS)	21
Temperature	123
Whole Effluent Toxicity (WET)	8

As shown in Attachment 2 the facility has had the following violations since the March 01, 2008, addendum:

Parameter	Number of violations
Biochemical Oxygen Demand (BOD ₅)	74
Fecal Coliform	2
Nitrogen-Ammonia	38
Nitrogen-total Nitrate	5
Total Suspended Solids (TSS)	27
Temperature	5

The Secretary has taken enforcement action against Valley Queen Cheese because of these violations. The Secretary and Valley Queen Cheese have reached a settlement agreement for these violations. This settlement agreement requires Valley Queen Cheese, to upgrade its treatment facility and includes revised effluent limits, which go into effect February 1, 2012. The limits in this proposed permit will be the same as the limits in the settlement agreement. Valley Queen Cheese finished the upgrades to the facility in August 2011.

INSPECTIONS

Personnel from SDDENR conducted a *Compliance Inspection* of the Valley Queen Cheese wastewater treatment facility on August 31, 2011. The following comments and corrective actions were made:

COMMENTS	REQUIRED CORRECTIVE ACTIONS
Since the last inspection the facility has had 18 5-day Biochemical Oxygen Demand, 2 Total Suspended Solids, 1 fecal coliform, 1 nitrite, and 4 NH ₃ violations.	The facility has been improving operations and has finished a major upgrade to the treatment facility to address these violations. The Department commends the steps taken by Valley Queen Cheese to address these violations.
The facility is not keeping an updated Storm Water Pollution Prevention Plan (SWPPP) as required under the facility's storm water permit (SDR00A233).	The facility must develop a SWPPP as required under its storm water permit. If Valley Queen Cheese meets the requirements and submits a no-exposure certification form, the storm water

COMMENTS	REQUIRED CORRECTIVE ACTIONS
	permit can be terminated. If the storm water permit is terminated for Valley Queen Cheese, then a SWPPP would not need to be kept.
The facility is not recording the pH buffer solution temperature in the pH calibration log.	The pH meter calibration log must be kept. This log needs to include the date, time, and initials of the person calibrating the meter, and the temperature and calibrated meter readings for the 7.0 and 10.0 buffer solutions.

EFFLUENT LIMITS

As noted above, the Secretary of SDDENR issued an enforcement action against Valley Queen Cheese for its effluent violations. The enforcement action and corresponding settlement agreement required Valley Queen Cheese to upgrade its existing wastewater treatment plant and provided a schedule to complete the upgrades. Upon completion of the upgrades, Valley Queen Cheese was required to meet revised limits as detailed in the settlement agreement.

Effective immediately and lasting through the life of the permit, the permittee shall comply with the effluent limits specified below, which are based on the SDSWQS, Best Professional Judgment (BPJ), the settlement agreement, and current permit limits.

Outfall 001 – Any discharge from Valley Queen Cheese’s ultraviolet disinfection system following the cascade aeration into the South Fork Whetstone River (Latitude 45.221372°, Longitude -96.637297°, Navigational Quality GPS).

1. The five-day Biochemical Oxygen Demand (BOD₅) concentration shall not exceed 15 mg/L (30-day average) or 30 mg/L (daily maximum). These limits are based on the settlement agreement.
2. The Total Suspended Solids (TSS) concentration shall not exceed 20 mg/L (30-day average) or 40 mg/L (daily maximum). These limits are based on the settlement agreement.
3. The pH shall not be less than 6.0 standard units or greater than 9.0 standard units in any single analysis and/or measurement. These limits are based on the warmwater marginal fish life propagation waters classification of the South Fork Whetstone River, the SDSWQS (ARSD Section 74:51:01:49), and the settlement agreement.

Note: SDDENR specifies that pH analyses are to be conducted within 15 minutes of sample collection with a pH meter. Therefore, the permittee must have the ability to conduct onsite pH analyses. The pH meter used must be capable of simultaneous calibration to two points on the pH scale that bracket the expected pH and are approximately three standard units apart. The pH meter must read to

0.01 standard units and be equipped with temperature compensation adjustment. Readings shall be reported to the nearest 0.1 standard units.

4. The Dissolved Oxygen concentration shall not be less than 6.5 mg/ L in any single analysis or measurement. The Dissolved Oxygen limit is based on the settlement agreement.
5. Nitrates – Nitrogen concentration shall not exceed 50 mg/L (30-day average) or 88 mg/L (daily maximum). These limits are based on the fish and wildlife propagation, recreation, and stock watering waters classification of the South Fork Whetstone, the SDSWQS (ARSD Section 74:51:01:52) and the settlement agreement.
6. Total Phosphorus shall not exceed 7.0 mg/L (30-day average) or 10.0 mg/L (daily maximum). These limits are based on the settlement agreement.
7. Temperature shall not exceed 90.0 °F in any single analysis or measurement. If the effluent temperature is greater than 90 ° F, Valley Queen Cheese shall be required to sample South Fork Whetstone River 50 feet upstream and 50 feet downstream of the discharge. The discharge shall not cause the instream temperature of South Fork Whetstone River to increase by more than 2° F. This limit is based on the warmwater marginal fish life classification of the South Fork Whetstone River, the SDSWQS (ARSD 74:51:01:49), and BPJ.

Note: Section 316(a) of the federal Clean Water Act specifically pertains to point sources with thermal discharges. To implement this provision of the Clean Water Act, EPA adopted the regulations found in 40 CFR Part 125, Subpart H. SDDENR reviewed these regulations as they pertain to Valley Queen Cheese. Valley Queen Cheese has requested a variance to its temperature limits to allow for higher than 90 °F effluent temperature if there is no appreciable impact to the temperature of the South Fork Whetstone River.

8. Oil and Grease concentration shall not exceed 10 mg/L in any single analysis or measurement or impart a visible film or sheen to the surface of the water or the adjoining shorelines. These limits are based on the fish and wildlife propagation recreation, and stock watering waters classification of the South Fork Whetstone River, the SDSWQS (ARSD 74:51:01:01 and 74:51:01:52), and the settlement agreement.
9. *Escherichia Coli (E. Coli)* organisms from May 1 to September 30 shall not exceed a concentration of 630 per 100 milliliters as a geometric mean based on a minimum of five samples obtained during separate 24-hour periods for any 30-day period. ***This limit is applicable only if five or more samples are taken and is only effective from May 1 to September 30.***

In addition, *E. Coli* organisms shall not exceed 1,178 per 100 milliliters in any one sample from May 1 to September 30. These limits are based on the limited-contact recreation waters classification of South Fork Whetstone River, the SDSWQS (ARSD Section 74:51:01:51), and the settlement agreement.

10. The ammonia-nitrogen concentration shall not exceed 1.0 mg/L (30-day average) or 1.8 mg/L (daily maximum). These limits are based on the settlement agreement.
11. There shall be no Chronic Toxicity, as measured by the Whole Effluent Toxicity test. This limit is based on the SDSWQS (ARSD Section 74:51:01:12), the current permit, and the settlement agreement.
12. There shall be no discharge of floating solids or visible pollutants. This limit is based on the SDSWQS (ARSD Section 74:51:01:06) and the settlement agreement.
13. No chemicals, such as chlorine, shall be used without prior written permission. This limit is based on BPJ.

Flow rate (Million Gallons per Day), Chemical Oxygen Demand (COD, mg/L), Carbonaceous Biochemical Oxygen Demand (CBOD₅, mg/L), Total Dissolved Solids (TDS mg/L), Total Kjeldahl Nitrogen (TKN mg/L), Total Alkalinity (as CaCO₃, mg/L), and Conductivity (at 25 °C, µmhos/cm) shall be monitored, but shall not have a limit.

SELF-MONITORING REQUIREMENTS

Self-Monitoring Requirements – Outfall 001

Effective immediately and lasting through the life of the permit, all discharges, sanitary sewer overflows, and unauthorized releases shall be monitored for the following parameters at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the volume and nature of the monitored discharge.

Parameter ¹	Frequency	Reporting Values ¹	Sample Type ¹
Flow Rate, MGD	Continuous	Daily Maximum; 30-Day Average	Instantaneous
Dissolved Oxygen, mg/L	Continuous	Daily Minimum	Instantaneous
Water Temperature, °F	Continuous	Daily Maximum; 30-Day Average	Instantaneous ^{2,3}

¹ See **Definitions**, in the proposed Permit, for definition of terms.

² The water temperature of the effluent shall be taken as a field measurement at the time of sampling. Measurement shall be made with a mercury-filled, or dial type thermometer, or a thermistor. Readings shall be reported to the nearest whole degree Celsius. If the effluent temperature is greater than 90° F, then Valley Queen Cheese shall sample the South Fork Whetstone River 50 feet upstream and 50 feet downstream of the discharge.

³ When ammonia samples are collected, the pH and temperature of the effluent shall be determined.

Parameter ¹	Frequency	Reporting Values ¹	Sample Type ¹
pH, standard units	Continuous	Daily Minimum; Daily Maximum	Instantaneous ^{3, 4}
Visible Pollutants, visual	Daily	Presence or absence of sheen	Visual
Oil and Grease, visual	Daily	Presence or absence of sheen	Visual ⁵
Oil and Grease (hexane ext), mg/L	Contingent	Daily Maximum	Grab
Oil and Grease (hexane ext), mg/L	Weekly	Daily Maximum; 30-Day Average	Grab
Five Day Biochemical Oxygen Demand (BOD ₅), mg/L	Three Times/Week	Daily Maximum; 30-Day Average	24-hour Composite
Carbonaceous BOD ₅ , mg/L	Monthly	Daily Maximum; 30-Day Average	24-hour Composite
Total Suspended Solids (TSS), mg/L	Three Times/Week	Daily Maximum; 30-Day Average	24-hour Composite
Total Dissolved Solids (TDS), mg/L	Weekly	Daily Maximum; 30-Day Average	24-hour Composite
<i>Escherichia Coli</i> (<i>E. Coli</i>), no./100 mL	Three Times/Week ⁶	Daily Maximum; 30-Day Geometric Mean	Grab
Total Alkalinity (as CaCO ₃), mg/L	Weekly	Daily Maximum; 30-Day Average	24-hour Composite
Conductivity (at 25° C), µmhos/cm	Weekly	Daily Maximum; 30-Day Average	24-hour Composite
Nitrate-Nitrogen (as N), mg/L	Three Times/Week	Daily Maximum; 30-Day Average	24-hour Composite
Ammonia-Nitrogen (as N), mg/L	Weekly ⁷	Daily Maximum; 30-Day Average	24-hour Composite ³

⁴ The pH shall be taken within 15 minutes of sample collection with a pH meter. The pH meter must be capable of simultaneous calibration to two points on the pH scale that bracket the expected pH and are approximately three standard units apart. The pH meter must read to 0.01 standard units and be equipped with temperature compensation adjustment. Readings shall be reported to the nearest 0.1 standard units.

⁵ In the event a sheen is observed in the discharge, a grab sample shall be immediately taken and analyzed for oil and grease (hexane ext.). The results of the sampling shall be reported to the department. At a minimum, the permittee shall collect a grab sample for oil and grease at least weekly.

⁶ If a minimum of five samples are collected in a calendar month, all of the samples collected are to be used in determining the geometric mean. Samples are to be collected at the same time as BOD₅, TSS, etc. If less than five samples are taken during any calendar month, the maximum limit still applies. ***This sampling protocol for E. coli only applies if the discharge occurs between May 1 and September 30.***

⁷ When ammonia samples are collected, the pH and temperature of the effluent shall be determined.

Parameter¹	Frequency	Reporting Values¹	Sample Type¹
Total Kjeldahl Nitrogen (TKN), mg/L	Monthly	Daily Maximum; 30-Day Average	24-hour Composite
Total Phosphorus, mg/L	Monthly	Daily Maximum; 30-Day Average	24-hour Composite
Chemical Oxygen Demand (COD), mg/L	Monthly	Daily Maximum; 30-Day Average	24-hour Composite
Chronic Whole Effluent Toxicity	Quarterly ⁸	Pass/Fail	24-hour Composite

⁸ The permittee shall obtain and analyze a valid whole effluent toxicity sample at least once during each calendar quarter.

Discharge Monitoring Reports – Outfalls 001

All samples collected at Outfall 001 and analyzed using approved analytical methods during the reporting period are to be used in determining the averages. The permittee always has the option of collecting additional samples if appropriate. DMRs must be signed by an authorized signatory and submitted to SDDENR **monthly**. Alternatively, Valley Queen Cheese may request permission to submit the DMRs electronically through EPA’s NetDMR System.

Inspection Requirements

Monitoring shall consist of **daily** inspections of the facility and the outfall to verify that proper operation and maintenance procedures are being practiced. Documentation of each of these inspections shall be kept in a notebook to be reviewed by SDDENR or EPA personnel when an inspection occurs.

STORM WATER

Valley Queen Cheese has obtained a No Exposure Certification under the General Permit for Storm Water Discharges Associated with Industrial Activity; therefore they are exempt from storm water permitting.

SLUDGE

Valley Queen Cheese will be generating sludge during the course of its wastewater treatment operations. The proposed Surface Water Discharge permit will not contain sludge disposal requirements. Any sludge disposal is regulated by the department’s Waste Management Program.

ENDANGERED SPECIES

This is a renewal of an existing permit. No listed endangered species are expected to be impacted by activities related to this permit. However, the table below shows the species that may be present in the facility's geographic area.

COUNTY	GROUP	SPECIES	CERTAINTY OF OCCURRENCE
GRANT	FISH	SHINER, TOPEKA ¹	POSSIBLE

¹ Although Topeka Shiners have not been formally documented within Clark, Douglas, Grant, Jerauld, Kingsbury, Lake, Spink, or Yankton Counties, the species may still occur in these areas because they contain portions of known occupied Topeka Shiner streams and/or potentially occupied streams that exist within one or more of the three known inhabited watersheds in South Dakota: the James, Vermillion, and Big Sioux

This information was accessible at the following US Fish and Wildlife Service website as of November 21, 2011: <http://www.fws.gov/southdakotafieldoffice/SpeciesByCounty.pdf>

PERMIT EXPIRATION

A five-year permit is recommended.

PERMIT CONTACT

Any questions pertaining to this statement of basis can be directed to Jonathan Hill, Natural Resources Project Engineer, for the Surface Water Quality Program, at (605) 773-3351.

November 21, 2011

ATTACHMENT 1

Antidegradation Review

Minor Industrial

Permit Type: - Renewal Applicant: Valley Queen Cheese, Inc.
Date Received: Oct 01, 2008 Permit #: SD002007987
County: Grant Legal Description: Sec 7, T120N, R48W
Receiving Stream: South Fork Whetstone River Classification: 6,8,9,10
If the discharge affects a downstream waterbody with a higher use classification, list its name and uses:

APPLICABILITY

1. Is the permit or the stream segment exempt from the antidegradation review process under ARSD 74:51:01? Yes No If no, go to question #2. If yes, check those reasons why the review is not required:

- Existing facility covered under a surface water discharge permit is operating at or below design flows and pollutant loadings;
- *Existing effluent quality from a surface water discharge permitted facility is in compliance with all discharge permit limits;
- *Existing surface water discharge permittee was discharging to the current stream segment prior to March 27, 1973, and the quality and quantity of the discharge has not degraded the water quality of that segment as it existed on March 27, 1973;
- *The existing surface water discharge permittee, with DENR approval, has upgraded or built new wastewater treatment facilities between March 27, 1973, and July 1, 1988;
- The existing surface water discharge permittee discharges to a receiving water assigned only the beneficial uses of (9) and (10); the discharge is not expected to contain toxic pollutants in concentrations that may cause an impact to the receiving stream; and DENR has documented that the stream cannot attain a higher use classification. This exemption does not apply to discharges that may cause impacts to downstream segments that are of higher quality;
- Receiving water meets Tier 1 waters criteria. Any permitted discharge must meet water quality standards;
- The permitted discharge will be authorized by a Section 404 Corps of Engineers Permit, will undergo a similar review process in the issuance of that permit, and will be issued a 401 certification by the department, indicating compliance with the state's antidegradation provisions; or
- Other: This permit does not authorize an increase in effluent limits. Many of the proposed limits are more stringent than the current permit.

*An antidegradation review is not required where the proposal is to maintain or improve the existing effluent levels and conditions. Proposals for increased effluent levels, in these categories of activities are subject to review.

No further review required.

ANTIDEGRADATION REVIEW SUMMARY

2. The outcome of the review is:
- A formal antidegradation review was not required for reasons stated in this worksheet. Any permitted discharge must ensure water quality standards will not be violated.
 - The review has determined that degradation of water quality should not be allowed. Any permitted discharge would have to meet effluent limits or conditions that would not result in any degradation estimated through appropriate modeling techniques based on ambient water quality in the receiving stream, or pursue an alternative to discharging to the waterbody.
 - The review has determined that the discharge will cause an insignificant change in water quality in the receiving stream. The appropriate agency may proceed with permit issuance with the appropriate conditions to ensure water quality standards are met.
 - The review has determined, with public input, that the permitted discharge is allowed to discharge effluent at concentrations determined through a total maximum daily load (TMDL). The TMDL will determine the appropriate effluent limits based on the upstream ambient water quality and the water quality standard(s) of the receiving stream.
 - The review has determined that the discharge is allowed. However, the full assimilative capacity of the receiving stream cannot be used in developing the permit effluent limits or conditions. In this case, a TMDL must be completed based on the upstream ambient water quality and the assimilative capacity allowed by the antidegradation review.
 - Other: _____

3. Describe any other requirements to implement antidegradation or any special conditions That are required as a result of this antidegradation review: _____

Jonathan Hill
Reviewer

November 14, 2011
Date

Kelli D. Buscher, P.E.
Team Leader

November 18, 2011
Date

ATTACHMENT 2

Monitoring Data

Effluent Monitoring Tables

Limit	Alkalinity, total (as CaCO ₃)		BOD, 5-day, 20 deg. C				Nitrogen, ammonia total (as N)				Temperature, water	
	30-Day Ave	Daily Max	30-Day Ave		Daily Max		30-Day Ave		Daily MAX		30-Day Ave	Daily MAX
	N/A mg/L	N/A mg/L	30	67.6 lb/d	Varies lb/d	N/A mg/L	Varies lb/d	Varies mg/L	Varies lb/d	Varies mg/L	N/A °F	90 °F
End Date												
12/31/2005	761.3	880	14.6	NA	NA	27	NA	5.6	NA	15.7	75.9	81.7
01/31/2006	710.8	756	10.7	NA	NA	15	NA	1.8	NA	7	79.6	84
02/28/2006	592.8	649	14.14	NA	NA	26.9	NA	0.93	NA	2	78.94	82.89
03/31/2006	795.5	871	12.87	NA	NA	19.83	NA	1.28	NA	8	80.76	84.29
04/30/2006	616.2	765	12.11	NA	NA	20	NA	0.28	NA	2	86.69	89.74
05/31/2006	564.2	678	8.16	NA	NA	10.63	NA	1	NA	1	86.87	91.46
06/30/2006	490.5	538	12.9	NA	NA	18.63	NA	1.68	NA	5.14	91.07	94.5
07/31/2006	422	707	11.65	NA	NA	16	NA	2.16	NA	7.25	94.4	97.33
08/31/2006	482	567	17.6	NA	NA	22.98	NA	1.66	NA	4.1	93.81	96.63
09/30/2006	490.3	544	9.74	NA	NA	18.63	NA	0.86	NA	2.58	90.06	93.5
10/31/2006	563	660	11.51	NA	NA	19.11	NA	1.73	NA	5.14	85.35	90.26
11/30/2006	669	710	12.49	NA	NA	17.55	NA	5.58	NA	10.94	82.7	86.1
12/31/2006	832	923	12.28	NA	NA	21	NA	4.65	NA	14.13	81.31	84.3
01/31/2007	808	864	10.6	NA	NA	19.44	NA	4.76	NA	11.86	77.72	83
02/28/2007	929	937	16.75	NA	NA	24.18	NA	3.85	NA	11.38	77.19	82.6
03/31/2007	704	763	6.99	NA	NA	13.86	NA	0.57	NA	1.55	85.27	90
04/30/2007	654	715	4.58	NA	NA	9.11	NA	1.01	NA	4.82	82.85	87.3
05/31/2007	632	660	3.73	NA	NA	6.09	NA	0.19	NA	0.37	86.22	88.1
06/30/2007	709	767	6.38	NA	NA	12.32	NA	1.17	NA	3.55	88.33	91.2

Limit	Alkalinity, total (as CaCO3)		BOD, 5-day, 20 deg. C				Nitrogen, ammonia total (as N)				Temperature, water	
	30-Day Ave	Daily Max	30-Day Ave		Daily Max		30-Day Ave		Daily MAX		30-Day Ave	Daily MAX
	N/A mg/L	N/A mg/L	30	67.6 lb/d	Varies lb/d	N/A mg/L	Varies lb/d	Varies mg/L	Varies lb/d	Varies mg/L	N/A °F	90 °F
End Date												
07/31/2007	676	745	5.39	NA	NA	9.07	NA	1.24	NA	4.89	89.86	92.77
08/31/2007	694	742	4.74	NA	NA	12.86	NA	0.19	NA	0.44	88.66	91.13
09/30/2007	770	799	4.82	NA	NA	6.1	NA	1.35	NA	3.27	85.71	89.81
10/31/2007	784	827	13.82	NA	NA	20.82	NA	4.23	NA	9.46	83.12	87.79
11/30/2007	643	690	7.23	NA	NA	11.9	NA	1.36	NA	4.95	77.99	83.73
12/31/2007	715	790	9.02	NA	NA	15.37	NA	1.27	NA	3.22	75.9	79.12
01/31/2008	605	808	14.15	NA	NA	21.3	NA	2.28	NA	7.89	75.91	80.27
02/29/2008	637	876	14.89	NA	NA	22.34	NA	6.5	NA	15.37	76.24	80.14
03/31/2008	790	880	12.65	36.66	55.43	19.36	11.14	3.82	66.38	21.78	77.89	82.15
04/30/2008	583	495	14.43	40.52	90.96	33.66	3.93	1.38	13.89	5.14	81.93	86.65
05/31/2008	604	713	7.26	20.14	30.23	13.01	6.14	2.17	17.8	6.26	85.47	87.95
06/30/2008	589	735	6.39	18.01	39	12.72	1.31	0.46	5.72	2	87.89	89.96
07/31/2008	668	721	8.24	22.24	72.82	27.72	6.77	2.43	18.32	6.28	88.93	90.64
08/31/2008	617	651	5.23	14.55	27.62	9	1.7	0.61	15.03	5.33	88.52	90.45
09/30/2008	675	759	22.62	60.59	137.38	51	2.76	0.96	28.98	9.85	87.71	88.75
10/31/2008	772	790	15.47	42.6	104.21	35	3.09	1.1	12.57	3.83	85.31	87.4
11/30/2008	676	737	35.92	105.47	141.5	47	6.83	2.3	16.19	5.15	81.3	87.31
12/31/2008	721	786	25.8	71.8	131.26	43	16.4	5.93	29.42	10.32	75.28	79.12
01/31/2009	661	709	8.92	25.29	66.03	24	1.91	0.65	13.65	4.29	76.15	80.3
02/28/2009	595	682	5.46	15.83	30.27	10	0.44	0.15	1.47	0.44	77.3	80.36
03/31/2009	572	616	7.99	24.19	38.49	15	5.31	1.74	11.24	3.57	80.35	83.77

Limit	Alkalinity, total (as CaCO3)		BOD, 5-day, 20 deg. C				Nitrogen, ammonia total (as N)				Temperature, water	
	30-Day Ave	Daily Max	30-Day Ave		Daily Max		30-Day Ave		Daily MAX		30-Day Ave	Daily MAX
	N/A mg/L	N/A mg/L	30	67.6 lb/d	Varies lb/d	N/A mg/L	Varies lb/d	Varies mg/L	Varies lb/d	Varies mg/L	N/A °F	90 °F
End Date												
04/30/2009	576	604	7.09	20.65	38.06	13	2.2	0.76	5.65	1.99	83.25	86.57
05/31/2009	655	680	4.23	11.73	19.31	6.83	0.74	0.27	2.62	0.98	84.53	86.46
06/30/2009	653	673	4.35	12.7	24.63	7.96	0.63	0.22	2.88	0.97	86.59	89.39
07/31/2009	707	760	4.32	11.3	24.01	8.62	1.67	0.61	5.01	1.62	87.41	89.03
08/31/2009	720	776	4.91	13.6	27.29	10.52	2.15	0.77	9.87	3.42	88.05	89.35
09/30/2009	747	790	5.15	15.09	23.47	7.84	6.7	2.29	25.24	9.17	87.27	89.01
10/31/2009	696	738	5.09	15.99	23.01	7.3	0.66	0.21	4.05	1.32	82.49	84.7
11/30/2009	700	806	4.95	14.25	17.42	5.66	0.3	0.1	1.8	0.61	79.81	83.02
12/31/2009	767	870	7.81	23.19	46.89	15.5	6.52	2.25	30.13	10.7	75.31	77.48
01/31/2010	814	846	11.9	38.58	66.45	22.5	1.67	0.56	6.36	2.14	75.12	78.98
02/28/2010	1,079	1,167	16.29	47.16	73	24.18	1.32	0.45	3.21	1.12	77.05	81.46
03/31/2010	913	940	10.39	30.62	51.25	15.92	1.47	0.55	5.09	1.12	82.93	87.42
04/30/2010	946	1,027	11.83	34.26	51.93	15.92	0.93	0.3	2.17	0.63	83.32	87.42
05/31/2010	758	840	6.05	20.48	30.69	15.92	3.97	1.16	11.2	2.88	83.59	89.52
06/30/2010	703	728	7.82	26.38	60.06	19	3.35	0.98	4.83	1.28	86.17	89.04
07/31/2010	854	1,109	10.25	32.17	54.41	16.83	10.42	3.14	25.58	5.97	85.83	88.12
08/31/2010	641	675	12.9	45.18	65.54	18.36	9.75	2.75	25.48	6.76	85.74	89.6
09/30/2010	600	629	14.59	51.45	70.56	20.38	6.02	1.73	8.46	2.39	83.8	86.89
10/31/2010	570	671	17.39	61.16	120.89	35.88	7.17	2.08	33.32	10.33	86.34	82.72
11/30/2010	554	577	7.57	26.52	41.33	11.33	1.66	0.48	4.73	1.34	82.58	85.96
12/31/2010	541	601	10.51	34.43	63.05	18	2.46	0.72	9.51	2.67	79.27	81.5

Limit	Alkalinity, total (as CaCO3)		BOD, 5-day, 20 deg. C				Nitrogen, ammonia total (as N)				Temperature, water	
	30-Day Ave	Daily Max	30-Day Ave		Daily Max		30-Day Ave		Daily MAX		30-Day Ave	Daily MAX
	N/A mg/L	N/A mg/L	30	67.6 lb/d	Varies lb/d	N/A mg/L	Varies lb/d	Varies mg/L	Varies lb/d	Varies mg/L	N/A °F	90 °F
End Date												
01/31/2011	512	659	13.8	47.36	70.15	19.43	3.49	1	7.15	2.19	78.07	80.95
02/28/2011	572	710	7.73	27.22	47.98	13.41	2.29	0.65	3.71	1.13	78.93	82.53
03/31/2011	585	637	11.03	40.56	81.95	21.74	1.04	0.28	1.64	0.43	79.18	82.53
04/30/2011	651	660	13.25	50.45	59.02	18.24	2.62	0.7	4.8	1.24	80.15	81.63
05/31/2011	7.31	880	7.24	28.57	65.12	16	4.96	1.26	6.64	1.72	82.14	86.41

Note: ***Bold, Italic, Highlighted*** cells indicate violations.
 BD indicates result was below detection.
 NR indicates the test was Not Required.

Limit	Nitrogen, Kjeldahl, total (as N)		Nitrogen, nitrate total (as N)		Oxygen, dissolved (DO)	pH		Oil and grease			Conductivity	
	30-Day Ave	Daily Max	30-Day Ave	Daily MAX	Daily MIN	Daily MIN	Daily MAX	Visual	30-Day Ave	Daily Max	30-Day Ave	Daily Max
	N/A, mg/L	N/A, mg/L	Varies mg/L	88 mg/L	Varies mg/L	6 SU	9 SU	Y=1;N=0	N/A mg/L	10 mg/L	N/A umho/cm	N/A umho/cm
End Date												
12/31/2005	3.3	5.64	74.7	95.8	6.63	6.7	8.36	0	2.4	3.5	3,580	3,655
01/31/2006	1.8	3.44	124.3	133	6.77	7.14	8.6	0	1.77	1.77	3,941	4,060
02/28/2006	1.58	1.58	151.5	166	6.63	7.04	8.54	0	1.8	1.92	3,850	3,950
03/31/2006	0.06	0.06	110	126	6.51	7.65	8.21	0	1.8	1.9	3,735	3,880
04/30/2006	4.01	4.01	113.7	121	5.03	7.62	8.14	0	3.01	6.6	3,780	3,940
05/31/2006	0.06	0.06	107	119	6.4	6.94	8.46	0	1.77	1.77	3,558	3,510
06/30/2006	0.06	0.06	51.53	135	6.54	6.77	8.32	0	1.8	1.9	3,393	3,580
07/31/2006	10.7	10.7	11.2	32.6	6.51	7.05	7.93	0	1.77	1.77	3,397.50	3,510
08/31/2006	4.5	4.5	71.2	92.1	6.53	7.05	7.82	0	1.78	1.82	3,532	3,640
09/30/2006	0.06	0.06	84.16	99.7	6.58	6.98	8.1	0	1.77	1.77	3,474	3,590
10/31/2006	1.61	1.61	90.1	102	6.52	7.14	8.64	0	1.77	1.77	3,443	3,540
11/30/2006	9.53	9.53	65.3	81.9	6.51	7.13	8.5	0	1.79	1.85	3,547	3,600
12/31/2006	14.9	19.5	30.53	49.5	6.51	7.54	8.2	0	1.87	2.2	3,502	3,595
01/31/2007	2.13	2.13	40.26	59.2	6.53	7.39	8.17	0	2.33	2.71	3,500	3,590
02/28/2007	9.42	11.4	13.6	26.6	6.59	7.52	8.01	0	2.71	2.71	3,454	3,510
03/31/2007	1.63	1.63	45.82	62	6.52	6.99	8.09	0	2.71	2.71	3,403	3,500
04/30/2007	BD	BD	50.25	61.7	6.26	7.23	7.71	0	BD	BD	3,133	3,240
05/31/2007	1.95	1.95	58.12	71	6.51	6.19	8.83	0	2.7	2.7	3,070	3,200

Limit	Nitrogen, Kjeldahl, total (as N)		Nitrogen, nitrate total (as N)		Oxygen, dissolved (DO)	pH		Oil and grease			Conductivity	
	30-Day Ave	Daily Max	30-Day Ave	Daily MAX	Daily MIN	Daily MIN	Daily MAX	Visual	30-Day Ave	Daily Max	30-Day Ave	Daily Max
	N/A, mg/L	N/A, mg/L	Varies mg/L	88 mg/L	Varies mg/L	6 SU	9 SU	Y=1;N=0	N/A mg/L	10 mg/L	N/A umho/cm	N/A umho/cm
End Date												
06/30/2007	0.78	0.78	29.58	51.3	6.56	6.32	7.95	0	2.7	2.7	2,983	3,085
07/31/2007	2.49	2.49	30.7	35.1	6.59	6.32	7.95	0	2.71	2.71	3,002	3,075
08/31/2007	2.95	2.95	23.1	32.6	6.65	6.88	8.52	0	2.71	2.71	3,005	3,065
09/30/2007	5.61	5.61	19.7	23.3	6.57	6.21	8.55	0	2.71	2.71	3,134	3,235
10/31/2007	6.68	6.68	16.1	25.4	6.59	6.84	7.86	0	2.71	2.71	3,183	3,235
11/30/2007	0.1	0.1	57.7	65.5	6.79	6.99	8.13	0	2.71	2.71	3,236	3,290
12/31/2007	0.1	0.1	41.7	61.9	6.8	7.43	8	0	2.71	2.71	3,350	3,405
01/31/2008	4.31	4.31	33.4	43.6	6.9	7.33	7.77	0	2.71	2.71	2,728	3,375
02/29/2008	6.86	6.86	16.5	30	6.74	6.8	7.81	0	2.71	2.71	2,525	3,470
03/31/2008	9.44	9.44	30.1	45.6	6.69	7.32	7.74	0	2.71	2.71	3,532	3,620
04/30/2008	0.1	0.1	62	83.8	6.92	7.12	8.19	0	2.71	2.71	3,446	3,515
05/31/2008	3.16	3.16	37.1	46.9	6.96	7.07	7.89	0	2.71	2.71	3,223	3,525
06/30/2008	4.22	4.22	44.9	76	6.83	6.88	7.8	0	2.71	2.71	3,193	3,275
07/31/2008	6.01	6.01	34.9	52.4	6.64	7	7.83	0	2.71	2.71	3,208	3,370
08/31/2008	5.54	5.54	25.7	52.4	6.55	7.01	7.47	0	2.71	2.71	3,194	3,220
09/30/2008	9.64	9.64	4.3	10	6.75	7.07	7.59	0	2.71	2.71	3,129	3,305
10/31/2008	1	1	5.1	13.6	6.64	7.21	7.57	0	2.71	2.71	3,159	3,220
11/30/2008	3.61	3.61	3.3	10.4	6.68	6.68	7.62	0	2.71	2.71	3,055	3,330
12/31/2008	12.1	12.1	6	21.8	6.72	7.07	7.74	0	2.71	2.71	3,193	3,475
01/31/2009	0.61	0.61	23.4	47	6.51	7.26	7.78	0	2.71	2.71	3,168	3,275

Limit	Nitrogen, Kjeldahl, total (as N)		Nitrogen, nitrate total (as N)		Oxygen, dissolved (DO)	pH		Oil and grease			Conductivity	
	30-Day Ave	Daily Max	30-Day Ave	Daily MAX	Daily MIN	Daily MIN	Daily MAX	Visual	30-Day Ave	Daily Max	30-Day Ave	Daily Max
	N/A, mg/L	N/A, mg/L	Varies mg/L	88 mg/L	Varies mg/L	6 SU	9 SU	Y=1;N=0	N/A mg/L	10 mg/L	N/A umho/cm	N/A umho/cm
End Date												
02/28/2009	BD	BD	50.7	69.1	6.73	7.06	7.91	0	BD	BD	3,080	3,210
03/31/2009	0.91	0.91	56.8	68.71	6.62	6.95	7.59	0	BD	BD	3,026	3,160
04/30/2009	3.64	3.64	50.9	67	6.72	6.78	7.76	0	BD	BD	2,895	2,950
05/31/2009	0.14	0.14	28.8	43.9	6.75	7.15	7.62	0	BD	BD	2,839	2,990
06/30/2009	0.81	0.81	33.3	39.5	6.64	6.68	7.95	0	BD	BD	2,649	2,670
07/31/2009	1.72	1.72	22.5	57.4	6.54	6.23	7.94	0	BD	BD	2,000	2,010
08/31/2009	3.12	3.12	13.4	19.8	6.55	6.13	7.8	0	BD	BD	2,004	2,010
09/30/2009	1.83	1.83	15.9	55.4	6.57	6.67	7.79	0	BD	BD	2,483	2,610
10/31/2009	1.43	1.43	34.7	48.2	6.69	6.55	8.01	0	2.71	2.71	2,530	2,570
11/30/2009	1.68	1.68	25	49.2	6.68	6.51	7.52	0	BD	BD	2,584	2,640
12/31/2009	5.71	8.99	42.2	83.4	6.61	6.28	7.53	0	1.16	1.6	2,855	2,960
01/31/2010	4.83	4.83	16.8	48.3	6.93	6.31	7.82	0	1.8	2.1	2,861	3,115
02/28/2010	4	4	5.6	11.2	6.78	6.64	7.85	0	0.93	1.4	2,920	3,070
03/31/2010	2.38	2.38	3.7	6.66	6.69	7.23	7.67	0	1.51	2.2	2,800	2,900
04/30/2010	4.71	4.71	10.7	28.8	6.9	6.74	8.89	0	1.39	1.9	3,006	3,200
05/31/2010	3.26	3.26	22.5	48.4	6.84	7.26	8.89	0	BD	2	2,601	2,775
06/30/2010	6.68	7.32	4.9	11.3	6.65	6.76	8.22	0	1.42	1.8	2,621	2,780
07/31/2010	8.6	10.7	6.9	17.9	6.65	6.5	7.56	0	1.82	2.2	2,926	3,250
08/31/2010	9.69	15.1	6.2	43.5	6.6	6.34	8.34	0	1.55	1.9	2,781	3,245
09/30/2010	9.29	13.7	6.1	22.3	6.65	6.86	7.66	0	1.76	2.7	2,614	2,670

Limit	Nitrogen, Kjeldahl, total (as N)		Nitrogen, nitrate total (as N)		Oxygen, dissolved (DO)	pH		Oil and grease			Conductivity	
	30-Day Ave	Daily Max	30-Day Ave	Daily MAX	Daily MIN	Daily MIN	Daily MAX	Visual	30-Day Ave	Daily Max	30-Day Ave	Daily Max
	N/A, mg/L	N/A, mg/L	Varies mg/L	88 mg/L	Varies mg/L	6 SU	9 SU	Y=1;N=0	N/A mg/L	10 mg/L	N/A umho/cm	N/A umho/cm
End Date												
10/31/2010	11.17	23.1	42.4	78	651	7.16	7.78	0	1.84	2.35	2,865	2,910
11/30/2010	3.81	6.17	50.6	80.4	6.6	7.14	7.8	0	1.98	2.43	2,893	2,995
12/31/2010	4.4	6.66	47.59	65.6	6.55	7.39	7.83	0	2.78	3.4	2,545	2,790
01/31/2011	5.81	7.51	33.04	69.1	6.52	6.84	7.93	0	1.42	1.6	2,415	2,520
02/28/2011	4.31	5.81	46.26	71.2	6.74	6.96	7.77	0	1.6	2	2,466	2,570
03/31/2011	5.59	9.03	40.3	56.6	6.6	7.18	7.98	0	1.59	1.87	2,449	2,595
04/30/2011	7.39	9.07	16.07	27.4	6.5	6.9	7.9	0	2.05	2.4	2,419	2,585
05/31/2011	6.97	10.1	9.04	33.9	6.67	7	8.28	0	2.74	3.2	2,444	2,755

Note: ***Bold, Italic, Highlighted*** cells indicate violations.
 BD indicates result was below detection.
 NR indicates the test was Not Required.

Limit End Date	BOD, carbonaceous		Chemical Oxygen Demand (COD)		Coliform, fecal general		Flow rate			
	30-Day Ave	Daily Max	30-Day Ave	Daily Max	30DA GEO	Daily Max	30-Day Ave	Daily Max		Monthly Total
	N/A mg/L	N/A mg/L	N/A mg/L	N/A mg/L	1000 #/100mL	2000 #/100mL	Varies Mgal/d	0.3 Mgal/d	N/A Mgal/d	N/A Mgal/mo
12/31/2005	1.5	2	26.2	37	NR	NR	0.27	0.32	NA	5.1
01/31/2006	4.6	4.6	43.3	64	NR	NR	0.23	0.29	NA	7.11
02/28/2006	7.7	7.7	69.3	72	NR	NR	0.24	0.32	NA	NR
03/31/2006	8.17	8.17	73.2	105	NR	NR	0.24	0.31	NA	7.36
04/30/2006	9.06	9.06	72.2	78	NR	NR	0.26	0.3	NA	7.89
05/31/2006	4.2	4.2	83	83	30	1,550	0.28	0.32	NA	8.94
06/30/2006	5.64	6.42	151	194.5	576	1,450	0.29	0.32	NA	8.57
07/31/2006	7.25	9.39	127.7	194	184	800	0.29	0.33	NA	9.01
08/31/2006	11.6	11.6	150.4	226	210	550	0.27	0.34	NA	9.01
09/30/2006	7.92	7.92	86.09	154	249	1,180	0.29	0.35	NA	8.78
10/31/2006	1.71	1.71	83.66	159	NR	NR	0.28	0.32	NA	8.56
11/30/2006	4.5	4.5	66.08	110	NR	NR	0.27	0.33	NA	7.98

Limit	BOD, carbonaceous		Chemical Oxygen Demand (COD)		Coliform, fecal general		Flow rate				
	30-Day Ave	Daily Max	30-Day Ave	Daily Max	30DA GEO	Daily Max	30-Day Ave	Daily Max		Monthly Total	
	N/A mg/L	N/A mg/L	N/A mg/L	N/A mg/L	1000 #/100mL	2000 #/100mL	Varies Mgal/d	0.3 Mgal/d	N/A Mgal/d	N/A Mgal/mo	
End Date											
	12/31/2006	4.02	4.02	65.76	97	NR	NR	0.29	0.36	NA	8.98
	01/31/2007	3.93	3.93	69.95	103	NR	NR	0.31	0.34	NA	9.47
	02/28/2007	7.55	7.55	76.75	100	NR	NR	0.27	0.31	NA	7.56
	03/31/2007	4.47	4.47	61.39	100	NR	NR	0.31	0.37	NA	9.62
	04/30/2007	2.46	2.46	40.8	76	NR	NR	0.33	0.37	NA	9.9
	05/31/2007	4.07	4.07	39.5	77	10	675	0.32	0.39	NA	9.98
	06/30/2007	2.64	2.64	37	75	10	50	0.34	0.4	NA	10.07
	07/31/2007	2.35	2.35	35.29	80	10	20	0.34	0.36	NA	10.41
	08/31/2007	2.79	2.79	42.7	70	10	10	0.32	0.39	NA	10.03
	09/30/2007	2.09	2.09	35.4	52	4	10	0.33	0.39	NA	9.83
	10/31/2007	4.4	4.4	68.8	97	NR	NR	0.31	0.41	NA	9.73
	11/30/2007	3.86	3.86	49.8	83	NR	NR	0.33	0.38	NA	NR
	12/31/2007	3.52	3.52	43.2	63	NR	NR	0.32	0.38	NA	9.86
	01/31/2008	3.78	3.78	52.7	84	NR	NR	0.32	0.36	NA	9.86
	02/29/2008	7.25	7.25	57	81	NR	NR	0.33	0.38	NA	9.43
	03/31/2008	4.61	4.61	47.8	116	NR	NR	0.34	NR	0.38	10.21
	04/30/2008	10.46	10.46	63.7	89	NR	NR	0.34	NR	0.42	10.3
	05/31/2008	4	4	63.7	89	10	20	0.33	NR	0.38	10.3
	06/30/2008	3.26	3.26	54.9	133	10	400	0.35	NR	0.39	10.38
	07/31/2008	2.44	2.44	70.7	113	10	33	0.32	NR	0.36	10.29
	08/31/2008	7	7	103.5	137	15	29	0.32	NR	0.39	10.29

Limit	BOD, carbonaceous		Chemical Oxygen Demand (COD)		Coliform, fecal general		Flow rate			
	30-Day Ave	Daily Max	30-Day Ave	Daily Max	30DA GEO	Daily Max	30-Day Ave	Daily Max		Monthly Total
	N/A mg/L	N/A mg/L	N/A mg/L	N/A mg/L	1000 #/100mL	2000 #/100mL	Varies Mgal/d	0.3 Mgal/d	N/A Mgal/d	N/A Mgal/mo
End Date										
09/30/2008	2.18	3.2	81.3	121	20	84	0.33	NR	0.37	9.87
10/31/2008	1.63	3.2	39.6	59	NR	NR	0.33	NR	0.39	10.29
11/30/2008	9.73	30	74.3	112	NR	NR	0.35	NR	0.41	10.29
12/31/2008	6.54	18.5	90.4	133	NR	NR	0.34	NR	0.38	10.53
01/31/2009	1.88	2.6	43.7	68	NR	NR	0.35	NR	0.39	10.8
02/28/2009	5	5	38.6	55	NR	NR	0.35	NR	0.41	9.74
03/31/2009	2	2	39.7	51	NR	NR	0.36	NR	0.41	11.21
04/30/2009	1.5	1.5	29.8	48	NR	NR	0.34	NR	0.41	10.22
05/31/2009	5.43	5.43	19.1	32	20	1,100	0.34	NR	0.4	10.57
06/30/2009	BD	BD	28.6	46	BD	BD	0.35	NR	0.39	10.38
07/31/2009	BD	BD	33.9	58	BD	BD	0.33	NR	0.39	10.24
08/31/2009	2.2	2.2	32.7	58	BD	BD	0.33	NR	0.36	10.13
09/30/2009	1.97	1.97	38.3	56	BD	1	0.36	NR	0.41	10.82
10/31/2009	2.1	2.1	34.1	49	NR	NR	0.37	NR	0.4	11.56
11/30/2009	3	3	24.9	37	NR	NR	0.35	NR	0.39	10.58
12/31/2009	3.2	3.2	59	106	NR	NR	0.35	NR	0.4	10.98
01/31/2010	2.05	2.05	88.9	103.5	NR	NR	0.37	NR	0.42	11.39
02/28/2010	9.78	9.78	70.9	93	NR	NR	0.04	NR	0.41	9.94
03/31/2010	4.8	4.8	80.4	113	NR	NR	0.35	NR	0.42	10.95
04/30/2010	6.9	6.9	79.7	113	NR	NR	0.35	NR	0.42	10.64
05/31/2010	BD	BD	68.9	103	10	84	0.42	NR	0.53	12.91

Limit	BOD, carbonaceous		Chemical Oxygen Demand (COD)		Coliform, fecal general		Flow rate			
	30-Day Ave	Daily Max	30-Day Ave	Daily Max	30DA GEO	Daily Max	30-Day Ave	Daily Max		Monthly Total
	N/A mg/L	N/A mg/L	N/A mg/L	N/A mg/L	1000 #/100mL	2000 #/100mL	Varies Mgal/d	0.3 Mgal/d	N/A Mgal/d	N/A Mgal/mo
End Date										
06/30/2010	5.85	5.85	73.9	110	BD	23	0.41	NR	0.46	12.4
07/31/2010	5.2	6.06	87.9	143	BD	2	0.38	NR	0.48	11.92
08/31/2010	3	3.7	120.5	230	90	3,400	0.42	NR	0.47	12.86
09/30/2010	5.8	14.18	96.2	119	130	1,500	0.42	NR	0.46	12.59
10/31/2010	6.7	16.68	78.5	110	NR	NR	0.41	NR	0.46	12.76
11/30/2010	3.8	6.05	78	105	NR	NR	0.41	NR	0.44	12.41
12/31/2010	4.8	6.7	69.2	120	NR	NR	0.41	NR	0.45	12.77
01/31/2011	4.6	6.56	70.7	103	NR	NR	0.43	NR	0.47	13.25
02/28/2011	3.8	5.22	104	167	NR	NR	0.43	NR	0.47	12.12
03/31/2011	5.6	9.5	75.2	107	NR	NR	0.43	NR	0.48	13.59
04/30/2011	6.4	8.9	70.6	85	NR	NR	0.45	NR	0.49	13.53
05/31/2011	6	6	74	99	130	6,300	0.48	NR	0.52	14.99

Note: ***Bold, Italic, Highlighted*** cells indicate violations.
 BD indicates result was below detection.
 NR indicates the test was Not Required.

Limit	Phosphorus, total (as P)		Solids, total dissolved		Solids, total suspended				IC25 Static Renewal 7 Day	
	30-Day Ave	Daily Max	30-Day Ave	Daily Max	30-Day Ave		Daily Max		Chronic Chrcceriodaphnia	Chronic Chrpimephales
	N/A mg/L	N/A mg/L	N/A mg/L	N/A mg/L	30 mg/L	67.6 lb/d	113 lb/d	45 mg/L	MINIMUM	MINIMUM
									% Varies	% Varies
End Date										
12/31/2005	41.8	44.6	2,339.50	2,890	37.6	NR	NR	75	NR	NR
01/31/2006	51.5	51.5	2,601.30	2,795	21.1	NR	NR	57	NR	NR
02/28/2006	53	53	2,827.50	2,885	20.6	NR	NR	27.5	14.3	100
03/31/2006	49	52.4	2,652.50	2,745	18.3	NR	NR	37	20.7	NR
04/30/2006	47.4	53.6	2,797	3,015	24.8	NR	NR	42	NR	NR
05/31/2006	37.9	48.9	2,580	2,600	19.6	NR	NR	26.5	NR	NR
06/30/2006	46	51.1	2,965	3,110	25.2	NR	NR	35	12.5	77.5
07/31/2006	36.3	41.6	3,025	4,030	27.4	NR	NR	47.5	NR	NR
08/31/2006	43.8	50.3	2,638.80	3,090	33.1	NR	NR	50	NR	NR
09/30/2006	42.4	46	4,550	6,060	16.9	NR	NR	33	37	82.8
10/31/2006	42.6	42.6	6,491.60	14,390	20.4	NR	NR	41	NR	NR
11/30/2006	46.9	46.9	2,972.50	3,400	15.8	NR	NR	27	NR	NR
12/31/2006	46.2	46.2	2,737.50	3,370	14.1	NR	NR	25.5	4.32	100
01/31/2007	38.9	46	2,775	3,145	11.4	NR	NR	21	NR	NR
02/28/2007	38.7	40.7	2,687.50	3,355	15.5	NR	NR	29	29.77	100
03/31/2007	47.3	47.3	2,765	2,415	11.9	NR	NR	27	NR	NR
04/30/2007	35.1	35.1	2,635	3,150	7.5	NR	NR	18.5	NR	NR
05/31/2007	41.9	41.9	2,473.75	2,770	7	NR	NR	13.5	NR	NR
06/30/2007	31	31	1,784.25	1,925	10.1	NR	NR	55	56.02	82.54

Limit	Phosphorus, total (as P)		Solids, total dissolved		Solids, total suspended				IC25 Static Renewal 7 Day	
	30-Day Ave	Daily Max	30-Day Ave	Daily Max	30-Day Ave		Daily Max		Chronic Chrceriodaphnia	Chronic Chrpimephales
	N/A mg/L	N/A mg/L	N/A mg/L	N/A mg/L	30 mg/L	67.6 lb/d	113 lb/d	45 mg/L	MINIMUM	MINIMUM
									% Varies	% Varies
End Date										
07/31/2007	36.9	36.9	2,228.80	3,435	10.1	NR	NR	34	NR	NR
08/31/2007	31.3	31.3	3,263	4,275	9.31	NR	NR	25.5	NR	NR
09/30/2007	29.7	29.7	2,800	3,150	9.75	NR	NR	32	NR	59.72
10/31/2007	32.5	32.5	1,842	2,000	14.22	NR	NR	22.5	NR	NR
11/30/2007	32.15	32.9	1,811	1,978	13.57	NR	NR	28	NR	NR
12/31/2007	33.3	33.3	1,629	1,803	12.36	NR	NR	34	NR	100
01/31/2008	32.4	32.4	1,854	1,997	24.5	NR	NR	44	NR	NR
02/29/2008	23.7	23.7	1,932	2,007	31.31	NR	NR	55	NR	NR
03/31/2008	38	38	1,772	1,852	17.29	49.34	84.8	31	NR	100
04/30/2008	26.6	26.6	1,965	2,122	24.63	72.52	136.61	43	NR	NR
05/31/2008	20.3	20.3	1,987	2,122	27.03	71.86	128.2	42	NR	NR
06/30/2008	22.7	22.7	1,867	1,962	20.63	60.44	119.7	37	NR	100
07/31/2008	20.1	20.1	1,979	2,089	18.89	52.72	250.3	86	NR	NR
08/31/2008	36.4	36.4	1,911	1,958	16.07	45.44	136.58	46	NR	NR
09/30/2008	25.1	25.1	2,193	2,344	2.77	7.58	32.43	12	NR	100
10/31/2008	22.9	22.9	1,865	2,076	3.89	10.95	28.69	9.83	NR	NR
11/30/2008	28.4	28.4	1,889	2,040	19.56	58.42	88.28	25.5	NR	NR
12/31/2008	29.6	32.1	1,915	2,127	29.89	84.65	145.47	51	NR	100
01/31/2009	30.9	33.4	1,909	1,996	5.69	16.29	50.39	19	NR	NR
02/28/2009	29.45	40.8	1,998	2,074	4.58	13.57	28.78	8.75	NR	NR

Limit	Phosphorus, total (as P)		Solids, total dissolved		Solids, total suspended				IC25 Static Renewal 7 Day	
	30-Day Ave	Daily Max	30-Day Ave	Daily Max	30-Day Ave		Daily Max		Chronic Chrceriodaphnia	Chronic Chrpimephales
	N/A mg/L	N/A mg/L	N/A mg/L	N/A mg/L	30 mg/L	67.6 lb/d	113 lb/d	45 mg/L	MINIMUM	MINIMUM
									% Varies	% Varies
End Date										
03/31/2009	35.77	37.7	1,927	2,049	10.15	30.04	52.37	17.25	NR	64.66
04/30/2009	30.6	30.6	1,811	1,837	9.04	26.84	58.38	19.5	NR	NR
05/31/2009	29	29	1,809	1,879	5.57	15.57	31.61	10.5	NR	NR
06/30/2009	32.4	32.4	1,712	1,827	9.34	27.59	52.85	17.75	NR	100
07/31/2009	26.2	26.2	1,669	1,801	8.52	22.25	38.62	15.75	NR	NR
08/31/2009	22	22.3	1,702	1,894	12.06	32.71	94.1	33.78	NR	NR
09/30/2009	21.83	24.2	1,606	1,678	8.5	24.89	39.35	13.13	NR	NR
10/31/2009	22.3	22.3	1,608	1,668	6.62	20.31	30.71	10.2	NR	NR
11/30/2009	22.5	22.5	1,532	1,608	7.29	21.05	32.23	10.75	NR	BD
12/31/2009	24.5	25.3	1,756	1,960	7.97	23.44	42.87	16	NR	NR
01/31/2010	34.5	34.5	1,787	1,868	11.84	35.62	66.45	22.5	NR	100
02/28/2010	35.6	35.6	1,867	1,967	11.03	31.85	94.23	32.75	NR	NR
03/31/2010	28.4	28.4	1,790	1,967	8.19	24.15	49.7	14.5	NR	NR
04/30/2010	32.3	32.3	1,944	2,080	9.05	26.98	37.6	14.5	NR	NR
05/31/2010	27.6	30.4	1,603	1,842	9.19	31.24	53	14.75	NR	100
06/30/2010	25.85	25.9	1,583	1,664	9.11	30.59	97.2	30.75	NR	NR
07/31/2010	28.6	28.6	1,697	2,058	21.35	63.84	277.3	95	NR	NR
08/31/2010	20.3	20.3	1,669	1,812	12.37	43.41	141.36	37.5	NR	NR
09/30/2010	29.15	29.2	1,601	1,682	7.46	26.54	51	13.5	NR	NR
10/31/2010	31.9	32.1	1,717	1,840	6.29	22.08	45.75	13.25	NR	NR

Limit	Phosphorus, total (as P)		Solids, total dissolved		Solids, total suspended				IC25 Static Renewal 7 Day	
	30-Day Ave	Daily Max	30-Day Ave	Daily Max	30-Day Ave		Daily Max		Chronic Chrceriodaphnia	Chronic Chrpimephales
	N/A mg/L	N/A mg/L	N/A mg/L	N/A mg/L	30 mg/L	67.6 lb/d	113 lb/d	45 mg/L	MINIMUM	MINIMUM
									% Varies	% Varies
End Date										
11/30/2010	35.05	35.8	1,897	2,036	6.84	23.8	38.9	12	NR	NR
12/31/2010	30.45	32	1,437	1,568	5.63	19.21	28	8.75	NR	NR
01/31/2011	20.7	23.9	1,559	1,612	16.79	56.97	121.9	40.5	NR	NR
02/28/2011	29.6	31.2	1,618	1,642	14.77	51.73	104.7	31	NR	NR
03/31/2011	30.2	31.8	1,578	1,638	11.27	41.38	72.7	20	100	NR
04/30/2011	27.65	28.8	1,471	1,628	9.77	35.52	48.6	14.5	NR	NR
05/31/2011	26.1	26.4	1,442	1,510	7.58	29.65	56	15	NR	100

Note: ***Bold, Italic, Highlighted*** cells indicate violations.
 BD indicates result was below detection.
 NR indicates the test was Not Required.